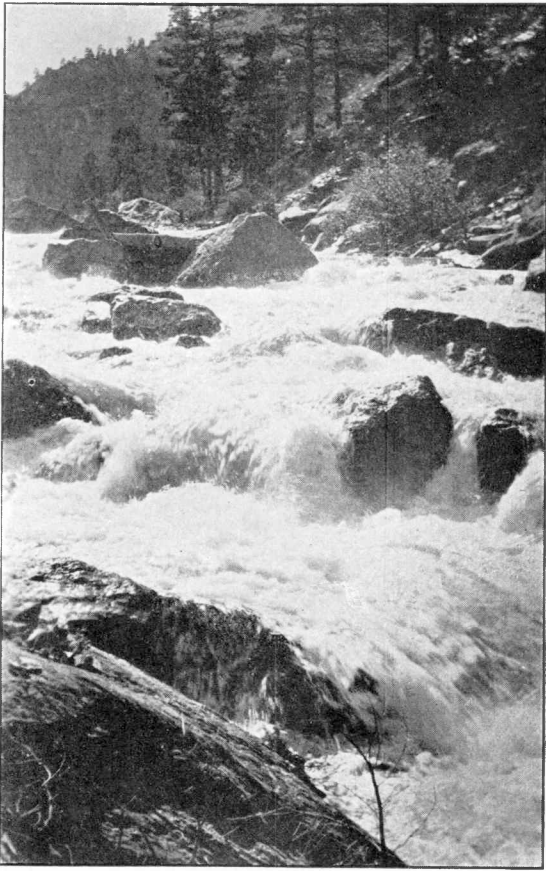


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1840 Bulletin
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THE WHITE WATERS OF THE POUDE RIVER
The Source of the Water Supply of the City of Greeley and the College



SUNSHINE AND SHADOW ON THE CAMPUS



SAMUEL C. SCHMUCKER

GENERAL LECTURER

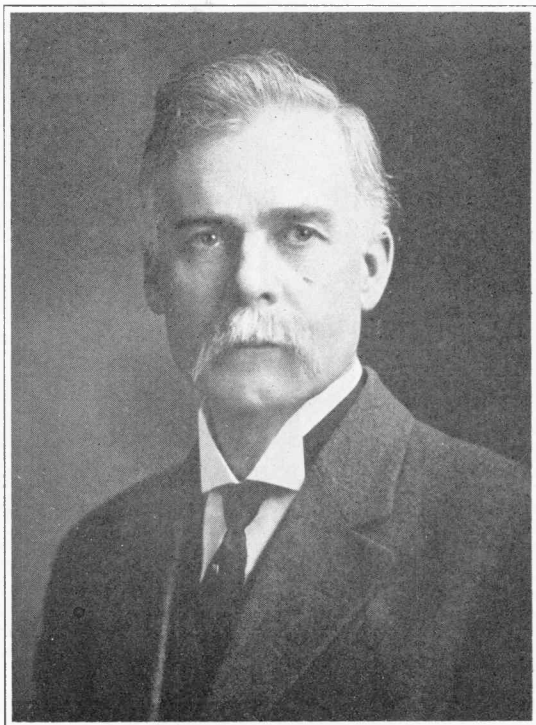
JUNE 26-30

1. Nature and Nurture.
2. Heredity and its Laws.
3. Our Learning Years.
4. Our Heritage of Strength.
5. Building for the Future

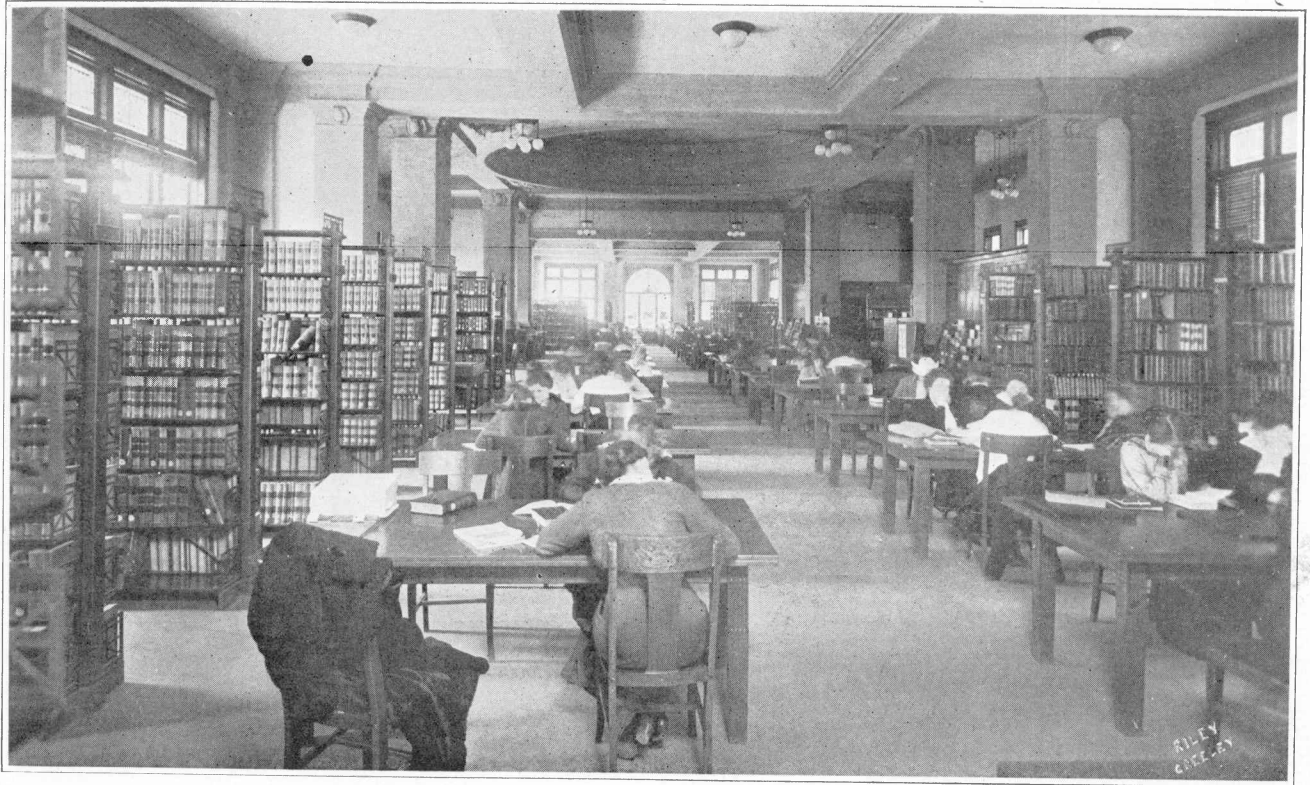
GENERAL LECTURER

JULY 3-7

1. Standards and Tests.
2. Community and School Surveys.
3. Formal versus Incidental Education.
4. Economic, Civic and Moral Training.
5. Vocational Education.



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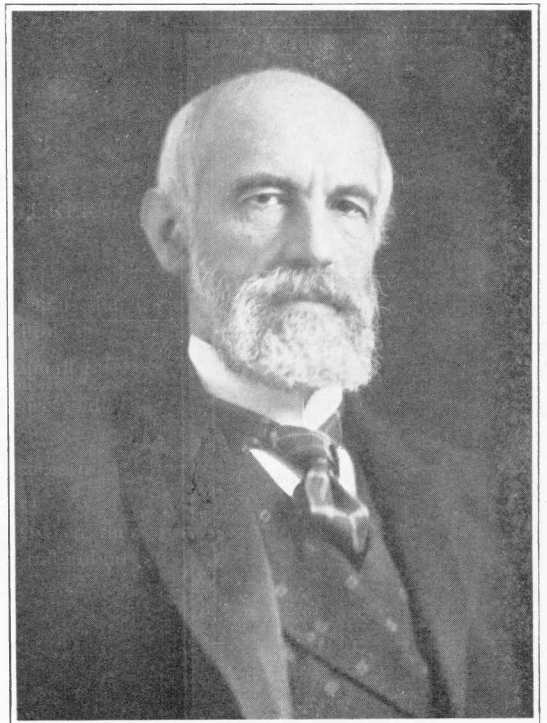
JULY 10-14

1. A Literary Clinic.
2. A Plea for Modern Conveniences in Thinking.
3. The Charm of English Prose of the Seventeenth Century.
4. Thomas Fuller.
5. John Milton.

GENERAL LECTURER

JULY 17-21

1. Using the Unconscious Faculties of the Child.
2. The Periods of Human Life.
3. Religious Experience and Education.
4. Individual Differences in Children.
5. The Relations Between the Race and the Individual in Education.



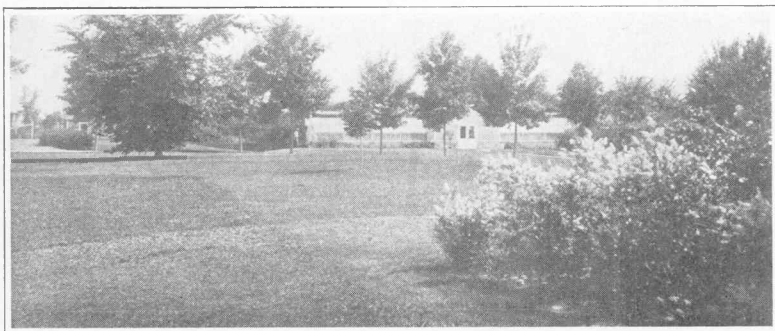
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THE SIMON GUGGENHEIM HALL OF INDUSTRIAL ARTS—EARLY SPRING VIEW

The
State Teachers College
GREELEY, COLORADO

The Greatest Summer School
in the West



FOR FULLER INFORMATION
concerning the Summer Term of the
State Teachers College of Colorado
see the

Summer Term Bulletin

The Bulletin contains all information
concerning courses, admission, gradu-
ation, degrees, etc.

Address all inquiries to

THE STATE TEACHERS COLLEGE
GREELEY, COLORADO

3

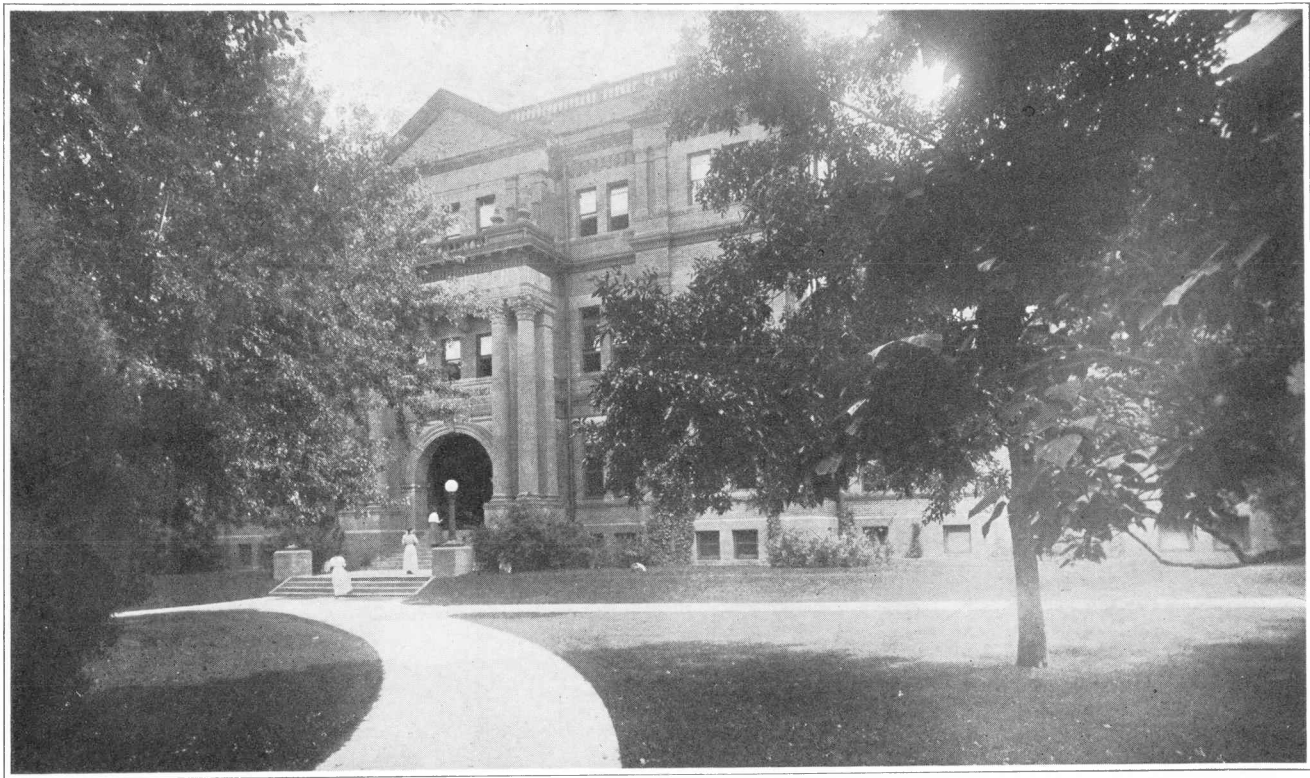
The State Teachers College of Colorado

YEAR BOOK AND CATALOG



1916-1917

PUBLISHED QUARTERLY BY THE BOARD OF TRUSTEES
GREELEY, COLORADO



APPROACH TO THE ADMINISTRATION BUILDING

BULLETIN *of* THE STATE TEACHERS COLLEGE *of* COLORADO
SERIES XVI May, 1916 No. 3

Entered at the Post Office, Greeley, Colorado, as second class matter.

TWENTY-SIXTH

YEAR BOOK AND
CATALOG

OF THE

State Teachers College of Colorado

GREELEY, COLORADO

1916-1917

In all publications of this institution certain of the spellings recommended by the
Simplified Spelling Board are used.

The Faculty

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

JAMES HARVEY HAYS, A.B., A.M., Acting President. Dean of the College and of Non-Resident and Summer Term Work, and Professor of Latin and Mythology.

HELEN GILPIN BROWN, A.B., Dean of Women.

†ELIZABETH HAYS KENDEL, Pd.M., A.B., Training Teacher, Fifth Grade.

SAMUEL MILO HADDEN, Pd.B., A.B., A.M., Dean of Practical Arts. Professor of Industrial Education.

DAVID DOUGLAS HUGH, A.B., A.M., Dean of the Training School. Professor of Education.

FRANCIS LORENZO ABBOTT, B.S., A.M., Professor of Physical Science.

BELLA BRUCE SIBLEY, Pd.B., Pd.M., A.B., Training Teacher, Second Grade.

GURDON RANSOM MILLER, Ph.B., A.M., Dean of the Senior College. Professor of Sociology and Economics.

FRANCES TOBEY, B.S., Dean of the Junior College. Professor of Reading and Interpretation.

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

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†WILLIAM BARNARD MOONEY, Pd.M., A.B., School Visitor. Professor of School Administration.

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KATHRYN M. LONG, B.S., A.B., Training Teacher, First Grade.

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JOHN T. McCUNIFF, Pd.M., A.B., Assistant Professor of Industrial Arts, Printing and Mechanical Drawing.

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*Deceased November 11, 1915.

†Leave of absence, 1915-1916.

- GEORGE WILLIAM FINLEY, B.S., Professor of Mathematics.
- ☐ MARGARET STATLER, Pd.B., A.B., Training Teacher, Third Grade.
Instructor in Story Telling.
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Professor of Secondary Education.
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- GEORGE EARL FREELAND, A.B., A.M., Principal of the Elementary School.
- AGNES HOLMES, Pd.M., Assistant in Industrial Arts.
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- MERLE KISSICK, A.B., Ph.B., Director and Professor of Household Arts.
- CELIA LAWLER, Pd.M., A.B., Training Teacher, Fourth Grade.
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CHARLES HALL WITHINGTON, M.S., A.M., Professor of Agriculture.
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ALFONSE MOTT.....	Physics
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LEONA BERTHA PETERS.....	Fourth Grade

—o—

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 A. W. YAICH, Record Clerk.
 R. I. PHIPPENEY, Stenographer.
 ROSE SOTHMAN, Stenographer.

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JAMES HARVEY HAYS, Dean of the College, and of Non-Resident and Summer Term Work.

HELEN GILPIN BROWN, Dean of Women.

FRANCES TOBEY, Dean of the Junior College.

DAVID DOUGLAS HUGH, Dean of the Training School.

GURDON RANSOM MILLER, Dean of the Senior College.

THOMAS C. McCRACKEN, Dean of the Graduate College.

SAMUEL MILO HADDEN, Dean of Practical Arts.

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Mr. McCracken

Mentor

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Mr. Foulk, Mr. Withington; Mr. McKelvey, Secretary

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Function: The Charge and Care of Woman's Building

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Function: Aids, Helps, Expansion and Growth
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Mr. Shriber, Mr. Mooney, Mr. Withington, Mr. Hugh

THE FUNCTION OF THE TEACHERS COLLEGE

The function of the Teachers College 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 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, the student, the home, the state, society, and the course of study.

The Faculty

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

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

Ability to teach ranks next in the hierarchy of qualification. This is ability to adapt self and subject to the pupil, and to inspire to action. It is a natural gift specially trained.

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

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.

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 characterizes all the members of the faculty. Due regard for each other in speech and manner should always exist.

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 Teachers College 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.

The Student

A student who enters the State Teachers College should have maturity of mind. This is absolutely necessary, for the student who

is studying objects in their relation to the education of children has a more complex problem than one who is studying the subject for the subject's sake.

HISTORY OF THE COLLEGE

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.

The Eighteenth General Assembly passed an act making the State Normal School at Greeley, Colorado, also the State Teachers College of Colorado. In the catalogue and in all the official publications hereafter the title, "The State Teachers College of Colorado," will be used.

Location

The Teachers College is located at Greeley, in Weld County, on the Union Pacific, the Colorado & Southern, and the Denver, Laramie & Northwestern 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 10,000 inhabitants.

THE CLIMATE

Colorado sunshine is a proverb. The altitude of Greeley is one mile. The combination of a moderate elevation and sunshiny days produces an almost ideal condition for school work in summer. The middle of the day is usually warm, but in the shade the temperature is never unpleasant. The cool evenings are all that the student could desire. A humid, hot night is unknown.

EQUIPMENT

The institution is well equipped in the way of laboratories, libraries, gymnasiums, playgrounds, an athletic field, art collection,

museums, and a school garden. The library has 40,000 volumes bearing on the work of the Teachers College. There is ample opportunity to work out subjects requiring library research. There is a handicraft department connected with the library wherein a student may learn how to conduct a library. The gymnasium is well equipped with modern apparatus. Games of all sorts suitable for schools are taught.

THE GREELEY WATER

The water supply of Greeley is obtained from the canon of the Cache la Poudre, forty miles from Greeley, in the mountains. The water is passed through settling basins and filters until all foreign matter is removed. The supply is clear, pure, and ample for all the needs of the city. The system was constructed at an expense of \$400,000 and is owned by the city.

BUILDINGS

The buildings which are completed at the present time consist of the administration building, the library building, the residence of the President, the training school and the industrial arts building. The main, or administration building, is 240 feet long and 80 feet wide. It has in it the executive offices, class-rooms, and class museums. Its halls are wide and commodious and are occupied by statuary and other works of art which make them very pleasing.

The library is a beautiful building. The first floor is entirely occupied by the library, consisting of more than forty thousand volumes. The furniture in the library is of light oak and harmonizes with the room in a most pleasing manner. The basement is occupied by committee rooms, text-book department, taxidermy shop, wild animal museum, ceramic museum, and the departments of geography and agriculture.

The Training School is a commodious building of red pressed brick similar in style to the administration building. In its construction no pains or expense have been spared to make it sanitary, fireproof, and in every possible way an ideal building for a complete graded school from the kindergarten to the high school, inclusive.

The Simon Guggenheim Hall of Industrial Arts is a beautiful structure in the classic style of architecture. It is constructed of gray pressed brick. It accommodates the departments of Manual Training and Art, including every branch of hand work and art training applicable to the highest type of public school of the present and immediate future. This building is a gift to the School from Senator Simon Guggenheim.

The President's house is on the campus among the trees. In this beautiful home are held many social gatherings for students during the school year.

CLUB HOUSE AND COTTAGE

During the year 1915-1916, two new buildings have been completed and opened. The first of these is a model cottage of five rooms for demonstrations in house furnishing and housekeeping for the department of Domestic Economy. The second is the club house for women students. This beautiful building will be used for student social gatherings.

THE CAMPUS

Surrounding the buildings is a beautiful campus of forty acres. It is covered with trees and grass, and dotted here and there with shrubs and flowers, which give it the appearance of a natural forest. During the summer, birds, rabbits, squirrels and other small animals make the campus their home, thus increasing its value as a place of rest, recreation, or study.

During the summer and fall terms the faculty gives its evening reception to the students on the campus. At this time it presents a most pleasing appearance, being lighted, as it then is, by electric lights and Japanese lanterns.

In the rear of the buildings is a large playground, which covers several acres. In the southwestern portion of this playground is a general athletic field, a complete view of which is secured from a grandstand, which will accommodate more than a thousand spectators. On the portion of the grounds adjacent to the buildings there is a complete outdoor gymnasium. To the south of the buildings are located the tennis courts.

This is one of the most complete playgrounds west of the Mississippi, and when the present plans are fully realized it will be one of the best equipped and arranged grounds in the United States.

SCHOOL GARDEN

One of the pleasing features of the spring, summer and fall sessions of the school is the school garden. This garden occupies several acres of ground and is divided into four units—the conservatory, the formal garden, the vegetable garden, and the nursery. From the conservatory the student passes into the large formal garden, where all kinds of flowers, old and new, abound. Here may be found the first snow-drop of early March and the last aster of late October. From the formal garden we pass to the school garden proper. Here in garden and nursery the student may dig and

plant, sow and reap, the while gathering that knowledge, that handicraft, that is essential in the teaching of a most fascinating subject of the up-to-date school—gardening.

THE CONSERVATORY

The greenhouse is one of the best equipped of its kind in the United States. After a hard day's work it is a rest and an inspiration to visit this beautiful conservatory. Here hundreds of varieties of flowers are kept blooming all winter, and the early spring flowers and vegetables are started for the spring planting.

EXPENSES

College Department

Table board costs from \$3.50 to \$4.00 per week. Room rent costs from \$8.00 to \$10.00 per month; one or two in a room. Rooms may be had equipped for light housekeeping at from \$6.00 to \$10.00 per month. There are a number of opportunities for students to earn a part or all of their expense of board and room by helping in households, etc.

Tuition

Tuition is free to citizens of this state.

Library Deposit

Each student in the College and High School Departments deposits two dollars upon entrance as a guarantee to the school against loss of books, returnable at the end of the school year or at the time of the student's permanent withdrawal from the school.

Term Fees

All College students pay the following fees each term:

Owing to the expansion of the special departments and the necessity of material to carry on the work in those departments, such as food and material for domestic science; wood, metal and supplies for the manual arts; chemicals and physical supplies for laboratories; musical supplies; art supplies for public school arts; publications for distribution to students; text books and general books for the library; and museums which are in every department of the institution, the following incidental fee and physical education fees are paid by each student of the College department per term:

Incidental fee	\$ 8.50
Physical Education fee.....	1.50

Total	<u>\$10.00</u>
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The Physical Education fee is collected at the office by the secretary for the Physical Education department. The secretary is the custodian, but the distribution and expenditure of the funds are in the hands of the Physical Education department. The institution, as such, has nothing to do with this beyond its collection.

All persons not citizens of the State of Colorado pay five dollars (\$5.00) per term tuition in addition to the incidental fees of ten dollars specified above.

A citizen of the state is one who is eligible to vote at any election in the State of Colorado, or a student whose parents are legal residents of the state.

A student whose parents reside in another state, does not acquire a legal residence by virtue of having attended the College one year or over.

Caps and Gowns

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

The Y. W. C. A. has on hand a limited number of caps and gowns which may be rented at a very reasonable rate.

MAINTENANCE

The maintenance of The State Teachers College is from a millage on the entire tax assessment of the property of the state and from special supplementary appropriations from the legislature. Appropriations for buildings and general development are made by the legislature of the state.

ORGANIZATION OF THE COLLEGE

The State Teachers College is organized into three divisions—The Junior College, The Senior College, and The Graduate College. Each of these has its own regulations, similar in essentials, but different in some details, for admission, advanced standing, major subjects, diplomas, degrees, graduation, etc., etc. These matters of administration are presented in different sections of this book, each College having its own place. These may be seen on the pages indicated below:

Junior College	Page 24
Senior College	Page 26
Graduate College	Page 28

Only details of administration are to be found in the pages noted. Each department schedules *all* the courses it has to offer in

one place. The department indicates what courses are intended primarily for Junior College, what for Senior College, and what for Graduate College. This arrangement is made to indicate the grade of work to be expected in a given course and is not intended to exclude any student from any course which he wishes to take if he has had previous training to fit himself to do that kind or grade of work.

THE GRADING SYSTEM

Each student registers for not more than twenty hours each term. Of these twenty hours, not over two required courses, exclusive of physical education, may be chosen for any one term.

Students who do work of high quality are marked "A," and receive credit for the number of hours scheduled for the course. Those who do work of unusually high quality are marked "AA," and receive credit for 20 per cent. more than the normal hours allowed for the course. Work of only fair quality is marked "B," and 20 per cent. is deducted from the normal allowance. Work of poor quality is marked "C," and 40 per cent. is deducted from the normal allowance.

5AA indicates 6 hours credit.

5A indicates 5 hours credit.

5B indicates 4 hours credit.

5C indicates 3 hours credit.

F indicates a failure in the course.

These marks go on the permanent records and stand as an indication of the quality of the work done by the student while in college, and are useful for instructors when they recommend graduates for positions.

Those who undertake a course and are compelled to leave the school because of sickness or for some other reason before the term is completed, receive credit for the amount and quality of the work done. For example, a student enters a three-hour course and completes about two-thirds of it with unusual distinction. The record will be, not "3B," but "2AA." Each of these marks would indicate credit for 2.4 hours. The second mark would show, when the circumstances of the case were forgotten, that the quality of the work was excellent. The other mark, "3B," would indicate that only fair work was done in a three hour course.

The Term Hour

The unit of work in the College is one recitation a week for a term of twelve weeks. This is called in this catalog a term-hour or credit-hour.

Non-Resident Study

Individual and Group Plans of Study.—The non-resident work may be done by individual students corresponding directly with the college or by groups organized under the direction of the college. The regulations governing this work, including the conditions governing the acceptance of non-resident teaching in lieu of resident teaching, are set forth in The Non-Resident Bulletin.

Advanced Standing

Students who wish to apply for advanced standing should ask for the Blank Application Form for Advanced Standing. Upon presenting this, properly filled out and accompanied by the credentials called for, the College will grant whatever advanced standing seems to be merited. Credits from other normal schools or teachers' colleges of equal rank with The State Teachers College of Colorado are accepted, hour for hour. Credits from reputable colleges, and universities, are accepted at their original value.

GOVERNMENT

That government of a school which brings about self-control is the highest and truest type. Discipline consists in transforming objective authority into subjective authority. Students who cannot conform to the government of the college, and who cannot have a respectful bearing toward the school, will, after due trial and effort on the part of the faculty to have them conform, be quietly asked to withdraw.

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

Discipline—Moral and Spiritual Influence

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

The Standard of the School

It is the purpose of the trustees and faculty of the State Teachers College to maintain a high standard of scholarship and professional training. Those who are graduated shall be thoroughly prepared and worthy of all for which their diplomas stand. It 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.

Bureau of Recommendations

It is the purpose of the Bureau of Recommendations to secure such information as will insure the selection of the best available person for a given position. Boards of Education wishing to employ teachers are invited to make their wants known. All correspondence should be addressed to the Secretary of the Bureau of Recommendations.

Museum of Fine Arts and Arts-Crafts

The Art Museum is one of the notable features of the equipment of the institution. It contains excellent copies of ancient, mediæval and modern art.

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.

There is a good collection of pottery. The specimens are used in the arts-crafts work. The ceramics of a number of countries are already represented in the museum.

Departmental Museums

The museums of the State Teachers College are as fully developed for actual use as any in the whole country. Each department maintains a well-arranged museum. The objects in the museums are such as may be used by way of illustrating lessons.

The Christian Association

Realizing the necessity for religious and social culture in the school, and believing that 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.

Bible Study—"The Greeley Plan"

Unusual opportunities for Bible study are offered to students through a system of co-operation between the churches of Greeley and the Teachers College. Bible courses of college grade are maintained in all the larger churches. Under specified conditions, students may receive college credit for the work done in these classes. This year 232 students have availed themselves of the opportunity of Bible study under this plan.

Community Co-operation

The College offers credit to students doing social service in the community, such as directing the work of Boy Scouts, Camp Fire Girls, boys' clubs, girls' clubs, Sunday school classes, Junior Christian Endeavor Societies, Junior Epworth Leagues, and similar organizations. Credit is granted for this work upon conditions to be announced at the beginning of the school year. Churches and organizations wishing to avail themselves of the service of student helpers under this plan of Community and College Co-operation should communicate with the director, Dean Thomas C. McCracken, at least two weeks before the opening of the term in which the service is desired.

Visitors

The school is open to visitors. The teachers and educators of the state are especially invited.

LOAN FUNDS

The following are a number of loan funds that are designed to help needy students to complete courses in The State Teachers College of Colorado:

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 through until graduation, meets with an unexpected loss, through sickness or other causes, which compels him either to leave the school or to continue the work under conditions that are not conducive to the best results. To meet the need of these students, a fund has been established, called the Students' Relief Fund, from which money is lent 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 College 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. The treasurer accepts the student's note and collects it when it becomes due.

Y. W. C. A. Student Aid Fund

The Young Women's Christian Association has a fund of several hundred dollars which is kept to aid students who need small sums to enable them to finish a term or a course. The fund is in charge of a committee composed of the treasurer of the society, two members of its Advisory Board and a member of the faculty. Loans are made without reference to membership in the society, and at present no interest is charged.

Senior College Scholarship Fund

The Senior College Fund is an accumulation of money contributed by Senior College graduates and others who may be interested in creating a fund for those who pursue courses in the Senior College. This fund now approximates one thousand dollars, from which loans are made to Senior College students only. It has already helped many worthy students to continue to the end of their Master of Pedagogy courses or to their A.B. in Education. This fund is in charge of a Board of Trustees now headed by the Dean of the Senior College.

Junior College Scholarship Fund

The Junior College Fund is an accumulation of money contributed by Junior College graduates and others who may be interested in creating a fund for those who pursue courses in the Junior College. This fund is in charge of the Secretary of the Board of Trustees and is subject to the control of the students of the Junior College department.

The William Porter Herrick Memorial Fund

This fund, the gift of Mrs. Ursula D. Herrick, in memory of her husband, the late William Porter Herrick, consists of the principal sum of \$5,000. The proceeds or income of said fund are to be

paid over and expended by the Board of Trustees of The State Teachers College of Colorado in aid of such worthy and promising under-graduate students of the College, of either sex, as the President of said College may from time to time designate; provided, however, that no student who uses tobacco in any form, or who uses intoxicating liquors of any kind as a beverage shall participate in the benefits of this fund. The sum or sums, income or proceeds so expended by the said Trustees shall be considered in the nature of a loan or loans to such students as may receive the same, and each of said recipients shall execute a note or notes promising to repay to said Trustees the amount or amounts so received, within five years after graduation or quitting the College, without interest; but it is the desire of said donor that no student shall be pressed for the payment of said note or notes when the same shall become due and payable, so long as the Board of Trustees shall be satisfied that the recipient is making every reasonable effort, according to his abilities, to repay the same and is not endeavoring to repudiate the obligation.

GIFTS TO THE COLLEGE

From the beginning of the life of the college, friends and organizations have been generous in making gifts of land, money, books, museum specimens, and other articles of value. The authorities of the college gratefully acknowledge their obligations to all these donors, and invite any who may feel so inclined, to make similar donations.

The Junior College

FRANCES TOBEY, B.S., Dean

The scope of the Junior College is the work of the first two years of the college proper. The student completing this course, having earned credit for 120 term-hours, is granted a diploma, which is a life certificate to teach in the public schools of Colorado.

Admission to the Junior College

Anyone may take courses in Non-Residence, but to become a resident student and a candidate for a degree and diploma, the regulations given below must be complied with.

1. Students must be of good moral character and free from contagious disease.

2. Graduates of acceptable high schools of this and other states are admitted without examination upon presenting to the Dean of the College their diplomas or certificates of graduation. The minimum of work acceptable for entrance is 30 semester hours (15 units).

3. Practical teachers of mature years, who are not high school graduates, may enter and take such work as will make up the deficiency and then become candidates for graduation and the state certificate in the same way as other students.

Requirements for Graduation

A student must be in residence at least three terms before being granted a certificate of graduation from the Junior College. One hundred and twenty term-hours are required. This work is elective, except for the following subjects required of all Junior College students:

	Minimum Hours
Psychology 1	4
Psychology 2, 3a, 3b, or 4 (one of these).....	3
Biology 2	4
Sociology 3	3.6
Education 11	4
Education 8, 12a, 12b, 24, 25, 33 (one of these).....	2.4
Training School 1.....	3.6
Teaching	9
English 1	4
Total minimum required.....	37.6

Physical Education, two-thirds of the terms in which the student is in residence.

All of these required subjects are usually taken in the first year, except Education 11, the second course in Psychology, Teaching, and a part of the Physical Education courses.

Majors

No major is granted in the Junior College. Those who wish to earn a major later in the Senior College may begin work in the special subject in the Junior College. A student may obtain permission to complete as many as thirty hours in one subject in the Junior College.

The Senior College

GURDON RANSOM MILLER, A.M., Dean.

The Senior College includes the third and fourth years of the work of The State Teachers College.

The Senior College offers to all students and professional teachers who have done not less than two years of study beyond the high school an opportunity for higher professional and scholastic work.

It furnishes special advanced preparation for normal school critics and teachers.

It offers superior opportunities for supervisors of all elementary school work.

Supervisors of special subjects, music, art, manual training, domestic science and art, agriculture and physical education, will find courses adequate to their needs in the Senior College.

High school teachers will find here superior professional and scholastic courses adapted to their professional aims.

Principals and superintendents will find in the program of the Senior College an unusual number of courses, specially intended for mature students of wide professional interests.

Minimum Terms in Residence

No diploma of the College is granted for less than three terms of work in residence.

No person who has already received one diploma from this institution will be permitted to receive another diploma until such person shall have earned the full number of credits required for such diploma, and completed not less than one full additional term of resident work in this institution.

Admission to the Senior College

Graduates from the Junior College of The State Teachers College of Colorado are admitted to the Senior College.

Graduates of other colleges, who have earned one of the regular academic degrees, are admitted to the Senior or Graduate College without examination, and may receive advanced standing for a large part of the work done in the third and fourth years of the College.

Requirements for Graduation

One hundred and twenty term-hours in addition to those required for graduation from the Junior College are required for graduation and a degree from the Senior College. With the exception of the Teaching only 15 term-hours of academic work are required. This work must be elected from the departments of Biology, Sociology, Psychology, and Education. All Senior College programs must be approved by the Dean of the Senior College. Not less than five hours of the fifteen hours indicated above must be taken in the third year. A certificate which is a life license to teach in Colorado, and which is accepted by most of the states of the West, is granted upon the completion of the third year, if applied for by the student.

Four terms of teaching are usually required in addition to that done in the Junior College—two terms in the third year and two in the fourth. No student will be granted a diploma of the College without teaching at least three terms.

The Superintendent of the Training Department may, at his discretion, accept teaching done in other schools to satisfy the requirements in practice teaching.

Diplomas and Degrees

At the end of the fourth year of study, the student having credit for 120 term-hours in the Senior College, will be granted a diploma, which is a life certificate to teach in the public schools of Colorado. The degree of Bachelor of Arts (A.B.) in Education, will be conferred upon the graduate.

Majors

Sixty term-hours in one department is the minimum requirement for a major in the Senior College. The major notation must be approved by the head of the department in which it is sought before it can be entered on the student's diploma.

The head of a department may accept (but not require) work from an allied department as a part of required major credits.

The Graduate College

THOMAS C. McCracken, A.M., Dean

The Graduate College offers advanced instruction leading to the degree of Master of Arts in Education. The principal aim of graduate study is the development of the power of independent work and the promotion of the spirit of research. *Every department of the College is willing to offer not only the courses regularly scheduled but others of research and advanced nature which the candidate wishes to pursue.* Each candidate for a degree is expected to have a wide knowledge of his subject and of related fields of work.

Persons holding the degree of Bachelor of Arts, Letters, Philosophy, or Science from a reputable institution authorized by law to confer these degrees, or holding any other degree or certificate which can be accepted as an equivalent, may be admitted as graduate students in The Colorado State Teachers College upon presenting official credentials.

1. Residence. One year of work in residence at the College is required in advance of the requirements for the A.B. degree. This is three terms of work beyond a four-year college course. Students may satisfy the residence requirement by attendance for three summer terms under the conditions specified below.

2. Units of Work. A year's work shall be interpreted as sixty (60) term-hours. Forty-eight hours credit will be given for graduate courses pursued and twelve (12) hours credit for the Master's thesis which is required. Twenty (20) hours credit per term during the regular school year is the maximum, inclusive of the research involved in the thesis requirement.

3. Special Interpretation of Graduate Work in Summer Term. Graduate students shall receive for each graduate course pursued in the Summer Term a credit of three (3) hours, twelve (12) hours being the maximum credit per summer term, inclusive of research work in connection with the thesis. In the three summer terms of residence work the student may earn thirty-six (36) hours credit; the remaining twenty-four (24) hours may be earned in non-residence in the intervals between Summer Terms. This organization of the work for students who cannot attend for one year of three consecutive terms is regarded as preferable to the distribution of the work through four or five summer terms. If the work is not completed within three years, new conditions may

be imposed upon the candidates or the old conditions may be modified. In no case, however, shall fewer than 36 hours of residence work satisfy the requirements for resident study.

PSYCHOLOGY AND CHILD STUDY

JACOB DANIEL HEILMAN, Ph.D.

The main purpose of the courses in Psychology and Child Study is to improve the student's ability to care for, train and educate the child by means of studying the child's nature, normal development and natural modes of learning. Provision is also made for elementary and advanced courses in General Psychology.

Courses Primarily for Junior College

1. **Child Hygiene.** The preservation of the child's health is believed to be of fundamental importance in the work of the schoolroom. The following topics will be treated in the course: The significance, prevention and detection of sensory defects; malnutrition; faulty postures and deformities; hygiene of the mouth and nervous system; air, light, clothing, exercise and sleep requirements. Five hours. Every term.

2. **Educational Psychology.** Instincts and capacities; psychology of learning; individual differences; mental work and fatigue. Four hours. Winter and Spring terms.

3. **Child Study.** This course deals primarily with the mental and physical development of the child.

a. Purposes and methods; anthropometrical measurements and growth; development of attention and sense perception; instruction in observation. Three hours. Fall term.

b. The development of memory, imagination and thinking; the psychology of lying; the growth of feelings and ideals; volition and interest; suggestion and imitation. Three hours. Winter term.

4. **Psychology of School Subjects.** Drawing; writing; spelling; arithmetic; reading; and treatment of speech defects. Four hours. Fall and winter terms.

Required Courses: 1 in the first year.

One of the following: 2, 3a, 3b, or 4 in the second year. A minimum of seven hours in Psychology is required.

Courses Primarily for Senior and Graduate College

5. **Clinical Psychology.** Methods and purposes; mental classification of children; pathological classification of the feeble-minded; treatment of special classes of children; their effect upon the school, society, and the race; causes of feeble-mindedness; mental characteristics of the feeble-minded. Three hours. Spring term.

6. **Mental Tests.** Binet-Simon; Yerkes-Bridges-Hardwick; Terman; Goddard; form board, etc.

7. **Psycho-Clinical Practice.** Students receive practice in the examination of children. A term hour will be granted for two hours of work per week. Fall and winter terms.

8. **General Psychology.** The materials, methods, purposes and main conclusions will be discussed. The work will be adapted to either elementary or advanced students. Five hours. Any term.

9. Conference Courses. These are designed chiefly for students in the Graduate College. Among the subjects for these courses are: Formal discipline; mental and physical tests; sex hygiene; speech defects; malnutrition; defective children; standards for measuring school work; mental fatigue; retardation. Any term.

EDUCATION

THOMAS C. McCracken, A.M.

FRANK L. WRIGHT, A.M.

JOHN R. BELL, A.M., D.Litt.

SAMUEL M. HADDEN, A.M.

JOSEPH H. SHRIBER, A.B.

WILLIAM B. MOONEY, A.B.

HELEN GILPIN-BROWN, A.B.

GRACE H. WILSON, A.B.

The work of this department, although having to do primarily with fundamental theory underlying the educative process, shows also how such theory is of practical value to the teacher. The teacher needs a theoretical background for her work and a broad acquaintance with all fields of educational activity. The purpose of the courses offered is to meet these needs.

Courses Primarily Junior College

8. Educational Values. The methods of determining educational values adopted by leading educators of the past will be discussed and contrasted with present-day American methods. A detailed inquiry concerning the value of the various studies of the curriculum will be made with the following points in mind: (a) the way in which any particular subject-matter is acquired; (b) the social and physical needs of the individual and of the group of which he is a member; and (c) the tastes and predilections of the individual. Three hours. Fall term.

MR. WRIGHT.

9. Theory and Practice of Teaching. This course will treat of principles of instruction, discipline, and details of class-room management as they are applied to the conditions of the elementary school. The work of the course will consider the practical problems of the class-room in their relation to the life of the community. Summer, 1916.

MR. PHILLIPS.

10. History of Education in Ancient Times. This course will deal with primitive education; Hebrew life, educational ideals, and practices; Greek life, civilization, and thought and their dominant educational ideals, practices, and philosophies; Roman education; and the transmission of significant elements of educational theory and practice to later educational periods. Three hours. Fall term.

MR. WRIGHT.

11. Principles of Education. Required second year. Open also to Senior College students who have not had its equivalent. This course is designed to set forth the theory of aims, values, and content of education; the place of a scientific basis in education; the relation of schools to other educational agencies; the social limitations upon the work of the schools; and the processes of learning and teaching. Five hours each term.

MR McCracken and MR. WRIGHT.

12a. Current Movements in Social Education. This course will include a discussion of such subjects as the following: The school as a social center; open air schools; consolidation of schools; vocational education; vocational guidance; the school survey; the six-three-three plan; and other subjects of current interest. Three hours. Fall term.

MR. McCRACKEN.

12b. Current Movements in Social Education. A continuation of Ed. 12a. Either course may be taken alone. Three hours. Winter term.

MR. McCRACKEN.

24. School Administration. This course will deal with school and class-room management, and is designed to meet the needs of supervisors, principals, and class-room teachers. Each student may make a special study of the problem in which he is particularly interested. Problems peculiar to superintendents and supervisors in villages and small cities will be considered. Three hours. Fall term.

MR. MOONEY.

25. Administration of Rural Schools. This is a course in the study of rural education, which aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education, and a discussion of forward movements in legislation as they affect the education of country children. Three hours. Winter Term.

MR. SHRIBER.

27. General Education. A non-credit course, except for Senior and Graduate College students, who may take it for credit upon permission of the head of the Department of Education. This course will consist of a series of daily lectures by men eminent in the field of education. Class notes, special readings, reports, and theses, will be required of those taking the course for credit. Summer Term, 1916. Lecturers: Dr. G. Stanley Hall, Dr. Edward A. Steiner, Dr. Samuel C. Schmucker, Dr. S. M. Crothers, Dr. E. A. Kirkpatrick, Dr. Edward Howard Griggs.

31. Religious and Moral Education. This course will consist of a study of the movement for more adequate religious and moral education both in the church and in the educational institutions of our country; a study and evaluation of suggested schemes of moral training; and a summary of essential principles in moral education and moral training. (Not offered 1916-17.)

MR. WRIGHT.

32. History of Education—In Mediæval and Renaissance Times. This course will consist of a brief study of early Christian education, showing the trend of educational thought in the early Church, the types of schools which grew up, and the relation of Christian thought and Christian schools to pagan learning. The Renaissance will be studied with special reference to the fundamental changes that took place in educational ideals and aims and in religious thought, the effect of these upon the curriculum and upon educational institutions, and the problems which the Renaissance movement created for modern education. Three hours. Winter Term.

MR. WRIGHT.

33. History of Modern Elementary Education. This course will be introduced by a brief review of the education of the Renaissance to furnish the setting for the study of the trend of modern education. The main part of the course will be devoted to such subjects as the development of the vernacular schools, the early religious basis of elementary schools, and the transition to a secular basis, together with the work of such men as Comenius, Locke, Rousseau, Pestalozzi, Herbart, and Frebel. Three hours. Spring Term.

MR. WRIGHT.

37. Ethics and Culture for Women. A course designed for instruction in the etiquette of every-day life, and a general appreciation of culture and its necessity in the training of a teacher. The Dean of Women

desires a personal touch with each student. Questions will be requested from the members of the class, and there will be a friendly exchange of ideas with reference to conduct. The course is primarily for first-year students. Lectures, book and magazine reviews, and reports. Two hours, each term.
MRS. GILPIN-BROWN.

38. **Vocations for Women.** A course designed for the study of vocations open to women, with the idea of preparing the teacher to guide her students in the choice of their life work. The course consists of lectures, recitations, readings, and reports. Three hours. Winter Term.
MISS WILSON.

40. **Humane Education.** The rights of children and the rights of lesser animals. The various agencies and laws for the general welfare and protection of both children and animals. Ways and co-operation between humane agencies and teachers. History of the humane movement. Education of children in the principles of humane treatment of animals. Inter-relations between animal diseases and human diseases. Moral effects of neglect and inhuman treatment of animals. Two hours. Winter Term.
MR. MOONEY.

44. **Social Education.** This course is required of students who elect to carry on club and class work in connection with the Community Co-operation Plan. A study will be made of educational problems involved in club and class organization and management. One hour. Throughout the year.
FELLOW IN EDUCATION.

15. **Ethics.** This course will treat of the genesis and function of the moral ideal in the history of the race, with special reference to the scientific interpretation of the moral life of today. Attention will be paid also to the principles underlying the development of the moral consciousness of the child and the problem of moral training in the public school. (Not offered 1916-17.)
MR. WRIGHT.

16. **Theory of High School Curriculum.** A discussion of educational values and the arrangement of studies to suit the age of the pupil. An attempt to eliminate waste material and to stress those courses that best prepare for life. A survey of experiments in the introduction of vocational courses in the curriculum of the secondary school; this will lead to a careful study of the various types of American secondary schools. Three hours. Winter Term.
MR. WRIGHT.

17. **Vocational Education.** This course has for its purpose the interpretation of the subject from the artistic, industrial, and commercial standpoints.
MR. HADDEN.

19. **Principles of High School Education.** The course will be introduced by a brief survey of the psychology of adolescence in its relation to the general problem of interpreting the life of the high school pupil and the adjustment of teaching method and subject-matter to his stage of development. Attention will be given to the underlying aims of the high school as they are being conceived by the most progressive educators. A critical evaluation of the function of the various subjects taught in the high school will be made, and the principles underlying current reconstructions of the curriculum and the content of specific subjects will be discussed. The newer conceptions of the nature and function of the American high school will be continually emphasized. Three hours. Spring Term.
DR. BELL.

20. **High School Administration.** This course will deal with the organization, management, and administration of high schools; a critical examination of typical high schools, emphasizing the function, courses, social needs, equipment, special classes, training and qualification of teachers, and similar matters of administration; and the high school in its administrative relation to elementary and higher education. Two hours. Fall Term.
MR. WRIGHT.

22. **History of Secondary Education.** This course takes up the history and comparative study of Secondary Education. The historical study will prepare the way for the analysis of present conditions, and this will be used as the basis for the determination of the function and significance of the high school at the present time, and its responsibility for new adjustment to present social needs. Two hours. Spring Term. (Not offered 1916-17.)
MR. WRIGHT.

28. **Comparative Study of School Systems.** The study of European systems of education, particularly German, French, and English, will be made for the sake of a comparative basis and the suggestions that they furnish as to the current problems in American school administration. Three hours. Fall Term.
MR. WRIGHT.

29. **Current Educational Thought.** This course will consist of reviews and discussions of recent books in the various fields of education. Five hours. Spring Term.
MR. McCracken.

30. **Rural Education.** This course will consider rural education as a necessity of national progress. A brief study will be made of the rural educational systems of other countries. Agencies that are giving emphasis in this and other countries to the need for a better rural school will be studied. Considerable attention will be given to the question: What is the best kind or type of rural school, and how may it be attained, under conditions as they exist in Colorado and the West? Three hours. Fall Term.
MR. SHRIBER.

34. **American Education.** Senior College. A careful study will be made of typical methods of meeting educational needs in the colonies, of the growth of the public school idea, and of the spread of the public school system. Attention will be paid to various features of our American school system in its present status of development. Five hours. Winter Term.
MR. WRIGHT.

35. **Educational Classics.** Such classics as Plato's Republic, Spencer's Education, and Rousseau's Emile, will be considered, (a) as interpretations and criticisms of educational practices of the various periods of history represented; and, (b) as presentations of theory related to present-day education. Three hours. Spring Term.
MR. WRIGHT.

42. **Social Administration of Education.** The plan of this course comprises a comparative study of contemporary organization and administration with special reference to underlying social and economic problems; a critical examination of typical city and village systems; a survey of the organization, powers, and duties of the Board of Education; also of the qualifications, powers, duties, and opportunities of the superintendent and principal. Five hours. Winter Term.
MR. MOONEY.

43. **Federal Aid to and State Control of Education.** This course is designed to bring to the student a knowledge of the efforts of the federal government to aid education; also a survey of the school law of typical states, which will show the plan of the state administration of the school system within its bounds. Two hours. Fall Term.
MR. McCracken.

Courses Primarily Graduate College

23. **Research in Education.** This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of greatest interest to him, provided sufficient opportunity is at hand for original investigation. The results of such research are to be embodied in a thesis. Conference course at hours convenient to instructor and student. Every Term.
MR. McCracken.

41. **Master's Thesis Course.** The student who expects to work upon his Master's thesis will register for this course no matter for which department the thesis is being prepared. Any Term.
MR. McCracken.

45. **Measurements and Tests in Education.** A study of measurements of results in education, including tests of efficiency in school subjects and in the work of the individual teacher. Two hours. Spring Term.
MR McCracken and MR. WRIGHT.

THE TRAINING DEPARTMENT

The following persons offer courses in the Training Department for college students:

DAVID DOUGLAS HUGH, A.M., Dean of the Training School.
JOHN R. BELL, A. M., D.Litt., Principal of the High School.
GEORGE EARL FREELAND, A.M., Principal of the Elementary School.
JENNY LIND GREEN, Training Teacher—Seventh Grade.
ELIZABETH HAYS KENDEL, A.B., Training Teacher—Fifth Grade.
CELIA M. LAWLER, A.B., Training Teacher—Fourth Grade.
MARGARET STATLER, A.B., Training Teacher—Third Grade.
BELLA BRUCE SIBLEY, A.B., Training Teacher—Second Grade.
KATHRYN M. LONG, A.B., Training Teacher—First Grade.
MILDRED DEERING JULIAN, B.S., Training Teacher—Kindergarten.

The training school is the laboratory of a teachers' college. In it the theories of education are put into practice, and the merits of different kinds of subject-matter and different methods of instruction are determined. The training school also offers to young teachers practice in the acquisition of the technique of their art. Consequently, all candidates for degrees of The State Teachers College are expected to spend a period of apprenticeship in its classes.

The Training Department also provides courses in methodology, organization of the curriculum, and school administration. While it is difficult in some cases to differentiate these courses from those offered in other departments, the distinguishing characteristic of this work, in the main, is intended to be found in the fact that these courses are given by teachers who are in close touch with the work of children, and the adaptation of the materials and methods discussed to the needs of children will receive especial emphasis.

Courses Primarily Junior College

1. **Observation in the Training School.** Junior College and Senior College. (Required of first-year students and also of those in later classes who have not had its equivalent. Those who are preparing themselves to be high school teachers may substitute course 42 for this course. Those who are majoring in the industrial arts group, manual training, home economics, art, elementary agriculture and stenography, must substitute course 5, Practical Arts, for this course). This course is meant to prepare the student for teaching. It is in part a laboratory course, based upon the observation of teaching in the training school classes, and it, in part, consists of a study of the psychological principles underlying the teacher's work. In the latter connection, the best literature upon the subject will be reviewed. Four hours.

MR. HUGH.

2. Elementary School Teaching. Required of students preparing to be teachers in elementary schools. This work is intended both for young students who have not had previous experience in teaching and also for teachers who are ambitious to attain greater efficiency in their work. Provision is made for training in all divisions of the elementary school. An expert teacher is in charge of each grade. Students will receive training in the organization of subject-matter, in methods of instruction, and in classroom management. They meet with their training teachers in weekly conferences and more frequently individually to discuss the practical problems of school work. Three terms, five hours each.

MR. HUGH, MR. FREELAND AND TRAINING TEACHERS.

5. Primary Methods. This course is considered under two main headings: 1. The transition of the child from the home or kindergarten to grade work—the nature of the little child, and the principles which govern early growth; 2. The stimuli by which the child is led to use the tools of wider social intercourse. This study will include (1) a comparison of typical courses of study with our own; (2) a discussion of the basis of selection of subject-matter; (3) a reorganization of this material by the student into a tentative course of study; (4) the relation of subject-matter and method; and (5) practical problems in methodology. Four hours.

MISS LONG.

6. Primary Methods. The course is based on the needs of the child between the ages of 7 and 8 years. This course leads up to the selection of subject-matter which functions in the child's life. To this end a brief comparison of courses of study in some of our larger city schools is made. The latest and most scientific articles on primary methods are read and discussed. Many devices for teaching beginning reading, phonics, rhythm, spelling, songs, as well as methods for dramatization of stories, multiplication table, and practice in blackboard illustrating are given. Three hours.

MRS. SIBLEY.

7. Third and Fourth Grade Methods. Junior College Elective. The course is based on the needs of the child between the ages of 8 and 10. It will consist of (1) a review of the most significant things in child study common to children of this period; (2) a comparison of courses of study for these grades; (3) the building of a course of study; (4) methods of presenting the material of the curriculum of the third and fourth grades. Three hours.

MISS LAWLER.

8. Fifth and Sixth Grade Methods. A brief survey of the needs and interests characteristic of children in the pre-adolescent period—with the purpose of applying the conclusions of such psychological studies to methods of teaching—and a brief study of the subjects in the curriculum of the elementary grades. Chief emphasis will be placed upon the practical side of the work, including a consideration of the subject-matter to be taught; influence governing its selection, arrangement, and distribution; methods of presentation; devices, games, and drills for securing accuracy and retention; and observation of classes illustrating certain phases of the work. Three hours.

MISS KENDEL.

9. Grammar Grade Methods. The physical and mental status of the grammar grade pupil—with the instinctive tendencies and dominant interests of this period. Upon this as a basis, the material actually in use in these grades in various good schools will be considered. Following this preliminary work, an attempt will be made to evaluate several of the school subjects, and to work out functionally several topics of each. Three hours.

MISS GREEN.

11. School Hygiene. Includes hygienic methods of teaching and hygienic school conditions. Hygienic methods of teaching each elementary subject as well as the demands of the different grades in rooms, light relations, length of periods, etc. Four hours. Fall Term.

MR. FREELAND.

12. **The Use of Interest in Teaching.** The different phylogenetic, special hereditary, and acquired interests of elementary school children are considered. The growth and changes of interest are noted. Special attention is given to the use of these interests in teaching as well as the dangers of misuse and too much use of them. Four hours. Spring Term.
MR. FREELAND.

15. **Story-Telling in the Grades.** In this course the following phases of the work will be considered: 1. Brief survey of the history of story-telling. 2. The educational value of the story and the characteristics of a good story. 3. Classes of stories. Each student is expected to collect individual bibliographies of stories. Work in practical telling of stories to children will also be a feature of this course. Two hours.
MISS STATLER.

31. **Literature and Story-Telling in the Kindergarten and Primary Grades.** This course includes a study and classification of the different types of stories according to their fitness for various ages and purposes in story-telling. A study is made of the educational values of stories for children and of the possibilities of creative work by the children. The adaptation and selection of a graded list of stories will form a part of the course. Three hours.
MISS JULIAN.

32. **Handwork in the Kindergarten.** Intended to prepare teachers to meet the needs of the constructive instinct as it functions in the play life of the child. The needs that grow out of the child's play will be worked out experimentally with large building blocks, clay, paper, cardboard, and textile materials, etc. Two hours.
MISS JULIAN.

33. **Plays and Games for Kindergarten and Primary Children.** This course is a study of the development of games from the spontaneous activities of children, through the rhythmic and dramatic games, into the formal games, and finally the dance. An application of child psychology is made in the selection and presentation of games for different ages. Students have practice in presenting games. Three hours.
MISS JULIAN.

34. **Kindergarten Occupations.** This course is intended to give a mastery of the Fröbelian materials that are now considered good, together with other materials that have been added. Two hours.
MISS JULIAN.

35. **Kindergarten Principles.** This course aims to trace the evolution of the educational principles underlying present-day practice in the kindergarten. A comparative study will be made of Rousseau, Pestalozzi, and Fröbel, as well as the work of Montessori and other modern educators. Two hours.
MISS JULIAN.

36. **Construction in the Kindergarten.** The students are given practice in presenting different problems and materials to children. Their own work with the materials will be centered about some problem. The building with gifts will be illustrative. Two hours.
MISS JULIAN.

37. **The Kindergarten Program.** This course takes up the study of the different materials of the kindergarten curriculum, together with a detailed arrangement of these materials. Three hours.
MISS JULIAN.

39. **The Relation of the Kindergarten and the Primary Grades.** The aims, principles, methods, materials and subject of the kindergarten and the grades are compared. A study is made of the adaptation of the materials and subject-matter to suit the growing needs of the child. Three hours.
MISS JULIAN.

42. **Principles of High School Teaching.** Discussions, lectures, readings, and observations. This is an attempt to study in a real and practical way some of the best modern methods, equipment, material,

etc., pertaining to the teaching of the different high school subjects, and to point out some of the special difficulties peculiar to each subject. Each student, before the close of the term, will make a special study of the subject which he is preparing to teach. This course is open only to present or prospective high school teachers, and should be taken by such instead of Course 1. Winter Term. Five hours. DR. BELL.

Courses Primarily Senior College

3. **Elementary School Supervision.** Students who have served their period of apprenticeship in the elementary school and who have done work of an exceptionally high character may be allowed to assist in the supervision of teaching in the training department. They will still work under the direction of the training teachers but will have greater responsibilities and a larger share in the administrative work of the school. This training is intended for those seeking the more responsible positions in elementary school work and also for those who are planning to become training teachers for normal schools. Hours to be arranged.

MR. HUGH, MR. FREELAND AND TRAINING TEACHERS.

10. **Practical Problems in Education.** This includes a study of such questions as newer viewpoints in school work; different types of school organization; studies bearing on the teaching of the common branches; standardization; grading; promotion; and discipline. Winter Term. Three hours. MR. HUGH.

13. **Elementary School Measurements.** Considers the entire standardization field and develops accurate methods of measuring the school work of children in so far as it is measureable. The limits and dangers of too much measuring are also considered. Winter term. Four hours. MR. FREELAND.

29. **Kindergarten Theory.** Senior College. The philosophy of the kindergarten. A study is made of articles by MacVannel, Thorndyke, Dewey, and others, reports of the I. K. U. and articles in current magazines. Practice is given in teaching classes in theory in the Junior College. Five hours. MISS JULIAN.

30. **Kindergarten Conference.** This course will take up the problems of kindergarten supervision. A critical study will be made of typical kindergarten programs in different schools. The bearing of modern educational theories upon the kindergarten curriculum will be considered. Three hours. MISS JULIAN.

38. **The Play Life of Children as a Basis for Education in the Kindergarten.** The meaning of educational play and its significance in the mental and moral development of the children of the kindergarten and primary grade age are considered. The course will include readings, lectures, observation in the kindergarten, and discussion of methods and materials. Three hours. MISS JULIAN.

40. **Practice Teaching in the High School.** Required of students preparing to be high school teachers. Student teachers work under the immediate direction of the High School Training Teachers. The student teacher spends a part of his time in observation of the work of the training teacher, but is held responsible for the preparation and organization of the lessons and such other duties as may be assigned to him. Later he takes part in the classroom instruction under the supervision of the training teacher. Students are also expected to participate in the social life of the high school and to assist in carrying out its policies. Four terms, five hours each. MR. HUGH AND DR. BELL.

41. **High School Supervision.** Persons who have shown an unusually high degree of efficiency in high school teaching may be allowed to

assist in the supervision of the high school work. This training will afford them a more comprehensive view of the work and practice in the supervision of training of younger teachers. This experience is intended primarily for those who are preparing themselves for principals and superintendents or to fill other positions of responsibility in public school work. Hours to be arranged.

MR. HUGH AND DR. BELL.

44. **High School Practicum.** This course will consist of the study of a number of practical problems for the high school teachers. Among these will be the classification and causes of crimes and misdemeanors, faults, etc., having to do with high school government; truancy, its causes and remedies; student government, its history and present value; play and athletics, value and best methods of control; high school incentives; the high school as a social center; dental and medical inspection; how to provide for the varying abilities of pupils; elective versus required studies; retardation and elimination of high school pupils; home study, etc., etc. Three hours. Fall Term.

DR. BELL.

Special Work.—Students expecting to major in Training School work in the Senior College may begin their special work in the Junior College, looking toward a major in one of the following phases of teaching:

1. Kindergarten and Primary Teaching Miss Julian
2. Primary Grade Teaching Miss Long
3. Intermediate Grade Teaching Miss Lawler
4. Grammar Grade Teaching Miss Green
5. Elementary School Supervision.....Mr. Freeland
6. High School Supervision.....Dr. Bell
7. Public School Supervision.....Mr. Hugh

COUNTY SCHOOLS

JOSEPH H. SHRIBER, A.B., Director

This department recognizes that the rural problem is essentially the problem of the rural school, because it is the agency of education, and a natural center for organized community service. The object of the courses offered here is to prepare county teachers for community leadership and to assist in the proper organization and management of the type of school found in the open country. However, every effort consistent with existing conditions and lasting progress, shall be made to point out the importance of reorganizing the county educational system upon a principle that shall lead to centralization. While the new conception of a new school is in process of formation, we must make the best of the present situation. Whatever may be the organization, equipment or skill in management, good teaching is the fundamental source from which the product of our schools can be judged. The rural teacher, especially, on account of limited time and a crowded curriculum should have a clear-cut knowledge of the subject-matter he teaches. It shall be the chief aim of the department to stress the importance

of scholastic preparation, a professional training that relates the child closely to the teaching process, and of making the county school of the future a dynamic force in the community.

Courses Primarily Junior College

EDUCATION

26. **The Rural School Curriculum and the Community.** This course will treat of the problems of the teacher who desires to instruct country children in terms of their own environment. Methods and materials for such instruction will be outlined and discussed. Ways and means whereby stereotyped courses of study, in the various grade subjects, may be vitalized and made more significant to country children will be sought. Three hours. Spring Term.

6. **County School Methods.** The application of methods to a rural school, the organization of material, class room management, and effective presentation will be discussed. This course will aim to discover points of difference between the graded and the ungraded school in respect to the utility of pertinent methods used in teaching the various subjects in a rural and village school. Three hours. Winter Term.

Courses Primarily Senior College

25. **Administration of Rural Schools.** For full description of this course, see Department of Education. Three hours. Winter Term.

6. **Rural Sociology.** A study of rural social conditions; a scientific sociological study of modern changes in country life, and the organization and direction of rural education as a positive force in rural progress. Two hours. Spring Term.

7. **Rural Seminar.** The problem of the rural school in its relation to the teacher, the child, the school board and the community will be discussed. The daily program will be considered in its application to a school of eight grades. Two hours. Fall and Winter Terms.

30. **Rural Education.** For a full description of this course, see Education Department, Senior College. Two hours. Fall Term.

Vocational Courses

1. **Elementary Cooking.** For full description of this course, see Department of Practical Arts.

2. **Elementary Dressmaking.** For full description of this course, see Department of Practical Arts.

1. **Elementary Woodwork.** For full description of this course, see Department of Practical Arts.

5. **Elementary Agriculture.** For full description of this course, see Department of Practical Arts.

Demonstration Schools

The Teachers College plans to establish Demonstration Schools as near the College as favorable conditions will permit. These schools will be open at the beginning of the fall term and are one-room rural schools which will be utilized for the training of teachers

for rural and village schools. The Demonstration Schools are to be taught by successful, well trained, and expert teachers of the rural type of school. Teachers who desire special preparation for county schools will do their required teaching in the Training School and then spend one month in the Demonstration School as an assistant or helper to the regular teacher and assume such regular duties of a teacher as her capabilities warrant. Board will be even less in the districts where the demonstration schools are located than it would be at the College. The course of study being pursued at the College can be done in non-residence during the month spent in observation and practice teaching in the Demonstration School. The same credit will be given this work as is given practice teaching in the Training School at the College. Rural teachers will be expected to identify themselves with the activities of the Colorado Rural Club, which will hold bi-weekly meetings during the school year at the College.

Public School Courses

2. **Arithmetic.** The principal operations and the application side of arithmetic will receive special emphasis; decimal and common fractions; measurements and the applications of percentage. Practical farm problems and their use in vitalizing the subject will be considered. Five hours. Fall Term.

1. **Grammar and Composition.** For a full description of this course, see the Department of Literature and English. Five hours. Every term.

6. **Geography.** For a full description of this course, see the Department of Geology and Geography. Five hours.

14. **United States History and Civics.** For a full description of this course, see Department of History and Political Science. Five hours.

7. **General Science.** For a full description of this course, see Department of Physical Science.

1. **Music.** For a full description of this course, see Department of Music.

HYGIENE

ROYCE REED LONG, A.B.

GEORGE E. FREELAND, A.M.

HELEN GILPIN-BROWN, A.B.

JACOB DANIEL HEILMAN, Ph.D.

JOHN S. JOHNSON, M.S.

This department aims to present the fundamental teachings of hygiene as they relate to the individual; the school; and to the community at large, to the end that the teacher may take an intelligent and effective part in the world-wide fight against preventable disease.

1. **Personal Hygiene.** This work has been organized to answer a need in the College for instruction along the line of every-day, healthful living. It is deemed advisable that the Dean of Women in her work should

gain a personal knowledge of the living conditions of as many students as possible. The course will cover the fundamental facts relating to personal health and efficiency. Foods and feeding habits, clothing, housing and ventilation, baths and bathing, muscular activity, work, rest, and recreation, avoidance of communicable diseases as a health problem, etc., will form the subject-matter of the course. Lectures, recitations, reference assignments and reports. Three hours each term.

MRS. GILPIN-BROWN.

2. **School Hygiene.** This course considers the hygiene of the school building and hygienic methods of instruction in the different elementary school subjects. Junior or Senior College. Four periods, 4 hours. See Training School, II.

MR. FREELAND.

3. **Child Hygiene.** See course under Psychology.

DR. HEILMAN.

4. **First Aid.** A course covering the usual topics on what to do in cases of accident and emergency. The Red Cross Handbook on First Aid, with supplementary references; lectures, demonstrations, recitations. Junior or Senior College. One hour. Winter Term.

MR. LONG.

5. **Public Hygiene.** Lectures, recitations, reference assignments and reports. A course covering the main facts relating to the prevention or control of disease through community, state, and national co-operation. Open to all. Junior or Senior College. Five hours. Fall Term.

MR. LONG.

6. **Occupational Hygiene.** A course dealing with some of the important facts relating to the dangers to life and health of different occupations, discussions of legislation, factory inspection and other preventive measures adopted to reduce the incidence of occupational disease and accidents. Lectures, references and reports. Open to all. Two hours. Spring Term.

MR. LONG.

7. **Bacteria, Prophylaxis, and Hygiene.** A study of (1) bacteria—where found, what they are, how they live and grow; classification of bacteria of economic importance; useful bacteria; special emphasis on parasitic and disease-producing bacteria. (2) Prophylaxis—how disease is spread; methods of prevention and control; immunity, disinfection, inspection, vaccination. (3) Hygiene—of person, home and school room. (See Botany, 2.) Junior or Senior Course. Five hours. Winter Term.

MR. JOHNSON.

BIOLOGICAL SCIENCES

LEVERETT ALLEN ADAMS, A.B., A.M., Ph.D.

JOHN C. JOHNSON, A.B., M.S.

The Department of Biology is in possession of ample facilities in the way of specimens and apparatus for the presentation of the courses outlined below. The laboratory is on the third floor of the main building and the Museum of Birds and Mammals is in the basement of the library building.

The biological courses endeavor to give a biological setting for the educational studies and for the interpretation of the activities of life.

The courses in zoology are planned to combine laboratory and field work wherever this is possible, so that the studies of the laboratory may be correlated with the ecology, habits, and life histories of the Colorado forms.

A herbarium and greenhouse are at the disposal of the students of botany. The campus contains the most representative of the Colorado trees and shrubs.

A large poultry yard is at the disposal of the students for the study of Mendel's Law, selection, etc.

Biological Sciences

- Biology 2. Elementary Biology.
- Zoology 1. Invertebrates.
- Zoology 2. Invertebrates.
- Zoology 3. Vertebrates.
- Zoology 4. Ornithology.
- Zoology 5. Bird study.
- Zoology 6. Mammology.
- Zoology 7. Protozoology.
- Zoology 8. Animal behavior.
- Zoology 9. Parasitology.
- Botany 2. General botany.
- Botany 6. Yeasts, molds and bacteria. (Bact. 1.)
- Botany 10. Study of woods.
- Bacteriology 1. Bacteria, yeasts and molds. (Bot. 6.)
- Bacteriology 2. Bacteria, prophylaxis and hygiene. (Hyg. 1.)
- Bacteriology 3. Advanced bacteriology.
- Biotics 1. Evolution of man and his body.
- Biotics 2. Heredity.
- Biotics 3. Eugenics.
- Biotics 4. Advanced work in heredity and eugenics.
- Biotics 5. Experimental work in heredity.

Courses Primarily Junior College

BIOLOGY

2. **Bionomics.** Required in the Junior College. This is required in the first year. It is a study of some of the fundamental facts and laws of Biology that may be valuable in teaching. It forms a basis for the intelligent study of other educational subjects. It considers the Evolution doctrine, cell life, problems of fertilization, maturation and embryology. Mendel's Law, formation and organization of tissues.

Ten Classes: Four in fall, Four in winter, Two in spring.

ZOOLOGY

Zoology 1. Morphology and natural history of the invertebrates with particular reference to the Protozoa, Porifera and Coelenterata. Five hours. Laboratory course. Two hours a day with lectures and special topics.

Zoology 2. Continues Course 1. A study of the morphology of the invertebrates from the Platyhelminthes to the Cordates. Two hours' laboratory work a day with lectures and special topics. Five hours.

Zoology 3. Vertebrate morphology, starting with the Protochordates and including the comparative work on the higher vertebrates. Lectures, etc. Two hours a day of laboratory work. Five hours credit.

Zoology 4. Ornithology.

Zoology 5. Bird Study. A study of the Colorado birds. Consists of work in the field combined with the laboratory and museum. The course is not a scientific study of birds, but rather, as the name implies,

a study that should enable the student to identify the common birds and know something of the life histories, ecology, habits and economic importance. Students in this course may expect to use Saturdays for some of the excursions that require time. Spring and Summer Terms. Five hours.

Zoology 6. Mammals. The systematic position of the mammals, life histories, evolution, and geographical distribution. **Three hours.**

BOTANY

Botany 2. General Botany. Considers the development of the plant; life history of the plant; structures of plants in relation to their functions and environment; classification. **Three hours.** Spring term.

Courses Junior and Senior College

Botany 6. (Bacteriology 1). Bacteria, yeasts, and molds. Lectures and laboratory work on injurious and beneficial bacteria, yeasts and molds likely to be found in the home or domestic science laboratory. Primarily for Domestic Science specials, but open to all students. **Five hours.** Fall Term.

Botany 10. Considers the classification, morphological structures, growth, habits and zone locations of those trees used in the production of the various kinds of lumber and by-products. Primarily for manual training students. **Two hours.** Spring Term.

Courses Primarily Senior College

Zoology 7. Protozoology. The Protozoa of Colorado. Offered any term, but students are advised to take it in the spring term. **Three hours credit.** Three two-hour laboratory periods a week.

Biotics 1. History of man and his body from the standpoint of its evolution. Derivation of the skeleton, organs and different systems. Study of the remains of the prehistoric men, their form and their evolutionary significance. **Fall Term.** **Three hours credit.** T. W. Th.

Biotics 2. Heredity. A study of heredity and its significance. Study of the laws governing it and their importance to the future of the races. Relation to biological laws and education. **Winter Term.** **Three hours credit.** T. W. Th.

Biotics 3. Eugenics and Special Topics in Biology and Eugenics. The modern trend for the improvement of the race. A study of the application of the laws of heredity and some of the legislation for the application of these laws to the races. Consideration of some of the problems. **Spring Term.**

Courses Primarily Graduate College

Biotics 4. Heredity and Eugenics. Conference course. **Three hours.**

Biotics 5. Experimental work in heredity, regeneration, etc. Work in animal breeding and experimentation with flies and other forms. Laboratory course, three periods a week of two hours each. **Three hours credit.** To be arranged for.

Zoology 8. Animal Behavior. Conference course. Laboratory, two hour periods. Three times a week. **Three hours credit.**

Zoology 9. Parasitology. A study of parasites. **Two laboratory periods of two hours each.** **Two hours credit.**

PHYSICAL SCIENCES

FRANCIS LORENZO ABBOTT, B.S., A. M.

PHYSICS

Courses 1, 2 and 3 in Physics not only treat of the general principles of physics, but put much emphasis upon the application of these principles as found in machinery, and the many other appliances that are found in the every-day life. The recitation work is fully illustrated by experiments.

Courses Primarily Junior College

1. **General Physics.** Open to Senior College. The work of this term covers the following subjects: Properties of matter, resolution of forces, units of force and work, mechanics, hydrostatics, etc., also the subject of heat. Text-book: Kimball's College Physics. Fall Term. Five hours.

2. **General Physics.** Open to Senior College. A course of study in sound and light. Text-book: Kimball's College Physics. Winter Term. Five hours.

3. **General Physics.** Open to Senior College. A course in the study of magnetism and electricity. Text-book: Kimball's College Physics. Spring Term. Five hours.

Courses Primarily Senior College

4. **Advanced Physics. Radio Activity.** Kathode and X-rays, followed by a discussion of the radio-active substances and the disintegration products of radium and radium emanations; X-rays and canal rays. Five hours.

5. **Historical Physics.** This term's work is devised for the study of the biographies of some of the great scientists, the history of some of the classical experiments, and the reading of scientific articles found in the various magazines and periodicals. Five hours. Winter Term.

6. **Methods in Teaching Physics.** A study of the history of the teaching of physics, and a detailed course presenting a method which will make the subject of physics more interesting and of greater value to the student. Five hours. Spring Term.

7. **General Science.** A course complete in one term, dealing with the facts of physics, chemistry, zoology, physical geography, etc., such as are needed by the rural teacher. Intended in the main to meet the requirements of those who take the county examination in General Science.

8. **Radiographic Physics.** The subject of radio-telegraphy has become such an important factor in the business of the world that it is now necessary that teachers of science give the subject their consideration. In giving this course, we keep in mind the special requirements needed by teachers who desire to install a wireless station in their own schools. Students electing this course are given an opportunity of learning the wireless code. The department is equipped with a complete 1 K. W. Hightone Clapp-Eastman transmitting set, and a complete receiving set, together with a wave meter and standard condenser. We can easily communicate with any station in Colorado and can read radiograms sent out from Key West, New Orleans, San Francisco, and Arlington.

Graduate College

9. **Theory of Relativity.** This course requires a comprehensive review of the hypothesis of the ether and the structure of matter, which study shows the necessity for the Theory of Relativity.

Courses Primarily Junior College

CHEMISTRY

1. **Elementary Chemistry.** Open to Senior College. The course is primarily arranged for those wishing to begin the subject, but it also offers an excellent opportunity for review work to those students who have had only a short course in chemistry. Five hours.

2. **Qualitative Chemical Analysis.** A continuation of Course 1. (Open to Senior College.) Requirements: Students must have had Course 1 or its equivalent.

3. **Applied Industrial Chemistry.** Prerequisite: Courses 1 and 2. Five hours.

GEOGRAPHY AND GEOLOGY

GEORGE A. BARKER, B.S., M.S.

The courses listed in this department are not review courses covering merely the material taught in the common schools. Such review courses are listed in the high school department for which no credit is given toward graduation in the college.

Courses Primarily Junior College

2. **Physical Geography.** A course designed for those who have not had physical geography in the high school. The laboratory and field sides of the subject will be emphasized. Five hours.

3. **Climatology.** A study of climate, not only from the observational side but also from the side of method of presentation. Advantage will be taken of our weather bureau equipment to compile data, and methods of tabulating this data by means of graphs will be illustrated. Five hours.

4. **Geography of North America.** A lecture course with extensive library readings. The continent will be treated from the foundation of its geologic and climatic controls, and upon this will be built the economic side of the subject. Five hours.

5. **Geography of Europe.** It is recommended that this course follow Course 4, as it is largely based upon the material presented in Course 4. The realms of American geography—Californian, Canadian, Oregonian, etc.—will be the base from which a study of the similar European provinces will be undertaken. Five hours.

6. **Geography of Asia.** This course finishes the year's survey of the important continents. In addition to Asia, a rather rapid survey of the other remaining continents is undertaken in order to round out the year's work. Five hours.

7. **Commercial Geography.** A study of commerce, largely based on museum products, field trips and railroad and steamship maps. After a delineation of the underlying controls in commercial geography, the members of the class will be assigned special topics to present before the class

with the aid of pictures and museum specimens. Field trips to industrial plants will be taken. Five hours.

8. **Human Geography.** The relation of man to his environment and the various type environmental realms, as, for instance, the desert, tropical forest, mountain, etc., will be taken up. Five hours.

11. **Geography of Tropical Countries.** The problems of the tropics from the future commercial standpoint and the development of its resources. Five hours.

12. **Geography Method.** A general course in geography. This is the geography course that formerly was listed as Course 1. Five hours.

Courses Primarily Senior College

13. **Mathematical Geography.** A recitation course designed to bring out the main facts of mathematical geography. Johnson's *Mathematical Geography* will be used as a text-book. Three hours.

14. **Museum Work in Geography.** Largely laboratory work and the mechanics of collecting and preparing for display museum products in the geographical field. Two hours.

19. **Geography of the Polar Regions.** A brief lecture course giving the main hydrographic and climatic principles governing the polar oceans and lands as well as a short survey of their geologic background. Three hours.

21. **Geography of Alaska.** A lecture course taking up the physical and economic geography of Alaska. Two hours.

22. **Biogeography.** Open to Senior College students. The distribution of plants and animals emphasizing the main climatic and geologic controls of such distribution. Five hours.

MATHEMATICS

GEORGE WILLIAM FINLEY, B.S.

The courses in mathematics are conducted with a view to imparting such knowledge and training as shall be of benefit not only to those who wish to specialize along this line, but to those who wish to prepare for general teaching as well. Special attention is given to the practical application of subjects taught so as to link them as closely as possible to the real life of the students. The work is always kept abreast of the newer developments in methods, and students are given an opportunity to observe the workings in the class room and thus gain a real knowledge of them.

1. **College Algebra.** Gives a review of the progressions and logarithms and continues with the binomial theorem, permutations and combinations, probability, variables and limits, and infinite series. Five hours. Winter Term.

2. **College Algebra.** A continuation of Course 1. Undetermined coefficients, partial fractions, continued fractions, summation of series, exponential and logarithmic series, determinants, and theory of equations. Spring Term.

3. **Plane Trigonometry.** The right triangle and the oblique triangle with the development of the formulas used. The course is enriched by actual field work with a surveyor's transit by means of which real prob-

lems are brought in and the student led to realize the practical use of this branch of mathematics. Fall Term.

4. **Analytic Geometry.** This course opens up to the student, in a small way, the great field of higher mathematics. It gives him a broader outlook than he has had before and thus gives him new power. It covers the work as outlined in such text-books as Smith and Gale's Analytic Geometry. Winter Term.

8. **Methods in Arithmetic.** Designed for those who wish to prepare for the actual teaching of arithmetic by a study of the best methods that have been developed in recent years. It takes up a brief discussion of the different methods that have been used in modern times, the generally accepted methods of the present time, and the developments of the last few years.

5. **Differential and Integral Calculus.** An introduction to the powerful subject of the calculus. While care is taken to see that the formal side of the subject is thoroughly mastered, the course is strengthened by many problems brought in from geometry, physics, and mechanics.

6. **Differential and Integral Calculus.** A continuation of Course 5.

7. **Differential and Integral Calculus.** A continuation of Course 6.

9. **The Teaching of Secondary Mathematics.** A study of the more recent problems that have arisen with regard to the teaching of secondary mathematics. Problem material, order of topics in each subject, the order of the subjects in the course, the simultaneous teaching of algebra and geometry, the laboratory method; these and similar topics of interest to the teacher of high school mathematics are discussed at length.

11. **Descriptive Geometry.** This course is planned especially for those interested in mechanical and architectural drawing. It takes up the problems arising from the study of the projections of points, lines, planes and solids.

12. **Spherical Trigonometry.** Formulas relating to the right triangle. Napier's rules, solution of right triangles; spherical triangles in general; solution of examples, with applications to the celestial sphere.

13. **Advanced Calculus.** A continuation of the work begun in courses 5, 6, and 7, with special attention to applications in physics and mechanics.

14. **County School Arithmetic.** This course is to give an insight into the way in which arithmetic can be made vital in the lives of the children in the county schools. Problems of the farm, the home, and the shop are studied and methods of making them a part of the work in the schoolroom discussed.

15. **Arithmetic for Teachers.** The underlying principles of the subject are developed clearly and applied to the solution of problems. Methods of presenting these same principles to children are discussed. The subject of measuring results in the teaching of arithmetic is also considered.

DEPARTMENT OF SOCIAL SCIENCES

GURDON RANSOM MILLER, A.M.

EDGAR DUNNINGTON RANDOLPH, A.M.

From the viewpoint of education this department aims to make evident to its students the close relation between the science of education and the subject-matter of anthropology, sociology, and social economics. All our courses lay stress upon these relationships. However, any of our courses will prove of large value to

any students specializing in sociology or economics. University or college students or graduates interested in particular phases of sociology, or social settlement work, should consult the head of this department for advice in electing courses.

Primarily Junior College Courses

1. **Anthropology.** Comprising zoogenic, anthropogenic, and ethnogenic association; invention and growth of language; evolution of habitations, clothing, tools; evolution of ornament, and beginnings of art; tribal organizations, the family, and early evolution of law. Special attention given to the industrial activities of primitive peoples, and the possible relation of these activities to the elementary school curriculum. Four hours. Fall Term. MR. MILLER.

2. **Principles of Sociology.** Junior College and Senior College. Including a study of modern social organization; the historical evolution of institutions; law of social progress; lectures and discussion of modern social problems. A special emphasis is given to the modern school as a social organization. Four hours. Winter Term. MR. MILLER.

3. **Educational Sociology.** A course giving (1) a background of information concerning origins and interrelations of modern social problems; and making (2) a definite attempt to show the relationships to these of agencies of education and control. Four hours. Every term. Required. MR. RANDOLPH.

17. **Women and Social Evolution.** A study of the woman movement; its history; its economic and psychologic significance; its possible effects on social progress; its relation to education, and its specific relation to the education of women. Four hours. Spring Term. MR. MILLER.

Sociology 24. Problems and Methods of Child Welfare. A careful study of the movement for the conservation of children. After giving the movement a setting in contemporary thought, it traces out the operative factors in a large number of attempts to improve the conditions of childhood, shows the extent of the most pressing problems, brings to light the principles of care and protection gradually evolved (both public and private), and finally in each case makes clear the present problems and points of attack. The course has two aims: (1) To unify many phases of the conservational tendency, and (2) to give much information about each of the situations discussed. Five hours. MR. RANDOLPH.

27. **Anthropology.** Early social beginnings. Our anthropologic ancestry, and their world migrations. Anthropologic social progress, and the dawn of human history. Alternate winter terms. MR. MILLER.

Courses Primarily Senior College

4. **Social Theory.** A history of sociological theory; a comparative study of modern social theory, and application of the same in pedagogical practice. Two hours. Fall Term. MR. MILLER.

5. **Applied Sociology.** A study of modern social organization; purpose of social work; social correctives; the school as an organization for social betterment, and thus for self-betterment. Two hours. Winter Term. MR. MILLER.

6. **Social Adjustment.** Effect of modern economic changes on society and the school; adjustment of the school to the new conditions; industrial education and its effect on general social adjustment. Two hours. Spring Term. MR. MILLER.

7. **Social Economics.** Treats of organized industry and production; social and economic values; exchange and banking; economic panics; protection and free trade. Three hours. Fall Term. MR. MILLER.

8. **Social Economics.** Distribution of wealth; theory of interest and rent; wages and social stratification; population and social inequality. Three hours. Winter Term. MR. MILLER.

9. **Social Economics.** Labor problems and economic organization; labor unions and legislation; workingmen's insurance; corporations and public ownership; socialism; taxation. Three hours. Spring Term. MR. MILLER.

29. **Social Theory of Education and its Implications for the School Subjects.** A course for advanced students interested in (1) reading critically the available literature upon the school subject in which they are most interested, (2) formulating the values which the subject may be expected to contribute to the pupils, (3) comparing these values with the material usually *taught* in the subjects in question, and (4) tentatively blocking out such a course in the subject as seems demanded by the principles found and the values agreed upon. This is frankly an exploratory course and does not presume to settle the case of any subject discussed. Five hours. Elective. MR. RANDOLPH.

30. **Sociological Seminar.** Four hours. Spring Term. Elective. MR. MILLER.

Courses Primarily Graduate College

20. **The Consumption of Wealth.** An advanced course in social economics; a constructive analysis of the modern tendency to subject the consumption of wealth to scientific treatment, emphasizing the human costs of production versus the human utilities of scientific consumption; a human valuation. Open to students who have taken not less than two terms of work in sociology and economics. Alternates with Course 9. Spring Term. MR. MILLER.

21. **Problems and Methods of Organized Social Work.** A course in modern charity which (1) introduces the student to the nature and extent of present social failures; (2) shows the slow evolution of blind ways of giving relief to the distressed (or of putting down calls for relief) into the present more or less thoughtful and constructive methods designed to reduce the amount of social failure, and (3) exhibits the underlying principles that are today made use of in advanced countries having a heavy social burden of unfitness to carry. Five hours. MR. RANDOLPH.

28. **Principles of Social Progress.** A study of the basal principles of social evolution and social progress; consideration of present social tendencies; and speculations as to future social control. Elective for all Senior College and Graduate College students. MR. MILLER.

HISTORY AND POLITICAL SCIENCE

EDWIN B. SMITH, B.S.

1. **American History (1492-1789)** The American aborigines; European conditions leading to the discovery of America; the colonies established by Europeans; colonial institutions; the struggle for supremacy in North America; the American Revolution; the confederation and the constitution. Fall Term. Three hours.

2. **American History (1789-1861).** The development of the nation; organization of the national government; the Federalist party; Democratic opposition; Jefferson's policies; difficulties of neutrality; War of 1812;

reorganization after the war; westward expansion; the Monroe Doctrine; Jacksonian Democracy; sectional strife; the issue of slavery; Texas and the Mexican War; the Republican party; secession of the Southern States. Winter Term. Three hours.

3. **American History (1861-1916).** The Civil War and reconstruction; economic and diplomatic problems; the development of the Far West; political and financial readjustment; civil service and economic reform; great industrial combinations; the silver movement; the new American diplomacy; the war with Spain; imperialism; Roosevelt policies; the election of 1912; policies of the Wilson administration. Spring Term. Three hours.

4. **Western American History.** The westward movement as an historical process; the migration from the Atlantic into the Mississippi Valley; the Trans-Mississippi West; the history of Colorado as a typical section. Special emphasis on the social and economic conditions. Spring Term. Three hours.

5. **European History—France.** A survey of the condition of the people previous to the revolution; the French Revolution; the era of Napoleon; the restoration; the reign of Louis Napoleon; the second republic and the second empire; Napoleon III and the Franco-German War; the third republic; the conditions of the people and their problems today. This course, with the history of France as a center, will include some of the countries that are closely associated. Fall Term. Five hours.

6. **European History—Germany.** A brief study of the early people; the conditions previous to the Reformation; the development of the people after the organization of the German Empire; conditions of the people at present; German institutions; the European War. The emphasis of the course on the Germany of today and conditions traceable to that country. Winter Term. Five hours.

7. **European History—England.** This course presupposes a general knowledge of English history. An intensive study of the social and economic life of the English people; special emphasis on the development of language, literature, customs, and institutions that have a place in American life. Spring Term. Five hours.

12. **Civics (State and Local Government).** In this course and in course 9, which follows, the emphasis will be on the relation of the individual to the community and government. The community; services rendered the individual, duties and obligations of the individual; organization and administration of the government of the municipality, county, and state. Relation to the national government. The government of Colorado will be considered as a type. Fall Term. Five hours.

9. **Civics (National Government).** The relations between the government and the people; the origin and development of party organization and machinery; the place of party in government; primary legislation; corrupt practices acts; the organization and administration of the national government. Winter Term. Five hours.

14. **United States History—Civics.** A one-term course giving a survey of the essentials of the history of the United States, emphasizing the industrial and social aspects; in a similar manner community civics will be reviewed—the relation of the individual and the community, the various forms of government, the government of Colorado. Fall Term. Five hours.

10. **Industrial History of United States.** Industrial conditions of Europe affecting the early history of the United States; European incentives for exploration and settlement of colonies; industrial England; economic and industrial aspects of the American Revolution; industrial revolution in the United States; westward movement; slavery; recent industrial conditions. Winter Term. Five hours.

11. **Commercial History of United States.** A survey of commerce from early times; colonial commerce and its consequences to European nations; commerce in the several periods of American development; commerce in its relation in industry; policies of the government; international complications and international law. Spring Term. Five hours.

13. **The Teaching of History.** The development of history instruction in schools; history as taught in schools today; methods of study, presentation, and material, considered in connection with present conditions. Spring Term. Two hours.

15. **American Constitutional Law.** An advanced course for the study of the interpretation of the Constitution, modern theories of self-government, the protection of the individual in his personal, property, and political rights. Time to be arranged.

LATIN AND MYTHOLOGY

JAMES HARVEY HAYS, A.M.

The Latin courses, 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 elective course of four 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; 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:

1. **Cicero.** De Senectute, De Amicitia. Comparison of his style as found in the essay and oration. Five hours.
2. **Livy.** Five hours.
3. **Horace: Odes and Epodes.** Study of latin verse, lyrical poetry. Five hours.
4. **Terence and Plautus.** Their place in literature. Roman comedy. Five hours.
5. **Teachers' Training Course.** Discussions of method, reviews of syntax. Translation. Five hours.
6. **Teaching Latin in Training School.** Under supervision. Five hours.
7. **Prose Composition.** Study of correct Roman style. Sight translation. Five hours.
8. **Classical Mythology.** Interpretation of myths. Allusions in texts read. Five hours.
9. **Tactitus.** Agricola and Germania. Roman influence in Western Europe. Five hours.
10. **Roman Satire.** Cicero, Juvenal or Perseus. Five hours.
11. **Roman Life.** Five hours.

LITERATURE AND ENGLISH

ETHAN ALLEN CROSS, Ph.M.

ADDISON LEROY PHILLIPS, A.B.

RAE E. BLANCHARD, A.B.

NELLIE MARGARET STATLER, A.B.

The courses offered in literature and English fall into three classes: 1. Courses in grammar, composition, and rhetoric. 2. Courses in methods of teaching the subject in elementary and high schools. 3. Literary courses.

There is no sharp division making a given course especially appropriate to a certain college. Some Junior College students will be found able to pursue with profit courses that are set for Senior or Graduate students; and advanced students who have not already had certain courses in literature scheduled mainly for Junior College may find those courses best adapted to their needs.

Courses Primarily Junior College**COURSES IN GRAMMAR AND COMPOSITION**

1. Grammar and Composition. Required in the Junior College. The work of this course consists of two parts each equally important—Grammar, and Composition.

Grammar. A careful review of the essential facts of English Grammar (the facts that function in speech and writing). The parts of speech are reviewed, and then sentence construction and analysis occupies the remainder of the time. Special lessons are given upon matters of unusual difficulty, such as troublesome verbs, "shall" and "will," predicate complements of all kinds, and verbals.

The purpose of the work in grammar is to give the students such a review as will fit them to teach grammar in the upper grades, and incidentally to prepare them to pass the county or city examinations in grammar.

Composition. Twelve themes are required. These are from two to four pages in length, very carefully written. The weekly themes are carefully read by the instructor, marked for errors, and returned to the students promptly.

This is the only required course in English; and, consequently, students are not passed unless they come to understand the essentials of English grammar, and acquire the ability to write clear, straightforward English correctly. Spelling, punctuation and paragraph structure get especial attention in the composition work. Three sections. Every term. Five hours.

2. Intermediate Composition. A course in writing for students who have had English 1, and wish to get more practice in writing. Others who have been conditioned in the composition phase of English 1, may remove the condition by taking this course. Winter Term. Three hours.

3. Advanced Composition. Open to any student who has had Courses 1 and 2, or their equivalents. The course is intended to give additional practice in writing to those who wish it and are prepared to profit by a course of this kind. Spring Term. Three hours.

COURSES IN METHODS

4. **Oral Literature and Composition for the Lower Grades.** Oral literature and composition, including the arrangement of story-sequences, the principles of story-structure, and the treatment of the myth and the folk-epic for children. Fall Term. Three hours. MISS STATLER.

5. **Literature and Composition for the Upper Grades.** Literary material for the upper grades, with some attention to the appropriate material and the principles of work in composition. Winter Term. Three hours. MR. PHILLIPS.

COURSES IN LITERATURE

7. **The Epic.** This course consists of a study of the two great Greek epics, *The Iliad* and *The Odyssey*. Outlines of study covering other national epics. The purpose of the course is to furnish teachers in the elementary schools with the materials for story telling and literature studies embracing the hero tales from Greek literature. Fall Term. Five hours.

8. **The History of English Literature.** Junior College and Senior College. A reading course following the chronological development of our literature from 1400 to 1660. Fall Term. Five hours.

9. **The History of English Literature.** Junior College and Senior College. A reading course following the chronological development of our literature from 1660 to 1900. Winter Term. Five hours.

10. **American Literature.** Junior College and Senior College. A course in American literature following the plan of Courses 8 and 9 in English literature. Spring Term. Five hours.

25. **Story Telling.** For a full description of the course, see Training School Department, Course 15. MISS STATLER.

Courses Primarily Senior College

COURSES IN METHODS

6. **The Teaching of English in the High School.** Principles for the selection of literature for high school pupils considered critically; illustrative studies in the treatment of selected pieces; study of types of composition work for the secondary school, with illustrative practice in writing. Three hours. Spring Term. MR. CROSS.

COURSES IN LITERATURE.

11. **Lyric Poetry.** A preliminary study of the technic of poetry, an examination of a number of typical poems to determine form and theme, and finally the application of the knowledge of technic in the reading of English lyric poetry from the cavalier poets thru Dryden and Burns to Wordsworth. Five hours. Fall Term.

12. **Nineteenth Century Poetry.** A study of English Poetry from Wordsworth to Tennyson, including Coleridge, Byron, Shelley, Keats, and the lesser writers from 1798 to 1832. Five hours. Winter Term.

13. **Victorian Poetry.** Tennyson and Browning and the general choir of English poets from 1832 to 1900. Five hours. Spring Term.

14. **Nineteenth Century Prose.** The work of the chief prose writers of the century with the emphasis on those of the Victorian Age. The course does not include the fiction of the period. Five hours. Fall Term.

15. **Modern Plays.** Reading and class discussion of from twelve to twenty plays that best represent the characteristic thought-currents and the dramatic structure of our time. Five hours. Winter Term.

16. **The Novel.** The development, technic, and significance of the novel. The course in 1916 will deal with the development of the novel, and the writers thru the Victorian period. In 1917 and the odd years thereafter, it will make a careful study of the practice of contemporary novelists. Five hours. Spring Term.

17. **The Short Story.** A study of the construction and the meaning of the short story as a form of literary art, including a reading of a number of representative stories of today. Five hours. Fall Term.

18. **The Essay.** A study of the familiar essay for the purpose of determining the nature and form of this delightful phase of literary composition. The method in this course is similar to that pursued in the short story course; namely, a reading of a number of typical essays as laboratory material for a study of technic and theme. Five hours. Spring Term.

19. **Shakespeare's Plays—The Comedies.** A careful reading of the comedies of Shakespeare. The purpose of the three courses, 19, 20, and 21, is to familiarize students who expect to become teachers of English with all of Shakespeare. Five hours. Fall Term.

20. **Shakespeare's Plays—The Chronicle Plays.** This course is a continuation of Course 19. Five hours. Winter Term.

21. **Shakespeare's Plays—The Tragedies.** This course completes the series begun with 19. Five hours. Spring Term.

22. **Elizabethan Drama Exclusive of Shakespeare.** A knowledge of the dramatic literature of the early seventeenth century is incomplete without an acquaintance with the contemporaries and successors of Shakespeare from about 1585 to the closing of the theaters in 1642. The chief of these dramatists with one or more of the typical plays of each are studied in this course. Five hours. Spring Term.

Primarily Graduate College

30. **Conference Course.** This course number is intended to cover special study in collecting material for the thesis required for the degree of Master of Arts in the department of English. The assignments will of necessity be made individually to each student preparing a thesis.

READING AND INTERPRETATION

FRANCES TOBEY, B.S., Director
EMMA CHARLOTTE DUMKE, A.B.
MARGARET JOY KEYES, A.B.

The courses in reading take cognizance of the cultural as well as the practical value that reading, as an art, offers:

a. Facility in mastery of the printed page, ready visualization and instant realization of units of thought.

b. Training in analysis of a piece of literature as an art unit.

c. Personal culture thru an approximately adequate response (vocal, bodily, imaginative, emotional, volitional) to a wide range of beauty and truth in literature. This end is sought through devotion to the ideal of revelation, supplanting the limited and self-centering ideal too long held for the recitation—performance.

d. Mastery of methods of teaching.

Courses Primarily for Junior College Students

1. **The Evolution of Expression.** A systematic, directed endeavor to reflect, for the inspiration of the class, the spirit and dominant truth of varied literary units. The ultimate end of this endeavor is growth in personal power, manifested thru presence and address, in spontaneity, life, vigor, purpose, directness, poise.

Analysis of simple literary units: The essential truth, the parts, the service of the parts, the relationship of the parts. Fall and Winter Terms. Five hours. MISS DUMKE.

2. **Reading in the Grades.** Analysis of literary units, with study of structural plan. Courses of reading for the grades. Dramatizations from standard literature. Methods of teaching. Practice in teaching. A consideration of the relation of forms of expression to mental states. Every term. Five hours.

3. **Voice Culture.** Technical drill for freedom, flexibility, and responsiveness of voice. Exercises for clear-cut, accurate articulation. Interpretation of units of literature adapted, by their range of thought and feeling, to develop modulation, color, and variety of vocal response. Fall and Spring Terms. Three hours.

4. **Story Telling.** This course is offered as a complement to English 4, in connection with which it is the most advantageously taken. The material used is largely subject-matter presented in English 4, for use in the grades. Fall Term. Two hours.

5. **Dramatic Interpretation.** Second year. Open to candidates who have completed Courses 1, 2 and 3. Impersonation, the Dramatic Monolog. Fall Term. Four or five hours.

6. **Dramatic Interpretation.** Second year. Open to candidates who have completed Courses 1, 2, 3, and 5. Analysis and presentation of plays. Winter Term. Five hours.

7. **Pantomime.** Story-telling without words. Exercises for bodily freedom and responsiveness. Monologs and plays with emphasis upon expressive and definite action. Fall Term. Four hours.

MISS KEYES.

11. **Public Speaking.** Oral composition. Three hours.

13. **Esthetic Dancing.** See Department of Physical Education.

14. **Classical Dancing.** See Department of Physical Education.

17. **Interpretative Dancing.** See Department of Physical Education.

Courses Primarily for Senior College Students

12. **Public Speaking.** Study of models of oratory. Consideration of history of oratory. Practice in oratorical discourse. Two or three hours. MISS DUMKE.

15. **The Festival.** A study of the historic festival, its origin, forms and various elements. Research and original work in outlining unified festival plans, reflecting some significant event, idea, or phase of civilization. Spring Term. Three hours.

Primarily for Graduate College Students

16. **The Greek Drama.** Literary and dramatic standards applied to Greek drama. The classical drama and world view (philosophic, social, religious, ethical attitudes). The intensive study and dramatic presentation of a Greek tragedy. Five hours.

DEPARTMENT OF MODERN FOREIGN LANGUAGES

EDWIN STANTON DUPONCET, Ph.D.

It is the aim of the department of foreign languages to provide a course extending thru four years of undergraduate work in any one of the three languages offered, plus one additional year of graduate work, and two years each in two other foreign languages. Intended primarily for those students who are majoring in modern languages, or preparing to become high school teachers in this department. Before being able to secure a recommendation for a high school position in modern languages, the applicant will be expected to speak at least one foreign language with considerable fluency.

A Cultural Course extending thru two or more years of undergraduate work in any one or more of the three languages offered in the department, embracing a careful study of linguistics and the critical study of foreign literature; practical training in fonetics and the acquisition of a good working vocabulary in whatever languages are studied. Intended for those students who may be majoring in some other department.

A course designed to fit students or teachers for the teaching of French, German or Spanish in the elementary grades. The director believes that there is no reason why any American student may not acquire an absolutely correct pronunciation of foreign languages if the proper methods are employed. It is evident that a still better pronunciation will result if the instruction is begun at an early age. Therefore, it is the aim of the department to encourage everywhere the introduction of foreign language study in the lower grades, beginning with the fourth or fifth grades, and continuing thru the eighth. Special attention and drill in conversation, story telling and the use of the direct method exclusively will be some of the features of the work done. The State Teachers College has installed for this purpose a laboratory of phonographic recording and reproducing apparatus, consisting of seven standard Edison dictaphones, and the latest phonetic dictionaries.

In all the modern languages in this institution, the direct method is used from the very beginning. No English is used except in rare cases in the elementary stages of instruction. Further opportunities are offered by membership in the Club Español, Le Cercle Francais, and der Deutscher Verein, which hold fortnightly meetings thruout the year.

The Department of Modern Foreign Languages includes the four following languages: French, German, Spanish, and Italian.

FRENCH

1. Walter Ballard French grammar, and the reading of easy texts. Five hours. Fall Term.
2. Continuation of Grammar, graded texts. Winter Term. Five hours.
3. Grammar completed. The amount of reading for the first year will include about 500 pages of easy French texts. This course and all others conducted entirely in French.
4. Rapid review of grammar, much conversation required; the reading of selected plays, short stories and novels of the greatest writers of the Nineteenth Century. Among others: Balzac's "Le Cure' de Tours;" France's "Un Beau Mariage" and "Le Gendre de M. Poirier." Fall Term. Three hours.
5. Hugo's "La Chute;" Selections from Dumas's "Monte Cristo;" Devigny's "Cinq Mars;" Gautier's "Mademoiselle de Maupin," and Coppee's "Le Luthier de Cremona." Winter Term. Three hours.
6. Dumas's "Le Tour de Nesle;" Merimee's "Les Ames du Purgatoire;" Hugo's "Hernani;" De Mausset's "Fantasio." Spring Term. Two hours.
7. Ten lectures in French on each of the following subjects: Alexandre Dumas, the novelist and the dramatist; the origin of the modern melodrama; the history of fiction, and the romantic movement.
8. Hugo's "Bug Jargal" and "Ruy Blas," and selections from "Les Miserables." A literary survey of the life and works of Dumas, Hugo, Lamartine, Gautier, Coppee, Merimée, De Vigny and de Musset. Winter Term. Three hours.
9. A lecture and reading course intended to give an appreciation of the most interesting masterpieces of French genius: Hugo's "Notre Dame de Paris," Souvestre's "Un Philosophe sous Les Toits," and George Sand's "Indiana," or "Nanon." Spring Term. Two hours.
10. Continuation of Course 9. "Le Roman d'un Jeune Homme Pauvre," "Francois le Champi," by Sand; About's "Le Roi des Montagnes." Fall Term. Three hours.
11. Chateaubriand's "Atalie;" Marivaux's "Le Jeu de l'Amour et du Hasard;" Scribe's "Les Pattes de Mouches;" Rostand's "Cyrano de Bergerac," or "Chantecler." Winter Term. Three hours.
12. Of the following courses, only three will be given in any one year: Women in French literature; a reading and lecture course; the life and works of Georges Sand. Spring Term. Two hours.
13. The life and works of Madame de Lafayette. Fall Term. Three hours.
14. Madame de Stael's life and works. Winter Term. Three hours.
15. A study of Balzac's life and works, methods, purposes and achievements as the leading French novelist. Discussions, reports and classifications. Three of his best works will be read in class, and nine others as outside reading. Spring Term. Three hours.
16. Molière, a critical study of the life and works of the greatest writer of comedies in France. All of his plays will be read. Spring Term. Two hours.
17. Voltaire. Stories, histories and plays. Discussions of Voltaire's exile, attitude toward the church, unique position at Ferney, struggle for great causes. Winter Term. Three hours.
18. Victor Hugo. A careful study of Hugo as the leader of the romantic movement. All of his dramas will be read, and some poetry and novels studied in order to gain an idea of his manifold activity. Spring Term. Two hours.

19. **The French Tragedy.** A study of Racine, Corneille and Voltaire. Three selected works of each will be read. Fall Term. Three hours.

20. **Old French.** A reading course in old French prose. Winter Term. Five hours.

21. **A Course in Translation.** Original themes, short stories and work in French composition. Spring Term. Two hours.

GERMAN

1. **First Year Course.** Manfred's German Grammar and easy texts. Fall Term. Five hours.

2. **Continuation of Grammar.** Covering grammar and the reading of 150 pages of easy texts. Fall Term. Five hours.

3. **Conversation.** Conversation and composition and the reading of 175 pages of graded texts. Spring Term. Five hours.

4. **Intermediate German.** Reading of Gerstöcker's "Germelshauden," and Baumbach's "Der Schwiegersohn." Fall Term. Three hours.

5. **Schiller's "Wilhelm Tell."** A critical study of this text, and the methods to be employed in the high school teaching of the same. Winter Term. Three hours.

6. **Goethe's "Hermann and Dorothea,"** and "der Vicar von Sesenheim." Spring Term. Three hours.

7. **The German Novel.** "Scheffel und Freytag." Fall Term. Two hours.

8. **The German Novel—continued.** Sudermann. Winter Term. Two hours.

10. **Fouque, Gutzkow and Grillparzer.** Spring Term. Two hours.

11. Any one of the following may be taken as the fourth year's work: German Literature, using Wells, Robertson, and Francke in English, and Klee, Kummer, and Myer in German, for class and reference work. Fall Term. Two hours.

12. **Advanced German Literature.** Schiller's Trilogy. Winter Term. Two hours.

13. **Advanced Literature.** Lessing's "Nathan der Weise." Spring Term. Two hours.

14. **Middle High German.** Paul's "Grammatik," and Bachmann's "Lesebuch." Fall Term.

15. **The Recent German Drama.** Suderman's "Versunkene Glocke;" Molnar's "Der Teufel;" Voss' "Fulda." Spring Term. Two hours.

16. A course in composition, conversation and sight reading. Any term. Two hours.

SPANISH

1. **Beginner's Course.** Wagner's Spanish Grammar and easy texts. Fall Term. Five hours.

2. **Continuation of Course 1,** and reading of a hundred pages of easy texts. Winter Term. Five hours.

3. **Continuation of Course 2.** Reading of 200 pages of graded texts. Spring Term. Five hours.

4. **Valera's "El Pajaro Verde;"** Escrich's "Amparo." Fall Term. Three hours.

5. **Du Poncet's "La Tierra del Diablo,"** and "El Ultima de Su Raza." Winter Term. Three hours.

6. **Galdos' "Electra"** and "Marianela." Spring Term. Three hours.

and are meant to provide comprehensive training for teachers who teach vocal music in the public schools.

(b) Courses which treat of the historical, literary, and esthetic side of music and are meant for those who wish to specialize in school music and become supervisors.

Courses for the grade teacher and general student: Music 1, 2, 3, and 4.

Courses for supervisors and those who combine music instruction with other subjects: Music 2, 5, 7, 8, 9, 10, 17, 18, and 21.

Courses which are cultural in their nature and meant for the general or special student: Music 7, 10, 12, 13, 14, 16, 19, and 21.

Private Instruction

No instruction in voice, pianoforte or violin is provided by the school, but, if a teacher wishes to take up or continue the study of any of these special branches while attending the College, the opportunity will be given by the various instructors of the music faculty at scheduled rates, for which credit will be allowed.

All persons contemplating taking private lessons in music of any kind in the institution for credit should see the director of the department to make arrangements as soon as possible and mention their intentions to the Dean of the College when making out their program in order to receive credit.

In the Conservatory department frequent student recitals are given, which provide the students with an opportunity to appear in public recital. An opera is produced annually by the students under the direction of the director of the department.

The Philharmonic Orchestra is a Symphony composed of talent from the school and city, which gives monthly concerts. The standard symphonic and concert works are studied and played. Advance students capable of playing the music used by the organization are eligible to join upon the invitation of the director.

The college band offers an opportunity for those interested in band music to receive excellent training and prepare numbers for concerts and all functions of the college.

All students majoring in Music, Primary Methods, and Physical Education are to complete a prescribed course in piano, or show that they have already completed its equivalent. This instruction is provided free by the college.

1. **A Course for Beginners.** (Open to Senior College students.) Notation, theory, sight-reading. The course is designed especially for teachers desiring to make sure their knowledge of the rudiments of music so that they may be able to teach music in the public schools more efficiently.

2. **Methods for the First Eight Grades.** (Open to Senior College.) A very practical course for teachers in which the material used in the pub-

lic schools is studied and sung, with suggestions as to the best ways to introduce all phases of the work. Prerequisite for this class, Music 1, or its equivalent.

3. Kindergarten and Primary Music. (Open to Senior College students.) First year. Designed especially for kindergartners and primary teachers. Songs and music adapted to the children of these departments will be studied and material arranged for every season and function of the year. The care and development of the child voice; the teacher's voice; methods of instruction; practice singing and rhythm exercises will be a part of this course.

4. Rural School Music. First or second year. This course consists of methods and material adapted to the conditions of the rural school building where a number of children from the various grades are assembled. Three hours.

5. A Supervisor's Course in Music. Second year or Senior College. The material used in the grades and high school is taken up, and studied from a supervisor's standpoint. Actual practice in conducting works of a standard nature will be offered those interested in this course. Open to those majoring in the department.

6. Chorus Singing. (Open to Senior College.) Worth-while music and standard choruses are studied and prepared to present in concert and at the commencement exercises. Open to all capable of doing the work prescribed. Generally offered in the Spring Term only.

7. History of Music. (Open to Senior College.) A literary course which does not require technical skill and is open to all students who wish to study music from a cultural standpoint. From beginning of music to Beethoven.

8a. Harmony. (Open to Senior College.) Beginning harmony. The work consists of written exercises on basses (both figured and unfigured) and the harmonization of given melodies in two, three, and four voices. These are corrected by the instructor and subsequently discussed with the students individually. Work completed to the harmonization of dominant discords and their inversions.

8b and 8c. A Continuation of Course 8a. (Open to Senior College.) Harmonization of all discords. The circle of chords completed, modulation, etc. The harmony courses continue throughout the year, and the work is planned to meet the individual needs of the class.

9. Advanced Harmony and Counterpoint. (Open to Senior College.) A continuation of Courses 8a, b, and c.

10. Methods in Appreciation. (Open to Senior College.) This course is planned to help teachers to present more intelligently the work in Appreciation of Music for which there is such a growing demand in all our schools. A careful graded course suitable for each grade will be given. The lives and compositions of the composers from Bach to Wagner are studied.

12. Individual Vocal Lessons. (Open to Senior College.) Correct tone production, refined diction, and intelligent interpretation of songs from the classical and modern composers. One hour credit granted for twelve lessons that show satisfactory progress. To make arrangements for this work, consult the director of the department.

13. Individual Piano Lessons. (Open to Senior College.) The piano work is especially arranged to meet the needs of teachers wishing to acquire a repertoire of simple music of the grade required in kindergarten, primary, and physical education work. For advanced students, the work will be arranged to fit their individual needs. Credit the same as for Course 12.

14. **Individual Violin Lessons.** (Open to Senior College.) The work will be outlined according to the ability of the student. Credit the same as for Course 12.

15. **School Entertainments.** (Open to Senior College.) Practical programs for all occasions. Thanksgiving, Christmas, and Arbor Day. Patriotic programs. Programs of songs of all nations. A spring musical festival. The term work concludes with the performance of some opera suitable for use in the grades.

16. **Individual Brass or Reed Instrument Lessons.** (Open to Senior College.) The work will be outlined according to the ability of the student. Credit the same as for Course 12.

17. **Modern Composers.** The lives of the musicians from Wagner to the present day are studied. Programs of their music are given by members of the class, the talking machines and player piano. The work is planned to show the modern trend in music and to make the students familiar with the compositions of the modern writers.

Courses Primarily Senior College

18. **Composition and Analysis.** Primary forms, including the minuet, scherzo, march, etc. Simple and elaborate accomplishments. Analysis of compositions of primary forms principally from Mendelssohn and Beethoven.

19. **Interpretations and Study of Standard Operas.** Operas of the classical and modern schools are studied, thru the use of the talking machine, and their structure and music made familiar to the class.

20. **Interpretation and Study of the Standard Oratorios and Symphonies.** The Standard oratorios are studied. The best known solos and choruses are presented by members of the class or by the talking machine, and the content of the work is studied with the hope of catching the spirit of the composer. The Symphonies of Haydn, Mozart, Beethoven, Schubert, Schumann, and other writers of the classical and modern schools are presented to the class.

21. **Research.** A comparative study of the work done in the public schools in cities of different classes. A similar study of the work done in the normal schools and teachers' colleges of the various states.

PHYSICAL EDUCATION AND PLAYGROUND TRAINING

ROYCE REED LONG, A.B., Director

MARGARET JOY KEYES, A.B.

Aims of the Department

The department aims (1) to help the student form regular habits of exercise and to develop the organic power; (2) to give such instruction that the average teacher may be able to supervise the play activities of her own school successfully; and (3) to give some of the preliminary training to specially qualified students who desire to become teachers of physical education in the schools, playground directors, or play leaders.

Equipment

The physical examination room contains the usual anthropometric instruments; the gymnasium has apparatus for indoor exer-

cises, and the outdoor gymnasium is supplied with modern playground apparatus; the athletic field has an excellent quarter mile cinder track, grandstand, football and baseball fields, tennis courts, and basketball courts.

Required Work

Four terms of work in physical training is required of all students for graduation from the Junior College. The only exception made is in cases of students entering with advanced standing who may be in residence less than four terms. In such cases the student is required to take one course in physical training each term in residence. In cases where physical disability does not permit student to participate in the regular activities, special work is prescribed or an equivalent of work in Hygiene is given.

Students electing Physical Education as a major subject are expected to complete not less than thirty hours of work in the department, and in individual cases more may be required.

Gymnasium Dress

All students are required to wear during exercises an approved gymnasium uniform. This uniform for women consists of bloomers, middle blouse, and tennis or ballet shoes. The uniform for men consists of a track suit and tennis shoes. These suits may be purchased in Greeley or they may be secured before entering the College.

Physical Examinations

Students upon registering are required to fill out health history blanks, and are given a physical examination. Students who are below average, or who have physical defects likely to interfere with their taking moderately strenuous exercise have special work prescribed for them.

Physical Education and Playground Teachers

To meet the increasing demand for teachers who can supervise physical education in schools and direct playground work, a major course has been outlined. In the matter of curriculum the students are guided in their selection in order best to meet their needs for the work for which they are preparing. In general these courses include Psychology, Biology, Physiology and Hygiene, Anatomy, Mechanics of Bodily Exercise, History of Physical Education and Play, Nature and Function of Play and such practical courses in gymnastics, playground games, and athletics as are necessary to equip them to successfully direct such work.

Courses for Women

1. **Physiology and Hygiene of Exercise.** A study of the effects of muscular activity upon the body. A course for students majoring in physical education, but open to all, both men and women. Junior and Senior College. Five periods, five hours. Fall Term, 8:10.
MR. LONG.
2. **Anatomy.** Junior College. This course is for physical education majors, men and women. Five periods per week. Five hours. Winter Term.
MR. LONG.
3. **Elementary Light Gymnastics.** Class organization and conduct; fundamental positions and movements; free arm, dumb-bell, wand, and Indian club drills; principles of selection and arrangement of exercises. Practice in organization and leading of drills. Junior or Senior College. Two periods, one hour. Winter and Spring Terms. LONG, KEYES.
4. **Advanced Light Gymnastics.** A continuation of Course 3. Prerequisite Course 3. Three periods. Two hours. Spring Term.
MR. LONG.
5. **Outdoor Plays and Games.** Plays and games progressively arranged from simple circle to highly organized group and team games. The course aims to meet the needs of the school and playground for the lower age periods. Fall and Spring Terms. Junior and Senior College. Two periods.
MISS KEYES.
6. **Children's Singing Games.** A course for those desiring play material for the elementary grades. Junior and Senior College. Three periods, two hours. Winter Term.
MISS KEYES.
7. **Folk Dances.** Selected folk dances of various nations arranged to meet the needs of school and playground. Junior or Senior College. Each term, 3 periods, two hours.
MISS KEYES.
8. **Esthetic Dancing.** Technic of the dance. Plastic exercises for the development of bodily co-ordination and rhythmical responsiveness. Practice and reports. Junior and Senior College. Three periods, three hours each term.
MISS KEYES.
9. **Classical Dancing.** Continuation of Course 8. Advanced technic. Classical dances. Three practice hours and two lectures per week on the history of the dance. Junior or Senior College. Three or five periods, three or five hours. Winter and Spring Terms.
MISS KEYES.
10. **Interpretative Dancing.** Continuation of Course 9. Interpretation of moods in music through rhythmical movements. Analysis, and composition of original dances. Junior or Senior College, Spring Term. Three periods, three hours.
MISS KEYES.
11. **Swedish Gymnastics.** Elementary Swedish gymnastics. Junior or Senior College, two periods, two hours. Winter Term.
MR. LONG.
12. **Playground Games.** Group and team games appropriate for the school yard or public playground. Practice, assigned references with reports. Junior or Senior College. Fall and Spring Terms. Two periods, two hours. Sec. I, T. Th.; Sec. II, M. W. 2:15.
MR. LONG.
13. **Indoor Games.** Selected group and team games. Junior or Senior College. Two periods, one hour. Winter Term.
MR. LONG and MISS KEYES.
14. **First Aid.** Lectures, demonstrations, and recitations. The Red Cross hand book used as text with references to other books on the subject. Junior or Senior College. Men and women. Winter Term. One period, one hour.
MR. LONG.

15. **Mechanics of Exercise.** A course for physical education majors, men and women. Prerequisite, Phys. Ed. 2. Four periods, four hours. Spring Term. **MR. LONG.**

16. **Anthropometry and Physical Examination.** A course for physical education majors. Signs and symptoms of common physical defects. Practice in making measurement of the body; discussion of principles as applied to physical training. Men and women. Second year. Junior or Senior College. Winter Term. Three periods, three hours credit. **MR. LONG.**

17. **History of Physical Education.** A course for physical education majors. The place given to physical education in the life of various nations in ancient, medieval and modern times. The beginnings of modern physical training. Junior or Senior College. Men and women. Two periods, two hours. Fall Term. **MR. LONG.**

Courses for Men

18. **Light Gymnastics.** Free arm drills, wands, dumb-bells and Indian clubs. Class organization and conduct; arrangement of exercises; principles of teaching. Winter and Spring Terms. Two periods, one hour credit. Junior College. **MR. LONG.**

19. **Elementary Heavy Gymnastics.** Work on the horse, rings, horizontal bar, etc. Progression from simple to complex exercises. Principles of teaching. Winter Term. Two periods, one hour. Credit. Junior College. **MR. LONG.**

20. **Advanced Heavy Gymnastics.** A continuation of course 17, but more advanced. Spring Term. Two periods, one hour. Junior or Senior College. **MR. LONG.**

21. **Playground and Group Games.** A selected list of group and team games. Junior or Senior College. Two periods, one hour. Spring Term. **MR. LONG.**

22. **Team Athletics.** Football, soccer, baseball, playground ball, basketball, and track and field athletics. Practice for skill and knowledge of the fundamental rules of the game are requirements. Fall, Winter and Spring Terms. Three periods, two hours. Junior or Senior College. **MR. LONG.**

23. **Group Teaching and Playground Supervision.** Qualified second year students will be given groups of first year students to teach the various games, and practice in the supervision of playground activities. Five periods per week. Three hours credit. Spring Term. **MR. LONG.**

24. **Research in Physical Education.** Qualified Senior College and graduate students may elect a subject for research in Physical Education. The following subjects are suggested, but others, depending upon the student's interest and available materials, may be chosen:

(1) The status of physical education in the schools of Colorado, with proposed plan for improvement.

(2) The playground and recreation movement; its rise, growth, and present status.

(3) A recreational survey of a selected community, with a suggested plan for improvement.

(4) A study of the playground games of different age periods, sexes and races.

(5) Educational athletics. Plan for a county or city school system.

By arrangement, any term. Three or more hours, according to the piece of work accomplished. **MR. LONG.**

PRACTICAL ARTS

SAMUEL MILO HADDEN, A.M., Dean

The Practical Arts Group comprises Woodwork, Metal Work, Bookbinding, Printing, Drafting, Fine Art, Accounting, Commercial Arts, Domestic Science, Household Arts, and Agriculture. This group occupies the entire three floors of the Guggenheim building, the first floor of the Training School, the Library basement, and the greater part of the basement floor of the Administration building. There has also just been completed a cottage which is for the exclusive use of the home economics department.

All together this group is the largest of the entire institution. Its faculty is composed of fifteen well trained men and women, all experts in his or her own line. Every student in the entire institution comes into contact with the group thru one branch or another.

Courses are varied in nature, in every special department. Courses are arranged along both the lines of theory and practice, neither of which is sacrificed for the good of the other. Methods in teaching the subjects in the public school are emphasized, and when a person has done his major work in one branch or another, he is fit practically to do the work, with an added advantage that he is also fit to teach the branches in the schools.

Industrial Art

SAMUEL MILO HADDEN, A.M.

JOHN T. McCUNIFF, A.B.

CHARLES M. FOULK, Pd.B.

Courses Primarily Junior College

5. **Methods in Practical Arts Subjects.** Required of all first-year students, and also of those in later classes who have not had its equivalent, who are majoring in the practical arts group, including manual training, art, home economics, printing, bookbinding, stenography, and elementary agriculture. The course deals with the fundamentals of teaching practical arts subjects, which includes a study of materials and processes. Correlation, e. g., inter-relation between included subjects, geography, arithmetic, and other appliances for the illumination of subjects; the introduction of practical arts subjects in the public schools, with equipment, supplies, etc. Observation of teaching in the training school classes is part of this course. Four hours. Every term.

1. **Elementary Woodwork.** This course is for beginners, and is designed to give a general knowledge of woods, a fair degree of skill in using woodworking tools, and an acquaintance with the underlying principles of manual training. It also includes mechanical and freehand drawing in their application to constructive design and decoration. Five hours. Every term.

2. **Intermediate Woodwork.** This course is designed for those who wish to become more proficient in the use of woodworking tools. It includes constructive design, the principles of cabinet-making and furniture

construction, and wood finishing. The different important constructive joints are discussed and applied wherever possible in the cabinet work done in class. Five hours. Fall and Winter Terms. Prerequisite: Manual Training 1, or equivalent.

24. **Material Study.** In this course all the materials used in the woodworking department will be discussed. The different kinds of material, the sources from which they come, the processes of manufacture, and other lines will be discussed; and tools and appliances as an integral part of a public school equipment is a part of this course. Two hours. Spring term.

3. **Woodwork for Elementary School.** In this course the following topics are discussed: equipment, materials, kinds of work, methods in teaching, methods in recitation, presentation of lessons, organization of classes, and outlining of work for the elementary school. Three hours. Fall and Spring Terms.

6. **Repair and Building Equipment.** This course has for its basis the repairing and building of furniture for the different departments of the college, such as the construction of lockers, cases, drafting boards, and such other equipment as can be handled in the department. Prerequisite: Woodwork 1 and 2. Fall and Winter Terms. Five hours.

19. **Wood Turning.** This course is designed for those who wish a more comprehensive knowledge of the art. The course will consist of talks, discussions, and practical work regarding various phases of the work, such as turning of patterns between centers, face plate turning, finishing, care of tools, preparation of materials, upkeep of lathes, speeds necessary for turning different diameters. Winter Term. Five hours.

10. **Elementary Mechanical Drawing.** This course is designed to give knowledge of the use of drawing instruments and materials, geometrical drawing, elements of projections, straight lines, and circles; problems involving tangents and planes of projection, development of surfaces, elementary, isometric, and oblique projections, simple working drawings, and letters. Five hours.

12. **Elementary Architectural Drawing.** This course includes designs, plans, elevations, and longitudinal sections of framing, doors, windows, sills, rafters, etc., in building construction in its application to work for barns, outbuildings and residences. It also includes the making of tracings, blueprints, and specifications. Prerequisite: Course 10. Five hours. Fall Term.

17. **Elementary Machine Design.** Here is treated the development of the helix and its application to V and square threads; conventions of material, screw threads, bolts and nuts, rivets, keys, etc. Sketches, drawings, and tracings are made from simple machine parts, such as collars, face plate, screw center, clamps, brackets, couplings, simple bearings and pulleys. Standardized proportions are used in all drawings. Winter Term.

16. **Historic Furniture.** Lectures illustrated by lantern slides and pictures showing the development of and characteristics fundamental in the Netherlands, England, and early American period. One hour.

8. **Elementary Art Metal.** This is a laboratory course dealing with the designing and constructing of simple artistic forms in sheet brass and copper. The aim is to create objects of artistic worth. The purpose is to realize in concrete form those qualities characteristic of good constructive design, such as fine proportion, elegance of form, and correct construction. Fall and Winter Terms. Five hours.

PRINTING

1. **Elementary Printing.** This course is intended to acquaint the student with the fundamental principles underlying the printing art. In

this course the student becomes efficient in hand composition, spacing odd jobs, locking up forms, making a job ready for press, and operating presses. Five hours. Every term.

2. **Intermediate Printing.** This course is a continuation of the elementary printing and is designed to make the student more proficient in the lines already mentioned; also rule work, and designing programs, window cards, etc., underlaying and overlaying on the press, making ready half tones, two and three-color work, proof reading, and operating in Monotype keyboard. Five hours. Fall and Winter Terms.

3. **Advanced Printing.** In this course the student is expected to become apt in all the lines of general printing, and more particularly the attention is given to ad composition, and the imposition of four and eight-page forms. Five hours. Spring Term.

BOOKBINDING

1. **Elementary Bookbinding.** This course includes the following: Tools, machines, materials, and their uses, collating and preparing the sheets for sewing, sewing on tape and cord, preparing of end sheets, trimming, gluing, rounding, backing, headbanding and lining of backs. Cover materials, planning and making of covers, finishing and lettering of titles, and labeling; all the steps necessary for the binding of full cloth-bound books. Five hours. Every term.

2. **Intermediate Bookbinding.** This course includes the binding of books in half morocco and full leather, including such processes as: Tooling in gold and blank, edge gilding and marbling, and the making and finishing of cardboard boxes and leather cases. Five hours. Winter and Spring Terms.

Courses Primarily Senior College

4. **Pre-Vocational Education.** The course is divided into two definite sections. First, the fundamental basis for pre-vocational work, the movement from the standpoint of special governmental and state schools, rural schools, state movements, including vocational clubs in relation to community interests, with a type program for the furthering of the movement from state and community standpoints. Second, the course of study and special methods of pre-vocational work in city school systems. The best courses in the different American and European cities will be considered with a summary of what may constitute a typical pre-vocational course for a Western city, as based upon the demands and needs for such work. Three hours.

7. **Industrial Art in Secondary and Trade Schools.** In this course the following topics will be discussed: Industrial art, secondary and trade schools in foreign countries, the movement in the United States. The course also includes a brief bibliography of articles that each student has read and reported on in class. Three hours. Winter Term.

15. **Project Design.** This course has for its object the planning of objects suitable for the elementary school. Complete artistic working drawings that will embody the best possible principles of artistic design, of things possible of execution in the elementary school, together with a short, valuable bibliography of sources from which information is obtained. Two hours.

20. **Pattern Making.** The topics discussed in this course will consist of the following: Woods best suited for various kinds of work, glue, varnish, shellac, dowels, draft, shrinkage, and finish. The practical work will consist of patterns for hollow castings, building up, and segment work. Five hours. On demand.

21. **Combination Course with Physics.** Building complete, well-balanced artistic physical apparatus based on the development work carried on in physics classes. Prerequisite: Courses 1 and 2. Three hours.

14. **Care and Management.** This course is designed to furnish the student a thoro knowledge of the care of both hand and power equipment, such as the filing and grinding of tools, and the changing and adjustment of power tools to do the different kinds of work which they are intended to do. The arrangement of the woodworking room, its care and management will be dealt with from the standpoint of efficiency and neatness. Two hours.

11. **Advanced Mechanical Drawing.** This course includes intersections, the cycloid, hypercycloid, and involute curves; their application to spur and bevel gear drawing; developments, advanced projections, lettering, and line shading. Prerequisite: Course 10. Five hours.

13. **Advanced Architectural Drawing.** This course is a continuation of Course 12, and deals with the drawing of plans for cement, brick, and stone structures, culminating in a complete set of plans and specifications for a residence or a public building of moderate cost. Prerequisite: Courses 10 and 12. Five hours.

18. **Advanced Machine Design.** A study is made of the transmission of motion by belt and pulley, and gears and cams. Such curves as the involute, cycloid, and epicycloid are applied in the designing of gears. Sketches, detail, and assembly drawings are made of intricate pieces of machinery, such as the globe valve, vise, head stock lathe, and such shop machinery as lathes, band saws, motors, and gas and steam engines. Five hours. On demand.

23. **Constructive Detail Drawing.** The purpose of this course is to prepare the student to draw in detail the different parts of a building or articles to be constructed of wood, stone, iron, brick, or other materials. The subject of proportion, dimension, and strength and the method of preparing and assembling will be dealt with in connection with the making of the detail drawing. The terminology in connection with this course will be given full consideration. Five hours.

20. **Pattern Making.** The topics discussed in this course will consist of the following: Woods best suited for various kinds of work, glue, varnish, shellac, dowels, draft, shrinkage and finish. The practical work will consist of both hollow castings, building up, and segment work. Five hours. On demand.

22. **Building Construction.** The purpose of this course is to give the student a knowledge of the different parts of a building and the best methods of fitting and assembling these parts. The work in this course will be executed on a reduced scale but in a manner that will convey the full purpose. The use of the steel square will be fully demonstrated in finding of lengths and cuts and also all of its uses brought out. Practical problems will be worked out by the use of the square and compass. Spring Term. Five hours.

9. **Advanced Art Metal.** This course should be taken after Course 8, since it deals with more advanced ideas in metal work, and includes work in brass, copper, bronze, and German silver. This course deals largely with the designing, decorating, and artistic coloring of metals. It also includes a short course in the chemistry of metal colors, and the use of lacers for protection. Simple artistic jewelry is made the basis for the constructive work in this course. Five hours. Spring Term.

Special Graduate Course and Seminar will be arranged upon application. For listed courses, see Department of Education.

Fine and Applied Arts

WALTER F. ISAACS, B.S.

AGNES HOLMES, Pd.M.

The Department of Fine and Applied Arts aims to prepare teachers to meet all the demands made upon regular grade teachers, in public and private schools from the kindergarten up thru the high school in all branches of drawing and to train special students to act as departmental teachers and supervisors in Fine and Applied Arts. The courses are open as electives to all students of the College.

The department is well equipped. In addition to the regular equipment there is a large museum of ceramics, original paintings, reproductions, and copies of masterpieces, bronzes, marbles, and tapestries. The museum of ceramics is a rare collection of pottery, containing ancient and modern specimens from different countries, including Japan, Austria, Holland, France, England, and America.

1. Elementary Drawing and Design. In this course a wide range of problems in public school drawing is taken up in a brief manner to give the student a general knowledge of the subject. Those students who are taking their majors in the department lay a foundation for their future work, and others who elect the course find it an aid in their teaching. The course includes the following subjects: (a) Freehand drawing of objects in accented outline; linear perspective; nature drawing; lectures on methods of teaching are given. Two hours.

(b) The study of elementary design principles. Exercises involving line, space, and color. Simple problems in construction. Three hours.

2. Applied Design. The construction and decoration of notebook covers, desk pads, and similar articles; theory of design in its relation to useful objects; the application of original designs by block printing on curtains, table runners, or pillow covers. Five hours.

3. Light and Shade. Drawing in charcoal or pencil from still life or from simple casts. The study of values is emphasized. Some work in colored chalk is introduced to stimulate the student's color vision. Five hours.

4. Design and Composition. The work begins with the theory of space filling and color harmony; abstract exercises in filling the square and circle, using geometric units, giving attention to line, value, and color. This is followed by a few practical problems carefully executed. Prerequisite: Courses 1 and 2. Five hours.

5. Water Color Painting. Groups of still life objects and flowers are rendered in water color. The student is allowed freedom of technic, but a close study of color values is insisted upon. Prerequisite: Course 3. Five hours.

6. Art Appreciation. The main principles of esthetics underlying the fine arts are taken up in illustrated lectures. The course is planned with a view to increasing the pupil's power to select and enjoy good examples of fine art. Examples of the world's best art are studied. Discussion of art in its relation to the home and to industrial life. One hour.

7. Constructive Design. Design as a factor in construction; reed and raffia work; construction of mats, bags, purses, book covers, etc., in leather with embossed or colored designs. Five hours.

8. **Pottery.** Handbuilt vases, bowls, decorative tiles, etc., are made. The department is equipped with a modern kiln, and the work of students is fired and glazed. A variety of glazes with different colors is used. Embossed, incised, and inlaid decorations. Five hours.

9. **History of Painting.** The evolution of painting from the beginning of history; the growth of the great schools and their influences; the study of the important masters, discussing their personalities as related to their painting, and their work as an index to the time in which they lived; illustrated by a large collection of photographs and lantern slides. Lectures with related reading. Two hours.

10. **History of Sculpture.** The works of the great masters of ancient and modern schools illustrated by pictures and lantern slides. Lectures with related reading. One hour.

11. **History of Architecture.** Illustrated lectures on the development of architecture; interpretations of famous buildings. One hour.

19. **Household Art Design.** Theory and practice of design in relation to house decoration, costume, etc. Five hours.

Courses Primarily Senior College

12. **Antique.** Charcoal drawing from antique casts in outline and in light and shade. An intensive course requiring accurate drawing and close study of values. Five hours.

13. **Commercial Design.** Design considered in its relation to advertising art. Posters, cover designs, and various advertising problems are executed by the student. Lectures on the appreciation of newspaper, magazine, and book illustration. Drawing for reproduction. A course with direct bearing on life and industry, and essential in every course of study. Five hours.

14. **Drawing from Life.** Study from the costumed model. The student is allowed to choose the medium to be used. Offered for classes of six or more students. Five hours.

15. **Methods in Art Supervision.** The supervision of art education in city systems; the planning of a course of study; methods of teaching. Three hours.

16. **Laboratory Drawing.** The theory and practice of diagrammatic drawing; laboratory problems involving the use of the microscope; discussions on the viewpoint of the scientist as contrasted with that of the artist. Two hours.

All of the courses outlined in the Junior College may be taken for Senior College credit if a standard of work sufficient to justify such credit is maintained.

Courses Primarily Graduate College

17. **Color Composition.** An advanced study of color composition in oil or water color. Arrangements of form and color for decorative effect. The student will be assigned subjects and will meet with the instructor for criticism at appointed times. Five hours.

18. **Oil Painting.** This work may be done outside of regular classes to suit the convenience of the student. Regular criticisms will be given by the instructor in charge. The student must submit satisfactory evidence of having a good knowledge of drawing and values, and must have done one term's work or its equivalent, in oil painting. Large studies from complicated still life groups or from life, showing reasonably correct

color values will be required. Advanced students who have not had one term of work or its equivalent in oil painting may take this work for Senior College credit. Five hours.

Home Economics

IDA MARSHALL, B.S.

MERLE KISSICK, Ph.B., A.B.

FLORENCE REDIFER, A.B.

GLADYS SCHARFENSTEIN, Ph.B.

The Junior College Courses in Home Economics are planned primarily to meet the needs of those wishing to teach these subjects in the elementary schools, and at the same time they give opportunity to elect considerable work along other lines. However, by confining electives to this department, to the sciences and to art, students may be able to fit themselves for high school teaching. While high school Home Economics teachers may be trained to do good work in a two-years' course, it is advisable to take the full four-year course if students wish to secure and hold with credit high school positions.

Opportunity is given in the Senior College to major in either Household Science or Household Art, with freedom to elect in either phase of the work.

Even tho a student may wish to take equal amounts of both Household Science and Household Art, it is advisable to choose one side of the work as a major and elect from the other side.

Uniforms

All students when in Household Science laboratory are requested to wear wash waist and a white princess apron, to which is attached a holder and a small hand towel.

Household Science

Courses Primarily Junior College

1. **Elementary Cooking.** A study of the following articles of food is made from the standpoint of composition, nutritive value, digestibility, growth or manufacture, marketing, adulteration, and methods of preparation: Fruits, vegetables, cereals, eggs, milk, meats, fish, and beverages. Special emphasis is laid upon the principles underlying the processes of cooking. Fall Term. Five hours. MISS REDIFER.

2. **Elementary Cooking.** A continuation of Course 1. Special study is made of the fatty foods, leavens and leavening agents, pastry, quick breads, light breads, and cake making. Five hours. Winter Term.

MISS REDIFER.

3. **Fancy Cooking and Serving.** Meals are planned, prepared and served at a given cost. Due consideration is given to diet suited to indi-

vidual needs, varying with age, health, and activity. Proper balancing of the menu is studied and carried out in the practical work. Five hours. Spring Term. Prerequisite: D. S. 1 and 2. MISS REDIFER.

4. **Preservation of Foods and Invalid Cookery.** The principles underlying the process of preserving foods are studied. Preservatives and food adulterants are discussed. Fruits and vegetables are canned and pickled. Fruits are preserved, and jellies and conserves made. One third of the time will be devoted to the preparation and serving of invalid dishes suited to the needs of patients suffering from various diseases. Fall Term. Five hours. Prerequisite: D. S. 1. MISS MARSHALL.

6. **Household Sanitation.** The following subjects are studied: House site, ventilation, heating, lighting, plumbing, and disposal of garbage. Elective. Spring Term. Two hours. MISS REDIFER.

5. **Housewifery.** Keeping of accounts, apportionment and judicious expenditures of the income, and the general cost of living are touched upon. The greater emphasis is laid upon methods of organizations, care of the house and its furnishings, and care of the family. Spring Term. Three hours. MISS REDIFER.

7. **Dietary Problems.** An application of the principles of human nutrition. A study is made of the relative value of the various articles of food as energy givers and body builders, and their relative cost. Practical comparison is made of the nutritive values of the common foods by computing, preparing, and serving meals at specific costs, in which specified nutrients are furnished. Prerequisite, at least one year's work in the study of cookery of foods. Elective. Winter Term. Five hours. MISS MARSHALL.

8. **Methods of Teaching Household Science.** A study of the problem of teaching domestic science in the elementary and high schools. It includes the arrangement of courses of study for different schools, and methods of presenting the subject-matter, planning of equipment, and laboratory management. Text books reviewed and lesson plans discussed. Three hours. Spring Term. Prerequisite: D. S. 1 and 2, or 1 and 3. MISS MARSHALL.

15. **Demonstrations.** Each girl will be given an opportunity to demonstrate some process of cooking before the entire class. Elective. Two hours. Spring Term. Prerequisite: D. S. 1 and 2, or 1 and 3. MISS MARSHALL.

19. **Home Nursing.** The following subjects are studied: Sanitary conditions of sick room, qualifications of the nurse, theory of disease, symptoms of disease, personal care of the patient, sick room methods and appliances, emergency work and maternity nursing. Three hours. Winter Term. MISS MARSHALL.

Courses Primarily Senior College

The Senior College courses in Home Economics are planned to meet the needs of those students who have completed a two-year college course in Home Economics and are preparing themselves for teachers of high school and college work. Since the aim in all of our work is finally to reach the home thru our teachers who go out from us, it seems unnecessary to add that courses in both the Junior and Senior College will also meet the needs of the housewife.

9. **Food Production.** This course is a study of food materials, their growth, the conditions under which they are matured and marketed, prob-

lems which relate to their storage and transportation, their adulteration and food laws. Spring Term. Five hours. MISS MARSHALL.

10. **Dietetics.** A course in the fundamental principles of dietetics and preparation of practical dietaries, special emphasis being laid upon diet in disease. Prerequisite: General and food Chemistry; D. S. 1 and 2. Five hours. MISS MARSHALL.

11. **Household Management.** A thoro study is made here of the place of the home and home maker in the economic world. The effect of the present economic position upon the home and society. Responsibilities of the housewife for conditions of public hygiene. Organization and management of the household. Division of the income, household accounts. Domestic service problem. Spring Term. Five hours. MISS MARSHALL.

12. **Experimental Cookery.** An experimental study of the various food products and the changes produced by cooking. Qualitative and quantitative study of recipes. Effects produced by various cooking appliances. Winter Term. Five hours. MISS MARSHALL.

14. **Home Economics Education.** A history of the home economics movement; study of different types of schools; purposes of work in the schools and the value of it. Content of home economics and its relation to other subjects of the curriculum. Study of equipment courses of study, and methods of conducting classes in high schools and colleges. Five hours. MISS MARSHALL.

Courses Primary Graduate College

The work of the Graduate College will consist principally of intensified Senior College work, description of which courses will be found in Senior College section. MISS MARSHALL.

9. **Food Production.** (Senior College.) Five hours.

11. **Household Management.** (Senior College.) Five hours.

14. **Home Economics Education.** (Senior College.) Five hours.

20. **Seminar.** An opportunity is here given to do original research work in any phase of domestic science. Each student may choose any subject suitable to her ability. Five hours.

18. **Household Management.** This course consists of one month's practice in the Domestic Science Cottage. Each girl has practice in the management of all household tasks, in cooking the three meals per day for one week, as laundress, and in the care and cleaning of the house. Two hours. Every Term. MISS SCHARFENSTEIN.

Courses in Household Art

Courses Primarily Junior College

1. **Household Art Crafts.** A study of the construction and decoration of articles for the home and for personal use, hand work as a basis, stressing accuracy of construction and application of good designs. Required of D. S. and H. A. majors without previous training in hand work. Fall and Spring Terms. Five hours. MISS SCHARFENSTEIN.

Elementary Dressmaking. Fundamental principles of garment construction with four problems based on drafted patterns. Required of D. S. and H. A. majors. Winter Term. Five hours. MISS SCHARFENSTEIN.

3. Household Arts Crafts II. Application of color to articles for the home, paying special attention to comparative costs and attractive combinations through the medium of woven materials. Elective for D. S. and H. A. majors or required as a substitute for Household Arts I. Winter Term. Five hours. MISS SCHARFENSTEIN.

4. Dressmaking. Practice in construction of dressmaking problems. Development of methods of procedure, accuracy, speed and manipulation in handling materials. Required household art majors. Lectures and laboratory. Spring Term. Five hours. MISS KISSICK.

5. Millinery. Study of basic design principles applied to the hat and silhouette with practical shop methods of remodeling and constructing from new materials. Required household art majors. Winter Term. Five hours. MISS KISSICK.

6. Elementary Textiles. Identification of textile materials from consumer's viewpoint by work with structure, color, width, price, etc. Microscopical, chemical and shopping study. Required household art majors. Fall Term. Five hours. MISS KISSICK.

7. House Decoration Representation. The application of principles of design to the decoration of the home, stressing the use of color in relation to space. Water color sketches used throughout the course. Elective for domestic science and household art majors. Fall Term. Five hours. MISS SCHARFENSTEIN.

16. Machine Sewing. Practice in the construction of garments working toward accuracy and speed in the use of the sewing machine and its attachments. Spring Term. Five hours. MISS SCHARFENSTEIN.

12. Costume Design Representation. Study of the lay figure in the construction of designs for costume and construction and modeling of original designs for type figures. Fall Term. Five hours. MISS SCHARFENSTEIN.

Courses Primarily Senior College

9. House Decoration. An appreciation course in decorative elements with reference to practical problems in application. Illustrative work in Model Cottage. Fall Term. Five hours. MISS KISSICK.

10. Festival Costuming. A survey of historical and modern literature as a basis for interpretative work in costuming for pageantry and festivals. Simple methods of modeling original designs in paper or crinoline materials. Elective also to reading majors or students interested in the problem of festival work. Spring Term. Five hours. MISS KISSICK.

11. Advanced Textiles. An examination of fabrics for adulteration, laundering and dyeing qualities. Experiments with colors. Study of market conditions in detail. Promotion of individual interest. Original and special work. Prerequisite: Household Art 6. Winter Term. Five hours. MISS KISSICK.

Courses Primarily Graduate College

14. Advanced Dressmaking. Sketching from copy, lay figure representation, modeling patterns from magazines and original designs with application to afternoon and evening gowns. Prerequisite, Household Art 1 or 3, 2 and 4. Winter Term. Five hours.

15. Drafting. A study of drafting systems used in schools and colleges to develop freedom in use and modeling of patterns. Fall Term. Five hours.

20. **Seminar.** Individual work on research problems in the household art field. Conference. Any term. Five hours.

Agriculture

CHARLES HALL WITHINGTON, M.S., A.M.

The large collection of plants growing upon the college campus, in arboretum, in the gardens and in the green house furnishes very rich illustrative material for classes in all Agriculture and Nature Study subjects. As a laboratory for the study of landscape gardening the campus furnishes one of the finest in the State.

Courses Primarily Junior College

3. **Elementary Agriculture.** This course is planned primarily for teachers in the rural and village schools. The subject-matter is selected and the work presented with this end in view. All laboratory work will be presented in such a way that it can be adapted to the needs of the individual teacher. Practical work is given in greenhouse, field and garden. Fall Term. Five hours.

4. **Continuation of Course No. 3.** Special study is made of soil structure and feeding. Winter Term. Five hours.

5. **Continuation of Course No. 4.** A special study is made of plant propagation, seed testing and garden work in general. Spring Term. Five hours.

6. **Plant Propagation.** A discussion of natural and cultural methods of propagation; seeds, seed testing, and seed growing. The treatment required for the different kinds of seeds, the production of seedling stock, grafting, budding, layering; the making of cuttings and the special requirements for propagating commercial fruits and ornamental plants. Fall Term. Five hours.

21. **School Gardening.** Meaning of the school gardening movement. The relation of gardening to nature study and elementary agriculture. The school garden as a laboratory of nature study and agriculture. Practice in garden handicraft. Planning and planting the school garden. The principles of landscape garden improvement applied to school and home grounds. Studies of the best native and introduced decorative plants. Spring Term. Five hours.

7. **Seed Testing.** The student becomes familiar with the details of structure of the seeds of all the principal races of agricultural plants and learns to distinguish those seeds which are used as adulterants or as fraudulent substitutes. Practice work is given in making purity and germination tests of seeds according to the official rules and methods of seed testing. Spring Term. Two hours.

8. **Vegetable Gardening.** Lectures, readings and practical exercises. Considerable attention will be given to garden soils and fertilizers, forcing and market gardening, as well as other cultural features. Spring Term. Three hours.

15. **General Entomology.** The study of our local insect fauna, together with the systematic relation and identification of the orders and the more important families, genera, and species and the habits and life history of representative species. Lectures and field work. Fall, Winter, and Spring Terms. Five hours.

18. **Nature Study.** The theory, practice and materials of nature study. Designed to fit teachers for teaching nature study in the elemen-

tary schools. In this course we consider (a) the nature study idea—a review of the writings of Professors L. H. Bailey, S. C. Schumacker, C. F. Hodge and others on the aims and ideals of nature study teaching; (b) The materials of nature study—First hand acquaintanceship with the good and common things of the outside world, the actual first hand observation in garden, laboratory, field and plain. Fall Term. Five hours.

19. **Continuation of Course 18.** Special emphasis is laid upon making mounts, also in studying the different trees and shrubs in their winter dress. Winter Term. Five hours.

20. **Continuation of Course 19.** Special emphasis is placed upon flowers, plant propagation, insect and animal life. Spring Term. Five hours.

11. **Elementary Poultry Raising.** A general course dealing with poultry house construction (taking Wood Working 1, as a parallel course), yarding, fattening, killing, dressing, marketing and a brief description of the more common breeds. Laboratory work consists of demonstrations in the practice of handling poultry. Fall and Spring Terms. Two hours.

12. **Practice in Incubation.** Three times a day, seven days a week for a period of four weeks. This course consists in the care of an incubator by the student thruout the incubation period, testing the eggs, and bringing off the hatch. Careful records of fertility, cost of incubation, etc., are kept. Spring Term. One hour by appointment.

13. **Practice in Brooding.** Three times a day, seven days a week, for a period of four weeks at hours outside the regular schedule. In this course every student handles a flock of chicks. He has the entire care of brooding and feeding them during the first four weeks of their life. A report of cost of fuel and feed, of gain in weight, etc., is required. This course must be preceded by Practice in Incubation. Spring Term. One hour by appointment.

14. **Practice in Poultry Feeding.** Three times a day, seven days a week for a period of four weeks at hours outside the regular schedule. This course consists of the actual care of a flock of fowls by the student under supervision. A careful record is kept of the feeds used and the eggs produced. A financial report is required at the end of the feeding period. One hour by appointment. Fall, Winter, and Spring Terms.

Courses Primarily Senior College

16. **Economic Entomology.** Primarily for students of agriculture. Discussions of the life history, habits, injuries and methods of controlling the more important insect pests; the economic value of beneficial insects and the preparation and use of insecticides and apparatus for the control of insects. Lectures, demonstrations, laboratory and field work. Prerequisite: General Entomology. Spring Term. Five hours.

9. **Landscape Gardening.** This course is a study of the ideals of landscape work and the means adopted to secure the best results in lawns, parks, public grounds, etc. Prerequisite: Plant Propagation. Spring Term. Five hours.

Courses Primarily Graduate College

10. **Agricultural Seminar.** Discussion of the various phases of agricultural investigation. Papers on assigned topics are presented for discussion by the pupils. Prerequisite: General Agriculture. Fall, Winter and Spring Terms. Two hours.

17. **Entomology Seminar.** Selected literature and special field investigation and insect problems to be studied and presented for discussion by the pupils. Prerequisite: Courses 15 and 16. Fall, Winter, and Spring Terms. Five hours.

Commercial Arts

JEHU BENTON WHITE, B.S.

FRANK W. SHULTIS, A.M.

In this department two opportunities will be given to earn a major. The Shorthand branch requires Courses 1, 2, 3, 4, 5, 6, 11, 12, 13; the Accounting branch, Courses 21, 22, 23, 24, 25, 26, 27, and 28.

Students who have done commercial work elsewhere, for which they have received entrance or advanced credit at this institution will be given advanced work and will be allowed to select work from both branches of the department.

Courses Primarily Junior College

1. **Principles of Shorthand.** First seven lessons in the Gregg Manual, with supplementary exercises. Fall Term. Five hours.
2. **Continuation of Course 1.** Eight lessons in the Gregg Manual with supplementary exercises. Winter Term. Five hours.
3. **Dictation.** Review of the principles, phrasing, dictation, reading shorthand plates. Fall Term. Five hours.
4. **Continuation of Course 3.** Four remaining lessons in the Gregg Manual, comprehensive study of the vocabulary, beginning dictation. Spring Term. Five hours.
5. **Speed Dictation.** Speed drill dictation, familiar and unfamiliar matter used, beginning office practice. Winter Term. Five hours.
6. **Office Practice and Methods.** Office work in the various departments of the school; teaching methods in both shorthand and typewriting. Spring Term. Five hours.
11. **Elementary Typewriting.** Beginning work in touch typewriting, covering position at the machine, memorizing of keyboard, proper touch, and correct fingering, with instruction in the care of the machine. One period of practice per day is required. Every Term. Two hours.
12. **Business Correspondence.** Study of approved forms of business letters, proper spacing and placing, filling in form and circular letters, addressing envelopes, manifolding and tabulating, preparing all kinds of legal documents. Every Term.
13. **Advanced Typewriting.** Speed practice, direct dictation, transcribing from shorthand notes. One period of practice per day. Every Term. Two hours.
40. **Business English.** The elementary principles involved in writing correct English. The sentence, the paragraph, grammatical correctness, effectiveness, clearness, punctuation. (This course may be taken by majors in this department instead of English.) Five hours.
41. **Business English.** Business letter writing. Advertisement writing. Business themes.
21. **Elementary Accounting.** Fundamental principles of double entry. Use of the journal and ledger. Making of trial balance and statements. Cash book, sales book, and purchase book introduced. Every Term. Five hours.
22. **Intermediate Accounting.** Commercial paper, bill book, invoice book, bills of lading, special column books, wholesale accounts. Every Term. Five hours.

23. **Advanced Accounting.** Corporation accounts, manufacturing accounts. Every Term. Five hours.

24. **Bank Accounting.** Organization of a bank; methods and principles of banking; commercial paper; loans and discounts; saving deposits. Every Term. Five hours.

25. **Commercial Arithmetic.** A rapid review of the four fundamental processes, and of common and decimal fractions will be given. This will be followed by a comprehensive treatment of percentage and its applications. Only modern methods will be used. Special attention will be given to the improvement of accuracy and speed. Fall Term. Five hours.

26. **Business Penmanship.** The work will consist of drills in free-arm movement writing. Those who wish to become special teachers of penmanship may, by taking three successive terms and showing marked proficiency, receive a certificate from the department. Every Term. Five hours.

Courses Primarily Senior College

7. **Methods in Commercial Work.** The commercial field; equipment; the course of study; special methods; equipment of teacher; relation of business school to the community. Spring Term. Five hours.

14. **Office Practice.** Daily work in the offices of the Institution. Every Term. Five hours.

27. **Commercial Law.** Study of contracts; negotiable instruments; agents; partnerships; real property; personal property. Winter Term. Five hours.

29. **Farm Accounts.** This course is offered as an elective for students of agricultural courses. The work will be simple enough to be taken up by those who have not studied bookkeeping. Spring Term. Five hours.

30. **Household Accounting.** An elective course for the students of home economics. Only elementary principles will be introduced. Spring Term. Five hours.

32. **Cost Accounting.** Importance of cost accounting in a business. Material cost, labor cost; overhead expense; distribution of expense; preparation of a set of books on manufacturing costs. Every Term. Five hours.

33. **Theory of Accounts.** A study of the principles of accounting. Spring Term. Five hours.

THE LIBRARY

ALBERT F. CARTER, M.S., Librarian

GRACE CUSHMAN, Pd.B., Assistant Librarian

MARGARET WATSON, A.B., Assistant Librarian

For the use of all connected with the school there is an excellent library and reading room, containing about forty thousand volumes, 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 attractive environment for readers. Because in the selection of books there has been careful adaption 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: Encyclopedias—The New International; the Encyclopedia Britannica, Encyclopedia Americana, Johnson's, People's, Iconographic, Encyclopedia of Religion and Ethics, American, The Jewish Encyclopedia, The Catholic Encyclopedia, etc. Dictionaries—The Century, the Encyclopedia, the Standard, the Oxford, Webster's, Worcester, 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 Cyclopedia of United States History, etc.

The library subscribes regularly for about three hundred and twenty-five of the best magazines and educational journals. It also receives, through 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 Index, Reader's Guide, and many other good indexes are provided.

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

In addition to the general library, there is a section 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 Training School

JAMES H. HAYS, A.B., Acting President

DAVID DOUGLAS HUGH, A.M., Dean of Training School

HIGH SCHOOL

JOHN R. BELL, LITT.D., Principal of the High School

RAE BLANCHARD, A.B., Preceptress, English Literature

GEO. W. FINLEY, B.S., Mathematics

CHAS. J. BLOUT, A.M., Science

EDNA WELSH, Pd.B., Typewriting and Shorthand

JEAN CROSBY, A.B., History

EMMA C. DUMKE, A.B., Modern Languages

LUCY McLANE, A.B., English

MARGARET KEYES, A.B., Physical Education

ELEMENTARY SCHOOL

GEORGE EARL FREELAND, A.M., Principal

JENNY LIND GREEN, Training Teacher—Seventh Grade

AMY RACHEL FOOTE, A.B., Training Teacher—Sixth Grade

*ELIZABETH HAYS KENDEL, A.B., Training Teacher—Fifth Grade

FRIEDA B. ROHR, A.B., Training Teacher—Fifth Grade

CELIA M. LAWLER, A.B., Training Teacher—Fourth Grade

MARGARET STATLER, A.B., Training Teacher—Third Grade

BELLA BRUCE SIBLEY, A.B., Training Teacher—Second Grade

KATHRYN M. LONG, A.B., Training Teacher—First Grade

MILDRED DEERING JULIAN, B.S., Training Teacher—Kindergarten

Fellows

JAMES H. HAYES, A.B., High School

W. L. BAKER, A.B., Eighth Grade

SUE CARY, Pd.M., Fifth Grade

EDITH STEVENS, Pd.M., Office

GRACE PADEN, Pd.M., Kindergarten

Scholars

CLARA TURNER, Pd.M., Seventh Grade

ANNA WALEK, Pd.M., Sixth Grade

LEONA PETERS, Pd.M., Fourth Grade

*Leave of Absence, 1915-16.

FLORENCE VICKERS, Pd.M., Third Grade
 ANNE NEVILLE, PdM., Second Grade
 ETHYL P. MACMILLAN, Pd.M., First Grade
 WALTER MORRISON, Pd.M., Playground
 CHARLOTTE HANNO, Pd.M., Modern Foreign Languages

The following members of the College Faculty aid in the supervision and teaching of their respective subjects in the Training School:

JAMES HARVEY HAYS, A.M., Latin
 SAMUEL MILO HADDEN, A.M., Industrial Arts
 FRANCIS LORENZO ABBOTT, A.M., Science
 GURDON RANSOM MILLER, A.M., Social Science
 FRANCES TOBEY, B.S., Reading and Dramatics
 ETHAN ALLEN CROSS, Ph.M., English
 JACOB DANIEL HEILMAN, Ph.D., Child Clinics
 JOHN T. McCUNNIFF, A.B., Printing and Mechanical Drawing
 MAX SHENCK, Bookbinding
 GEORGE A. BARKER, M.S., Physiography and Geography.
 CHARLES M. FOULK, Pd.B., Manual Training
 WALTER ISAACS, B.S., Drawing and Art
 AGNES HOLMES, Pd.M., Drawing
 JOHN CLARK KENDEL, A.B., Music
 ROYCE REED LONG, A.B., Physical Education
 IDA MARSHALL, B.S., Domestic Science
 EDWIN B. SMITH, B.S., History
 FRANK W. SHULTIS, A.M., Bookeeping
 LEVERETT ALLEN ADAMS, Ph.D., Nature Study
 MERLE KISSICK, Ph.B., Household Arts
 FLORENCE REDIFER, A.B., Cooking
 GLADYS IRENE SCHARFENSTEIN, Ph.B., Sewing
 ADDISON LEROY PHILLIPS, A.B., English
 EDWARD STANTON DU PONCET, Ph.D., Modern Languages
 CHARLES HALL WITHINGTON, A.M., Nature Study and Agriculture

The Elementary School

THE POINT OF VIEW

The dominant thought underlying the work of the Training School is that education is a process of participation in life and not merely a preparation for life. It is designed, therefore, to make the atmosphere of the Training School that of a happy, helpful home, where each individual is provided with something to do suited

to his tastes and capacities, and where each in turn contributes to the common good.

Much attention, consequently, is devoted to the spontaneous activities and interests of pupils. The dramatic, constructive, artistic, story, nature-study, social, and play impulses are utilized for educational ends. Thru dramatization, for example, the child enters with greater zest into the study of such subjects as reading, literature, and history; and consequently makes greater progress in them. Play safeguards health to a greater degree than the more formal gymnastic exercises of the classroom. To keep alive the child's native tendency to be interested in and experiment with animals and plants and natural forces is an important factor in education. To stimulate his appreciation of pictures, music, and literature, suited to his stage of development, is essential to a well-rounded life. In other words, the aim of the Training School is to afford opportunities for a healthful, growing life for the young people entrusted to its care. It assumes that they will put forth their most sustained effort and will accomplish most when working in harmony with their dominant interests.

THE PLACE OF THE THREE R'S

While emphasis is placed upon the freer forms of school work, this is not incompatible with the mastery of the essentials of reading, arithmetic, writing, and spelling. When used as tools for the mastery of problems in which there is vital interests, the most effective work is accomplished in these subjects. In addition to this work carefully planned drill exercises are also provided. By the careful elimination of the dead timber usually found in the various school subjects, much rich material can be introduced into the curriculum in such branches as art, music, literature, geography, history, and nature-study.

VOCATIONAL WORK

The best contemporary educational thought, moreover, demands that the school shall help to fit young people for a vocation. In the upper grades and the high school, at least, young people begin to feel the stress of the life-career motive. Consequently, at this time more attention is paid to manual training, the household arts, agriculture, stenography, bookkeeping, typewriting, and kindred subjects. Additional vocational courses are being offered from which the student may choose his work.

THE SOCIAL LIFE OF THE SCHOOL

Much importance is attached to conduct. An effort is made to maintain the social life of the school on a high plane. Sympa-

thetic and cordial relations between pupils and teachers are fostered. Each grade has occasionally some kind of social function to which parents or another group of young folk are invited. At noon a room is provided where the children eat their lunches at tables presided over by student teachers. Once a week one grade entertains the other grades at the morning exercises in the Training School Auditorium. Various kinds of clubs are organized in the upper grades and the High School. These and other occasions of similar nature tend to cultivate the amenities of social life, and afford opportunity for initiative and social co-operation.

THE RELATION OF HOME AND SCHOOL

Much of the work of the school is designed to make the boys and girls more helpful members of the home. Nature-study, gardening, cooking, sewing and handicrafts should function in work in the household. Literature, singing, story-telling, art and oral English render pupils capable of filling a larger place in the home circle. In fact, any school work that does not carry over into the home life is open to serious question.

PROMOTIONS

A flexible system of promotion prevails in the training school. Each grade in the Elementary School is divided into two or more groups, according to the advancement of the pupils, and each group is allowed to proceed at the fastest pace of which it is capable. Whenever the work of the year is completed by any group, it is permitted to begin the next year's work. This provides for the completion of the elementary school work in less than the eight years usually allotted to it.

SUMMER SCHOOL

There is a growing conviction among the educators of the country in favor of school during a part, at least, of the summer vacation. The right kind of school work is not inimical to the health and welfare of youth. Accordingly, a summer session has been organized for both the Elementary School and the High School. Credit is allowed for the work done.

PHYSICAL EDUCATION

The physical development and health of the children are considered of prime importance. An outdoor playground, equipped with needed apparatus, the athletic field, and the campus furnish places for supervised play. Games of suitable character, folk dancing, and gymnastics, are taught by well-trained teachers. The work culminates in the spring in a field day with events suitable for the

different grades of children. A scientific examination of the physical condition of the children is made each year by a child-study specialist and by the director of the department of physical education.

MUSEUMS AND EXCURSIONS

Another valuable source of information is furnished by the museums of the institution. Visits are made by groups of children under the direction of a teacher to the scientific, historical, and other museums belonging to the collegiate departments. A collection of specimens on nature study, geography, art, etc., is also available in the Training School building. Teachers are encouraged to utilize such material to the fullest possible extent as well as to make excursions to farms, factories, banks, stores, county offices, and local centers of interest in connection with the school work.

SCHOOLROOM LIBRARIES

A significant factor in the education of the children is the use of grade libraries. An earnest effort has been made to secure the best literature available for the children in the different grades. These books are accessible to the children in each room. They are used both to supplement the regular studies and also for home reading.

FEEES

All books and material used by the children are furnished by the school except incidental supplies, as pencils, note books, etc. No fee is collected in the first and second grades, except a small charge for materials, amounting to about 25 cents a term. In the remaining grades the incidental fees are as follows: Third and fourth, \$1.00 a term; fifth and sixth, \$1.50 a term; seventh and eighth, \$2.00 a term. There are three terms in the school year.

KINDERGARTEN

The kindergarten is an organic part of the Training School. Its function is not primarily to entertain and amuse children, but to educate them. This does not mean that formal work in reading, writing and arithmetic is introduced at this time. Education is much broader than the three R's. The problem of the kindergartner is to study the spontaneous activities of the child and to direct those activities so that he will become a stronger individual and a more helpful member of the society (family, school, etc.) to which he belongs. For example, the child's instinctive tendency to build with blocks is utilized with a view to increasing his muscular control, to developing his power of thought, and to giving him a clearer

insight into the industrial processes of home and neighborhood. His other instinctive tendencies, such as his interest in nature, in stories, and in association with other children, are trained in a similar manner. Each has to make its contribution to the maximum development of the child.

The kindergarten is thus the true adjunct of the home. Its mission is to keep the child living up to his highest possibilities by placing him in an environment that will touch many sides of his life and that will call forth his best effort. The kindergarten thus takes the experience that the child brings from the home and uses them. He is given different means of expressing the ideas and images that he has; and by expressing them they are enlarged and clarified. The broader experiences of the teacher are given to the child as he is ready to have his own limited experiences enlarged. Perhaps the greatest benefit derived from the kindergarten by the child is the socializing influence. He learns to take his place in a large group, to consider others, to give and take, to play fairly, and to consider the good of the group. The modern home does not, as a rule, afford a sufficient group of companions to bring out the best elements in the social life of the child.

In the second year some attention is given to definiteness of movement and skill of execution. The child is helped to work out patterns for his constructions and to work for more finished results. They are given some woodwork in making the doll's house and furniture and simple toys. Their sewing and weaving are not of the old, formal type, but are given only as the child has need of the objects made. Large materials are always used. For example, they make work aprons to use in their carpenter's work, bean bags with which they play games, clothes for the doll, and woven rugs for their doll house. They are permitted to take some of their work home to finish, and are encouraged to bring to the kindergarten work they have done in the home. There is definite opportunity for more self-control and independent action on the part of the children looking to the requirements of the first grade in the usual public school system.

KINDERGARTEN COURSE OF STUDY

Children are usually admitted to the kindergarten at the age of four years, but as age is not a certain index of development, this is at the discretion of the director of the kindergarten. This course covers two years and is divided into two grades, thus giving opportunity for a careful consideration of the needs of individual children. The program for each group is definite and progressive, but results are necessarily judged in terms of physical development and social co-operation.

The work of the first year aims to secure freedom of movement, simple motor co-ordination, readiness of response and training of the special senses. The children spend much time out of doors in the garden, the sand pile, and in hunting for nature materials to be used in their constructions.

They build with large blocks on the floor, making houses, barns, etc., that are large enough for them to play in. Much of their hand work is experimental—as they find a need for certain things in their play, they are encouraged to find the material and the method of using this material that will best satisfy the needs. In this way they learn to reason. The teacher's place is to suggest needs and improvements as the child is ready, and to encourage and inspire the child in his efforts. She plays with him.

COURSE OF STUDY FOR THE GRADES

Literature and 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 departments, 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 constructive 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 narrative, and thru constant emphasis on the need for unity and close connection. 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.

GRADE 1.

Purpose: To enrich the lives of the children thru stories and poems that have at all times appealed to the young. **Material:** Fables, folk tales, Mother Goose rhymes and other poems, with parts of Hiawatha in the third term. **Technical English:** Capitals at the beginning of the sentence and for the words "I" and "O," period to close a statement; question mark to close a question. Common errors corrected thru games and suggestion. **Composition:** Much practice in oral composition. Stories of home life told in opening exercises. Synopsis of stories dictated to the teachers for blackboard reading. Especial stress is placed upon sentence formation.

GRADE 2.

Purpose: To promote natural sympathies by presenting in somewhat idealized form those aspects of primitive life which best show fundamental and simple human experience. **Material:** Artistic stories, songs, dances, and primitive ritual, illustrative of the chief phases of early domestic, industrial, and social life. The list of poems to be memorized may be extended to include pieces from George MacDonald, Eugene Field, Helen Hunt Jackson, Alice Carey, Longfellow, Isaac Watts, Celia Thaxter, and others, e. g.: The Baby; The Rock-a-by Lady; September; November; Hiawatha's Home; Twinkle, Twinkle, Little Star; Spring; and other poems of the sort. **Technical English:** Capitals for names of persons and places; for names of the days of the week; for names of the months of the year. Abbreviations: Mr., Mrs., St., Ave. **Punctuation:** Period after abbreviations; periods after initials.

GRADE 3.

Purpose: To lead the children to an appreciation of the stalwart, valorous type of manhood that prevailed in the times of the Vikings. **Material:** Story of Siegfried; Wagner Story Book; Wagner Opera Stories; Norse Stories; Norse Mythologies. Material for memorizing is provided in Approved Selections for Reading and Memorizing. **Technical English:** Capitals for the beginning of each line of poetry; the formal beginning of a direct quotation; the principal words in titles or headings; names of people, cities, months. Abbreviations for the names of the months; the names of a few cities in the state; the units of measure as required; Dr., question mark after headings, titles, and the like that are interrogative; comma or colon to set off a direct quotation that needs to be set off; quotation marks to enclose direct quotations; comma to set off the name of the person addressed; apostrophe for possessive singular; the marks needed for pointing abbreviated expressions in the headings of

letters. Practice in the formation of plurals in "s" and "es." Rule for forming the possessive singular. Constant attention to oral language; practice in using the irregular verbs that are most troublesome.

GRADE 4.

Purpose: To give, in an appropriate setting (that of boy life in Homeric times), selected Greek myths in which the human and religious experience can be clearly and pleasingly presented and can be given point and significance by the occasion on which the story is told. **Material:** The boyhood of Achilles as constructed from the suggestions of the Iliad, the Odyssey, and other Greek material; twenty Greek myths. Selections for memorizing are made from the poetry presented in the year. The selections vary from year to year with the preferences of the children. Helen Hunt Jackson, Riley, Longfellow, Browning, Lowell, Whittier, Bryant, Emerson, MacDonald, Bjornsen, Child, and Shelley are all levied upon for material. Typical poems that we have used are; September; October; When the Frost is on the Pumpkin; Orphant Annie; The Raggedy Man; Hiawatha; The Birds of Killingsworth; The Pied Piper of Hamelin; The First Snowfall; The Corn Song; Indian Legend of the Robin; The Wind and the Moon; The Tree; and the like. **Technical English:** See preceding lists. Capitals for names applied to God; for adjectives derived from proper names. Abbreviations for units of measure and value as required; for "ante meridian," "post meridian," "United States," "Company," "Doctor," and the like. Contractions for "I will," "is not," "are not," "was not," "were not," "did not," "does not," "can not," "should not," "would not." Rule for forming plural of words ending in y preceded by a consonant; for adding suffix beginning with a vowel to monosyllables and words accented on the last syllable. Corrective work to establish right habits of expression; practice in using the principal parts of the troublesome irregular verbs; special attention to pronunciation of such words as "history," "geography," "agriculture," "government," "library," "arithmetic," "pronounce," "propose," "prepare," and the like. The work in composition gives as much attention to form as the children are able to profit from. The stress is still, of course, more largely on content, but the pupils are helped to achieve good form so that they get good habits early.

GRADE 5.

Purpose: To lead the children to participate in the growth of the ideal of Teutonic manhood from the invincible fighter to the chivalric statesman. **Material:** 1. The life of the North presented in a group of stories. 2. Beowulf, arranged as a series for telling. 3. The education of the knight presented in story form. 4. The work of King Arthur and the Round Table, presented in a story series. The children have hitherto found pleasure in and memorized such poems as O Captain! My Captain! Today; Sir Galahad; bits of Idylls of the King, such as the Knight's song from the Coming of Arthur, and the like; easier poems have been taken from Field, Riley, and Stevenson; and many "occasional" or seasonal poems have been learned. **Technical English:** See preceding lists. Contractions of "would not," "must not," and the like. Rules for spelling words ending in silent e; rules for forming the possessives. Comma to separate words in a series. Language work here begins to grade into elementary grammar: the sentence is presented simply—as over against the group of words that does not assert; the basal parts of the sentence are distinguished merely as subject and predicate—noun, pronoun, and verb with the simplest inflections; the modifying elements are likewise simply treated. Corrective work in oral and written recitation is persistently attended to, looking to the pronunciation of such words as "get," "just," "again," "attract," "going," and the like, as well as to the clear enunciation of longer words; providing exercises to overcome the habit

of misusing "like," "most," "besides," and so on; "that high," "this big," and the like. In composition the idea of the paragraph is now put clearly before the children and they learn to organize what they say.

GRADE 6.

Purpose: To develop feeling for the deeds and ideals of the heroic individual as a part of the epic life of his people. **Material:** Stories 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: "Aeneid." 3. The Norman French: "Song of Roland." **Material for memorizing** is provided in Approved Selections for Reading and Memorizing. **Technical English:** See preceding lists. Comma to set off elements independent or nearly so; comma to set off adverbial elements at the beginning of a sentence; semicolon to separate the parts of long compound sentences; period after numerals or letters used to distinguish topics. Abbreviations for names of important states and cities; abbreviations for titles and the like, e. g., "Hon," "Gov.," "Pres.," "M.D." Continued practice in correct forms of expression to offset bad English acquired early. Constant work upon vocabulary; practice in discriminating meanings of such words as "M.D." Continued practice in correct forms of expression to "queer," "odd," "funny," "strange," "scared," "frightened," "alert," "lively," "nimble;" "prompt," "ready," "vigilant." Composition takes its topics from all the schools subjects and from the children's interesting experiences. The chief advantage of using the school subjects for practice writing lies in the ease with which the children can be helped to see the organization of their material. The danger of self-chosen topics lies in the temptation to write pages of unorganized sentences. The grammar work of the preceding grade is extended to include most of the useful details of the parts of speech.

GRADE 7.

Purpose: To round out the great pictures of heroic life and chivalrous adventure and incidentally open up rich resources for the pleasure of the children. **Material:** Ballads of the Border from "Poetry of the People;" "The Robin Hood Ballads;" "Tales of a Grandfather;" "The Lay of the Last Minstrel;" "Ivanhoe;" "The Talisman," and parts of other novels of Scott; "Scottish Chiefs;" "The White Company," and other pieces. **Material for memorizing** is provided in the "Approved Selections for Reading and Memorizing," Book VII, Technical English; See preceding lists. Colon before enumerations; punctuation in *outlining*; forms for business letter, check, invitation. Constant work upon the vocabulary of the children, thru study of prefixes and suffixes; thru discrimination of synonyms. Grammar is carried on in as functional a manner as practicable. The basal elements of easy sentences should be readily distinguished by all the pupils before the close of the year; and along with this will go inevitably a knowledge of the commoner constructions of nouns and pronouns, the notions of tense and agreement of verb with subject, the meaning of "copulative," "attributive," "transitive," "intransitive," the common adjuncts in various forms, and so on. Composition here concerns itself with the form side somewhat more explicitly than in preceding grades. The *idea of the paragraph* must be wrought into the work of the pupil. It is easy to get much writing or talking from pupils. What is hard to get is *organized writing* or speaking without doing it for the pupil.

GRADE 8.

Purpose: To present appreciatively rather than analytically a large number of poems and stories that have become a part of American culture

—a considerable portion of the culture of the common people. **Material:** Commonly loved poems of Longfellow, Bryant, Whittier, Holmes, Lowell, Whitman, Miller, Lanier, Halleck, Holland, Sill, Thaxter, Byron, Burns, Blake, Clough, Henley, Southey, Gray, Shelley, Keats, Tennyson—a dozen or two of themes all within the reach of eighth grade children; in fiction, a novel of Cooper, two stories of Irving, a story of Poe, a story of Hale, a story or two of Hawthorne, and a novel of Hawthorne; along with these, as suits occasion, the classic orations of American history. Composition, both oral and written, runs hand in hand with all the school subjects, with the conscious aim of securing—not pages of writing or periods of talk—but *organization of ideas* according to a *plan of the pupils*. English grammar supplants literature in the Spring Term. The time is spent mainly upon the analysis of sentences. But this, of course, involves the vocabulary of grammar and the fundamental information about the parts of speech. An attempt is made to rationalize the corrective work that has hitherto occupied the greater part of the children's time.

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 apperceptive backgrounds. 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 attractive books with which to start the reading habit. This extensive reading also helps to provide the necessary visual training for fixing the symbols. The class recitation is largely given over to realizing 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 pupil's 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.

GRADE 1.

Purpose: To stimulate, thru interesting material, the children's desire to know; and to help them attain a measure of facility in interpreting written and printed symbols of thought. **Material:** Stories, simple poetry, rhymes, and jingles presented by the teacher; conversations involving the pupils' experiences at home, at school, and on excursions, or centering

about pictures, playthings, construction work, and the like. Among the readers in use are: The Summers Readers, Mother Goose Primers, The Free and Treadwell Readers, The Riverside Primer and First Reader, Little Red Riding Hood, Bow-wow and Mew-Mew, The McClosky Primer, The Circus Reader, Elson Book I, The Sunbonnet Babies, The Overall Boys, Beacon First, Hiawatha Primer. An intensive effort is made to rid the children's speech of the common blemishes of pronunciation and syntax.

GRADE 2.

Purpose: To supply the children's need for imaginative material; to develop the social side of their nature thru oral expression and play, and to secure a growing command of the printed vocabulary. **Material:** Among the books used in this grade are the Free and Treadwell Second Reader; the Riverside Second Reader; the Edson-Laing Second Reader; the Summers' Reader; the Circus Reader; Reynard, the Fox; Aesop's Fables; Eskimo Stories; Child-lore Dramatic Reader; The Early Cave Men (Dopp); Children of the Cliff, and Lodrix, the Little Lake Dweller.

GRADE 3.

Purpose: To further the independence of the children's study of literature by giving them the tools of the syllable and the diacritical mark; to make them conscious of their audience, the class, to whom their reading must be intelligible, at least; and to deepen their appreciation somewhat thru their attempts at impersonation. **Material:** The Tale of Bunny Cotton Tail; Children's Dramatic Reader, Bk. III; Grimm's Fairy Stories; Snowdrop and Other Stories; Merry Animal Tales; Lights to Literature, Bk. III; Approved Selections for Reading and Memorizing, Bk. III; Nature Myths; Hero Folk of Ancient Britain; and Free and Treadwell's Third Reader; Art Literature Reader, Bk. III; Edson-Laing Reader, Bk. III; The Dutch Twins; The Eskimo Twins; The Irish Twins; Viking Tales; Indian Legends; Mewanee; In the Animal World; Robinson Crusoe.

GRADE 4.

Purpose: To help the children realize more and more completely what they read, thru impersonation and dramatic representation. **Material:** Alice in Wonderland; Pinocchio; Water Babies; The Kipling Reader; Child's Garden of Verses; Dorcas, the Indian Boy; American History Stories; Dramatic Fourth Reader; occasional poems and Christmas stories.

GRADE 5.

Purpose: To secure appreciative response thru oral reading, to a varied range of moods, pictures, and human experiences in literature—thus stimulating the imagination, enriching experience, and giving possession of personal powers in co-ordinated vocal and bodily expression. To establish habits of curiosity concerning the pronunciation and meaning of unfamiliar words and habits of ready and accurate recognition in logical relationship of units of thought on the printed page. **Material:** Heidi, Spyri; Joan of Arc, Carpenter; Little Lame Prince, Mulock; Fanciful Tales, Stockton; King Arthur and His Knights, Radford; Robin Hood and His Merry Men, Pyle; The Ancient Mariner, Coleridge; Dramatic and seasonable poems, e. g., The Inchcape Rock.

GRADE 6.

Purpose: That children may have practice in getting thought from the printed page and giving it to others; that they may have the necessary drill to increase their vocabularies and broaden their general knowledge. **Material:** It is desirable that the children read much. The following titles are suggested: King of the Golden River; Water Babies; Black

Beauty; Swiss Family Robinson; Deerslayer; A Little Brother to the Bear; Wood Folk at School; Emergencies; Town and City; The Nurnberg Stove; A Dog of Flanders; Gulliver's Travels; Story of a Short Life; Adventures of Ulysses; Approved Selections for Memorizing; Four American Inventors.

GRADES 7 AND 8.

The reading in grades 7 and 8 is done for the most part in connection with other subjects, such as literature and history.

HISTORY

GRADE 1.

The history of the first year centers about the home. It is subdivided into three units of work:

1. The Child's own home—the home in which he lives; the home simplified in its relations as we find it in camp life. Problems of food and shelter worked out in the garden where the children may be compelled to go to original sources for their materials. Practical construction work based on their needs as a miniature community.

2. The Eskimo, studied during the winter months—a simple type of home life with its various activities. The main topics are food, weapons, utensils, clothing, shelter, modes of transportation, and games.

3. A study of the Indian, based upon Longfellow's *Hiawatha*. The topics are much the same as in the above units.

GRADE 2.

This year is devoted to a study of simple types of pastoral and agricultural life. It is subdivided into three units:

1. The stories of the simple type of Aryan family, first keeping sheep upon the hillside and then moving down into the lowlands and ultimately engaging in agriculture. Constructive work includes the making of the abode of the shepherd and the more permanent house of the agriculturist. Activities involved in caring for domestic animals and the ways in which they are utilized for food and clothing, are introduced, including such activities as butter and cheese-making, the beginnings of agriculture, the caring for the crops, the making of simple types of tools, such as the plow, hoe, and rake, the grinding of flour from the grain and simple ways of preparing it for food. Much opportunity is afforded for constructive work and for correlation of nature-study and gardening.

2. Stories of Hebrew shepherd life, especially those of Joseph and David.

3. A study of simple pastoral and agricultural types in the West.

GRADE 3.

This year presents as its chief feature a study of the simple type of community life in an early German village, and in addition to the simple modes of satisfying the needs for food, clothing, and shelter. This exemplifies a further stage of social evolution in the division of lands and labor, the use of materials, and the development of commerce. Considerable attention is given to houses, furniture, and clothing. The Norse tales of gods and heroes are interwoven into the stories by being told around the family hearth.

GRADE 4.

In the fourth year the child's growing desire for reality is satisfied by a study of the local history of Greeley, including the study of the original settlers of the colony, where they came from, why they came, what problems they had to face in the new situation, how they intended to

solve them, etc. The work makes a splendid basis for correlation with the local geography of this grade. This course is followed by stories of some of the early explorers, especially Columbus, Henry Hudson, John Smith, and Miles Standish.

As the material of this year is not rich in literary associations, the English work includes the telling of a series of Greek myths. They are organized about the story of the boy Achilles, to whom at an appropriate time, the myths are told. The background of Greek life worked out for the setting of this story furnishes an illustration for the home life of the Greeks.

GRADE 5.

Purpose: To secure on the part of the children an appreciation of the chivalrous spirit of medieval life thru (a) a study of social life in and about a feudal castle; and (b) thru a further study of this organized society, its ideals and motives as exhibited in the Third Crusade.

Problems:

1. Why, and how people lived in a fortified castle.
2. How the knight was trained.
3. Why men wanted to go on a crusade.
4. How the crusade was carried on.
5. Why the crusade failed.
6. How did the crusade affect commerce and industry?

GRADE 6.

Purpose: To reproduce from a biographical point of view some of the most interesting aspects of the life of those pioneers in America who were the forerunners of the western expansion.

Content:

- I. How the Dutch gained a foothold in America.
- II. How the French explored the basin of the St. Lawrence and the Mississippi Valley.
 1. The fur-traders—Radisson.
 2. The Jesuits—Marquette.
 3. La Salle.
- III. The Westward movement.
 1. How the English came to gain a foothold.
 2. How they gained the lead.
 3. How the Ohio Valley was settled—Boone; Clarke.
 4. How the Rocky Mountain region was settled.
 - a. How people learned about it. Coronado, Lewis and Clark, Fremont, Kit Carson.
 - b. How people reached this region.
 - c. How they got along with the Indians.
 - d. How they made a living. The discovery of gold; grazing and agriculture; the Union Colony.

GRADE 7.

This grade includes a systematic study of the history of the United States from the beginning of the Revolutionary War to the close of the Civil War. The work is organized under a number of large problems, among the most significant of which are the following:

1. How the people were living in the Colonies at the outbreak of the Revolutionary War.
2. How the Colonies came to wish for more freedom.
3. How the Colonies became independent.
4. How a new government was inaugurated.
5. What promise the United States gave, in 1790, of becoming a great nation.

6. What the most important problems were which confronted the new government.
7. How the nation looked to its development.
8. How the North and South developed divergent interests and went to war.

GRADE 8.

The work of this year comprises a somewhat intensive study of the history of the United States from the time of the Civil War. The purpose is to give insight into present day conditions and problems. A part of this year is reserved for the study of civics. The history is organized under the following headings:

- I. How the country recovered from the Civil War.
- II. How the West developed.
- III. How the United States became a world power.
- IV. What the problems are today.
 1. How to improve agricultural conditions.
 2. How to develop manufacturing.
 3. How to improve facilities for transportation.
 4. How to conserve national resources.
 5. How to deal with labor problems.
 6. How to provide for education.
 7. How to safeguard the health of the people.
 8. How to deal with immigration and alien peoples in the United States.

CIVICS

A course in civics is given for one term a year in the seventh and eighth grades. The purpose of this course is to help the children to appreciate the conditions of community life and to stimulate a spirit of co-operation in civic improvement.

The value of this course depends largely upon the method of approach. The problems studied should be vitally related to the everyday interests and observations of the young people. The following principles governing the organization of the subject-matter and the methods of instruction may be suggestive to the teacher:

1. The curriculum shall consist of problems rather than topics.
2. The problems shall be vital and significant to the pupils.
3. The approach to the problem shall consider the aspect which appeals most strongly to the pupils.
4. This course should culminate in such conduct as will express a high regard for civic co-operation and obligations.

The following outline is illustrative of the scope and treatment of the problems to be considered in this course:

GRADE 7.

- I. How can the public secure efficient service thru transportation?
 1. **By Streets.** How adequate are they as regards size, number, surface conditions, lighting, signs, etc.? How efficient is the street-car service as regards time, safety, cost, etc.? What auto service exists, and how might it be improved? What is the nature of the delivery service, and how satisfactory is it?

2. **By Roads.** How adequate are they for traffic? (See problems suggested under 1.) By whom are they kept up?

3. **By Railroads.** How satisfactory are they as regards train connections, location, and protection of crossings, depot service?

II. How can the public secure efficient service for the protection of life and property?

1. How are citizens protected from ignorant and unruly persons?

2. How is property protected from fire?

3. How are titles to property safeguarded?

III. How shall a city be made beautiful?

1. What shall be done with the rubbish?

2. What signs and billboards shall be permitted?

3. How shall houses, streets, lawns, parks, and vacant lots be made attractive?

IV. What provisions shall be made for recreation and rest?

V. What is money provided to defray the cost of public service?

(Charts of the factors of civic organization should be worked out as the problems are solved, and a thoro summary in terms of the function of these factors should close the course.)

GRADE 8.

I. How can the public protect itself from the dangers to health arising from the production, transportation, and distribution of foods?

These problems should be worked out in connection with the study of foods that are most used or that are most liable to contamination, such as water, milk, butter, bread, meat, eggs, and typical fruits and vegetables. Each problem should be approached from the standpoint of the pupil's actual experience in dealing with the foods. This experience should be enlarged by further observations and experimental work when possible.

II. How can the public protect itself as regards its clothing supply?

1. In regard to the matter of construction of buildings.

2. For the securing of cleanliness.

3. For the protection of life and health of employees.

4. To prevent the adulteration of goods.

III. How does the public regulate the cost of food and clothing?

1. By legislation affecting trusts.

2. By patents of inventions.

3. By control of facilities for transportation and communication—railroads, telephones, telegraph.

The functional study of civics as described in the foregoing is followed by a formal review of the points taken up, and a logical sequence is worked out.

GEOGRAPHY

Various aspects of geography should be presented in the elementary school. First, it should be descriptive geography, for we do most of our traveling in the geography course. When properly taught with a wealth of pictures, specimens, and other illustrative material, this subject can be made to serve most of the advantages of real travel.

Secondly, the dynamic side of geography should be emphasized. For example, the hills wear down and give way to plains;

the ice age gives way to a temperate climate. Facts like these emphasize in the child's mind that he is living in shifting, changing world, ever presenting new problems to solve.

Thirdly, the casual side of geography should be stressed. The child in the upper grades, at least, should be asked the "why" at every turn until he instinctively looks for the "why" himself. The child who has the question "why" postponed until he studies the natural sciences in the high school has passed that plastic period where the questioning attitude will for all time stamp itself upon his mental outlook. Besides, few children reach the high school, and no subject in the grades asks so many "whys" as geography.

Finally, the geography course should be the real geography of every-day experience rather than the too often outworn material of the text-book. When the pupil steps out into life, he should find the geography of the world about him of the same texture and material as the geography of the school.

For the convenience of the teacher, some reference material is suggested for the different grades. The attention of teachers in the Training School is called to the Colorado State Course of Study in Geography and to the Museum catalog of The State Teachers College; also the Tarr and McMurry geographies, and to the wealth of material for children in geographical readers and magazines.

GRADES 1 AND 2.

The history, nature-study, English, and geography in these grades are so closely connected that no special mention need be made here of the geography work as such. The garden work, the constructive period, the sand table, can all be made a medium for incidental expression in this line.

GRADE 3.

The geography work of the third grade is very simple and often closely connected with nature-study. Thru informal studies of the food products of the immediate locality, based upon results of garden work, observation of farm life and the home table; thru studies of common building materials involving excursions to lumber yard and to buildings in different stages of construction; and thru studies 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 sunsets and of various features of the local environment.

GRADE 4.

In this grade the geography is approached thru the actual experience with the industrial life which centers around the home environment, including the manufacturing of beet sugar. Field trips are taken. In the school the children take part in making sugar, starch, and in canning food stuffs raised by them in the school garden. The children learn the relation of the local environment to the growth of these products.

This local geography is followed by the study of various human types and their environment, as, for example, the Eskimo and his dog in the ice desert; the Lapp and his reindeer in the tundra desert; the African and the Filipino in their tropical surroundings; the Chinese and the Japanese as examples of Oriental peoples. The North American Indian, and the pioneer of the western United States, are included in this study.

The work starts from the descriptive and the human-interest standpoint and works backward to the relation of man to his environmental controls. While the study of the people with their various characteristics and activities thus forms the chief center of study in this year's work, the pupils learn to understand environmental controls in relation to the life of a people.

A wealth of illustrative material is drawn upon—pictures, museum specimens, etc. The children collect and exhibit the various products studied. The sand table is in constant use for modeling, as such work gives a sense of unity in the final rounding out of any aspect of this subject.

References for the teacher: Herbertson, *Man and His Work*; Ratzel, *History of Mankind*, Vols. 1, 2, and 3; Ward, *Climate*; Semple, *Influence of Geographical Environment*; Hardy, *Introduction to Plant Geography*; Newbigin, *Animal Geography*; Palmer, *Beet Sugar Industry of the United States*; Johnston, *Chemistry of Common Life*; McMurtrie, *Report on Culture of Sugar Beets*; Buffin, *Irrigation*.

GRADE 5.

The work of this grade centers in Europe. The geography of the different countries is approached from the standpoint of the activities, industries, etc., of the people; that is, from the standpoint of the child's interest; and the structural features of the country are studied insofar as they throw light upon the life and occupations of the inhabitants. For example, the study of Holland may be introduced with some such problem as: "Why is Holland a great dairy country?" A study of this problem will not only raise many questions about the life of the people, but will also throw much light upon the climate and topography of the country.

Again, the Norwegian might be studied in his little fishing village at the head of the fiord, and after a short descriptive study the pupils might be asked: "Why is the Norwegian in so many cases a fisherman instead of a farmer?" This approach would give a clew to the rock-bound soil, the cold, foggy climate and the great fishing banks off his shores.

To aid the teacher in making a systematic study of any such units of subject-matter it may be helpful first to organize the material in the usual logical text-book fashion and then to translate it into terms of the child's interest and experience.

In summarizing, the continent of Europe is studied as a unit. Products, industries, cities, rivers, etc., are located regionally without reference to national boundaries. One device used is to fill in outline maps, locating the industries, or what not, in crayon or with samples of the products themselves. This method serves the double purpose of, on the one hand, unifying the study of the different countries, and on the other hand, emphasizing more fully by constant comparison the likeness and differences of the various peoples as well as impressing more fully upon the minds of the children the picture desirable to be left.

In studying Europe the teacher should be acquainted with the resources the school offers. Use should be made of the two splendid relief maps in the geographic museum. Among the available reference material is the following: Mill's *International Geography*, pp. 123-419; L. N. Lyde, *The Continent of Europe*; MacKinder, *Britain and the British Sea*; Partsch, *Central Europe*; Hogarth, *Nearer East*; Adams, *Commerical Ge-*

ography; Chisholm's Commercial Georgraphy; Ripley, Races of Europe; State Course of Study, Sept., 1914, pp. 108-9.

GRADE 6.

In this grade, North America is taken up. The teacher should not spend too much of the year upon the geography of the United States to the neglect of the West Indies, Mexico, Central America, Canada, and Newfoundland.

The life, both commercial and cultural, in this grade, is best studied by centering it around an industry typical of some climatic or industrial region which is found the world over. In this way the United States is divided into a number of sections characterized by certain typical products and forms of industry, such as the cotton or sugar industry in the South, or fruit raising in California. Such activities are usually made the means of approach to the study of the various sections. This necessitates the study of their physical characteristics, such as climatic conditions, surface features, soil, etc.

In this way the pupils build up pictures of the conditions under which an industry is carried on. This knowledge is later further amplified by a comparison of similar industrial regions in other countries. For example, after getting the climatic and economic setting of orange culture in Florida, pupils are able to infer that somewhat similar conditions must prevail in other countries where oranges are raised, such as Paraguay, China, East Australia and Natal. Or the cowboy life of Colorado helps pupils to interpret the South American Guancho or the Russian Cossack. Much of his comparison, however, will be more effective when the children take up the study of these other countries. References for teachers: Bartholomew, School Economic Atlas (see product maps in back); Mill, International Geography, pp. 664-812; Hardy, Introduction to Plant Geography; Newbigin, Animal Geography; Freeman and Chandler, World's Commercial Products; Museum Catalog, State Teachers College (frequent use to be made of specimens).

GRADE 7.

The work of the seventh grade consists in interpreting South America, Asia, Africa, and Australia in terms of their relations with the United States. The most significant, tangible relation is probably that of trade. A problem provokes better thinking than a topic; therefore, broad, comprehensive problems demanding for their solution all the necessary facts ordinarily taught in seventh year geography courses, are made the basis for the work. A problem of live interest at the present time is most stimulating and worth while, and in so far as is possible, the problems are of present significance. Illustrative problems which under present conditions are much worth while:

I. How much does South American commerce mean to you—to the United States—to South America? Why and how does South America raise and make these things? How do we get them?

II. What should be the attitude of our people toward Asiatic immigration? Study the Japanese, Chinese, etc., near here: the work they do, how they happen to do such kinds of work in our country, whether determined by labor needs or work and training which they get in their own countries; to what extent they enter into American life, and why; the experience California has had with them; reasons for any restrictions as affected by conditions in their own country in Asia. Other small problems may well be used in addition.

III. Why is Africa called the "Dark Continent"? How much might she mean to us if she were more of a commercial power? Has she the possibilities for becoming such a power?

IV. To whom does Australia belong? Why? How much does she mean to that nation?

V. Islands of the sea—how were they made? How did they become peopled? How valuable are they?

GRADE 8.

A course in commercial geography occupies one term of the eighth grade year. The commercial relations of the United States to the rest of the world form the central topic of the study. Important articles of trade, such as food, forest, and mine products are studied in their geographical distribution, their proportionate amounts, and their importance as articles of export and import. Graphs showing relationship are extensively used, since figures, as such, have but little significance in the interpretation of conditions. The part which the United States plays in the exchange of commodities is dwelt upon, the chief markets of the world are determined, and constant comparisons between this country and other world powers are an important feature of the work. Physiographic and climatic factors are introduced only in so far as they throw light upon problems under discussion.

References: State Course of Study in Geography; Teachers College Museum Catalog; Freeman and Chandler, *World's Commercial Products*; Toothaker, *Commercial Raw Materials*; Longman, *School Atlas*; Bartholomew, *School Economic Atlas*.

ARITHMETIC

GRADES 1 AND 2.

Number instruction at first is informal. Facts are presented in their genetic order, i. e., in harmony with the pupil's instinctive tendencies, such as play, imitation, construction and rhythm. The children have many active experiences in counting objects—books, pencils, boxes, tables, desks, boys, and girls; in playing number games; measuring; weighing; use of money; telling time by the clock, etc. Such work leads to drill on number combinations. Fundamental addition and subtraction facts are taught. Counting by 2's, 3's, 4's, 5's, and 10's. Memorization of simpler multiplication facts. Writing numbers.

GRADE 3.

The objective point of this year's work is the mastery of the simple combinations in the four fundamental processes. The work in addition and subtraction is reviewed and enlarged. Combinations are taught by taking a group whole and separating it into its parts. By the end of the year the children should add accurately columns of ten numbers, three figures each, and subtract numbers of five and six digits.

The multiplication table is built up rationally with objects such as inch cubes or sticks. Denominate number tables are also good for this purpose, such as pints and quarts to teach the two's, and feet and yards to teach the three's. Division is not taught separate from multiplication, e. g., What two numbers multiplied make 18? Eighteen divided by 2 is? by 3? by 9? by 6? As soon as pupils learn a few combinations in multiplication or division, they are given practice in problems involving these processes. The children should know the multiplication tables from 2 to 12 inclusive and should be able to multiply quickly and accurately numbers of three and four digits by numbers of two digits.

Concrete material is used freely in teaching the combinations. Inch cubes, marbles, denominate measuring units, money, and number charts and cards are examples of such material. Games are also utilized, such as playing store, and number card games similar to finch. Much weighing and measuring is done. Application of number facts to gardening and construction is made when possible. The reading and writing of numbers up to 100,000 is taught.

Much stress is placed upon quick, snappy drills. Flash cards, revolving circles, and visualizing cards are some of the devices used. Oral drill is a daily practice. Frequent tests show where drill is most needed.

GRADE 4.

The subject matter of this grade is a more extensive study of the four fundamental operations. The multiplication tables are completed. Long division is introduced.

Many problems relating to life outside of school are used for practice, such as computing household expenses for groceries, milk, meat, etc., or the cost of raising a field of beets, onions, or potatoes. Planning for putting in the school gardens furnishes mathematical material. Problems are built around the canning experiments which take place in the room. Special holidays afford suggestions for good problems, such as finding the cost of Thanksgiving dinner for five persons. The more common denominate tables of measure are now mastered. Rapid oral and written drill is now a matter of daily practice.

GRADE 5.

In addition to the review of the four fundamental operations, the study of common and decimal fractions constitutes the main portion of the year's work.

The motivation for much of this work is found in the other school studies and in the interests connected with home life. Problems involving the use of fractions occur in estimating the amount of lumber needed to make a sled or a book rack, shelves, etc., in their manual training, or the cost of material for caps and aprons for use in the domestic science laboratory. Need of decimals will also arise in connection with the use of lumber as it is usually quoted at so much per thousand feet. Figuring a bill of lumber for a board walk, street signs, etc., affords problems of this kind.

After an interesting problem has been found, the next question is to determine the method of its solution. All such work is made objective by the use of objects and drawings. Rules are formulated only after much practice in objectifying the process.

Work on the tables of denominate numbers is continued and applied more fully. Measuring lumber, for example, is taught objectively. A board foot of lumber is used to show its meaning. Other pieces of different sizes each containing a board foot, are also used. Then the children measure and compute the board feet contained in various pieces of boards. Drills of this grade include the simple fractions. Much of this is oral. Work in the four fundamental operations is enlarged, and emphasis is placed on speed and accuracy. Class contests seem to stimulate interest in drill work.

GRADE 6.

The work of this grade covers largely the same ground as the fifth, but the aim is to mechanize the processes and to get a firmer grasp of the principles. A thoro review is made at the beginning of the year of the fifth grade work.

Notation and numeration are reviewed. The place values of digits are applied in the reading and writing of numbers. Decimals are shown to be an extension of the decimal scale downward beyond units place.

During the year the children become habituated to checking results. Casting out the nines is a good means for this purpose, and the children use it continually.

The four fundamental processes in fractions receive a large amount of drill. The children are taught a method of finding a common denominator other than by inspection. Constant use is made of cancellation.

In decimals attention is devoted to proper placing of the decimal point in problems of multiplication and division. One good method is enough to teach. Reduction of fractions is taught, including the reduction of common fractions to decimal and decimal to common.

Work in finding areas is reviewed and extended; also a review of board measure is made. Much of the review work of this grade is done thru the application of the principles already learned to practical problems within the experience of the children. Pupils keep personal account books of their own receipts and expenditures. Problems may be based upon the business of the grocer, the blacksmith, the dairyman, the farmer, the dry goods merchant, and the housekeeper.

GRADE 7.

The greater part of the year is devoted to getting a clear idea of the meaning and of the various applications of percentage. The subject is taken up inductively. There are no set rules or formulas given at the beginning. These grow out of the experiences gained in dealing with practical situations.

The approach to the subject is made thru the study of some business activity, such as a grocery store. Teacher and children, for example, visit a wholesale grocery; make out an imaginary set of purchases for a stock of goods, upon which they are allowed discount for cash; arrange to sell their goods for a certain per cent of profit; figure out the taxes and insurance upon their store building and stock, etc. In such ways numberless practical applications of percentage may be found in community activities within the range of the children's experience. After the concrete problems are solved, the children formulate the rules of percentage.

As in previous years, emphasis is placed upon quick, brisk drill, oral and written, upon the arithmetical operations learned. The children also continue their training in keeping personal accounts of money received and expended.

GRADE 8.

The work of this year begins with a careful and systematic review of the fundamental operations in integers, and common and decimal fractions. The remaining work of the year is gathered around some large topic or topics of special interest with a view to realizing the principles of arithmetic already learned, thru their application to significant practical problems. Some advanced work is also introduced.

As illustrative of the larger topics used for this year's work the planning of a five room cottage is undertaken. This involves a study of the legal description of the land, the platting of city lots, and the principles of land conveyances, bank deed, abstracts of title, mortgages, deeds of trust, etc. The drawings made by the pupils are supplemented by a complete set from the mechanical drawing department. In extending the cost of construction the pupils take up such problems as the expense of excavation, laying of the foundation, of lumber, plastering, painting, decorating, and cement sidewalks. The cost of plumbing, lightning, and heating may be added. The question of insurance and taxes, and the desirability of investment in such a residence opens up new fields for arithmetic work.

The year closes with a brief review of the essentials of arithmetic, stress being placed upon speed and accuracy in the processes studied. Considerable attention is given to mental arithmetic and to the use of short cuts whenever possible.

MUSIC

The function of music in the school is two-fold: first, to develop the latent talent of the child that he may learn to appreciate

fully music thru a moderately thoro understanding of the subject based upon his own participation in the work of the class; and, second, to create a love for the beautiful in music and to make intelligent listeners of all the children by having them learn to know the worth-while in music thru hearing as frequently as possible the compositions worthy of being brought before them.

In every grade one day a week is set aside for a lesson in appreciation of music in which either some member of the musical faculty appears to present a short program or the talking machine is brought in to make the children familiar with some musical masterpiece.

GRADE 1.

Thru the various phases of the work in the first grade the child becomes acquainted with some of the general characteristics of music from the point of view both of appreciation and expression. Musical taste, the emotional reaction purposed by the composer rather than the knowledge of musical tools, form the aim of the work. Well chosen instrumental and vocal selections are given for the development of appreciation. Rote songs and rhythmic exercises enhance this training on the side of expression, both original and imitative. More specific ear and tone work may be given as needed thru games and by drill on difficult phrases. Work preliminary to the development of a knowledge of notation is introduced.

GRADE 2.

In teaching music in the second grade, we attempt to give the children opportunity to express the rhythmic feeling. The rhythm of the song is clapped, or some children may sing while others walk, stepping in time to the music. In order to do this, it is necessary to note the relation which the accented tones have to the unaccented, and to take cognizance of the pulses in each measure. Such rhythmical observations and expressions are fundamental with reference to musical movement. We try to have the pupils discover for themselves that in marking time with music a stress occurs, and to represent such accented note by slight stress on the left foot. They afterward show this movement with the hand. Always the emphasis is placed first, upon rhythmic thinking; second, upon organized rhythmic movement expressed in clapping, walking, various hand movements, and the folk dance.

In song work, this same principle of musical thinking before expression in singing obtains. The relation between the words of the song and the musical setting is observed by the pupils; the variation in tone quality appealing to the ear first expressed vocally in song.

GRADE 3.

Music, like all other content subjects, should grow in significance with the greater maturity of the children. Rote singing still forms a prominent feature of the work of this grade, and many songs are taught, which should grow in interpretive expression, artistic finish, and independent thought work. In order to accomplish this, some training is given in voice and rhythm in connection with the songs taught. The thinking of musical intervals becomes necessary; reading of simple songs from blackboard and books is taken up; and the value of signatures, of notes and rests, etc., is dwelt upon incidentally.

GRADE 4.

In this grade the more formal work in the technical study of music is begun—the eight common keys are studied thru the singing of carefully selected songs and exercises from the book and blackboard, always keeping the too formal explanation of technical difficulties subservient to an effort to keep the spirit of the song alive while driving home the musical fact. Any seasonal songs that are particularly appropriate are introduced and taught by rote, and great care is taken to guard the voices of the children from being stained or forced.

GRADE 5.

The work in sight reading is continued with songs and exercises of increased difficulty. The purpose is to lay a good foundation in the rudiments of notation, and to give a keen grasp of the various skips and intervals in this grade upon which to build for the remaining three years of the grammar grades. Two-part singing is introduced and made much of, especially during the last two terms of the school year.

GRADE 6.

Constant practice in the singing and reading of many songs is continued. A simple explanation of the position of the sharps and flats is given, and the minor mode is made clear. Members of the class occasionally make reports upon the biographies of standard composers as a preface to a study of their compositions. Three-part singing is taken up the latter part of the year.

GRADES 7 AND 8.

Continuation of chorus singing; the bass clef introduced. The material is picked with special reference to holding the interest of the boys at this crucial time in their musical career. The work in musical appreciation is emphasized with the hope of having the pupils familiar with as many as possible of standard concert numbers before they leave the eighth grade. Frequent programs are given in which the members of the class who are able to play or sing solos acceptably may appear before the class. Every year when it is at all possible the eighth grade pupils present an operetta before the school. A school band is maintained, which keeps many of the boys interested.

ART

Design and construction are emphasized in this department. Pictorial drawing is taught as an aid to design and construction and to intensify the pupil's appreciation of the beautiful. Pupils who show a special interest in pictorial drawing are encouraged to do special work of this kind. All of the work is planned to correlate with the daily activities of the pupil and with the other subjects of the school curriculum.

GRADES 1 AND 2.

Purpose: To develop the pupil in freedom of expression, to stimulate his love for the beautiful, and to discipline his powers of observation. **Design:** The use of units, borders, surface designs, and decorations for objects, such as portfolios and booklets. The units are derived mainly from animal and plant forms. Freehand rhythmic borders, stick printing, and color study. **Pictorial Drawing:** Free illustration, memory drawing, simple landscapes in water color or crayons. Freehand cutting and tearing,

picture study. **Construction:** Clay modeling, raffia work, paper cutting, outdoor construction, sand table work.

GRADES 3, 4 AND 5.

Purpose: To develop the pupil's originality; to increase his technical skill; and to stimulate his appreciation of art and nature. **Design:** The pupils are expected to show more originality and taste with some consideration for suitable application of design; the decoration of holiday gifts; rhythmic borders; study of color, including simple value scales; cutting of design units in paper stencils; lettering. **Construction:** Use of the rule, with measurements involving half and quarter inches; raffia work; clay modeling; booklet making. **Pictorial Drawing:** Picture study; nature drawing, including studies of flowers, fruits, and landscapes; object drawing; illustrations in drawing and cutting; memory drawing; study of color, crayons, pencil, charcoal and brush and ink are used.

GRADES 6, 7, AND 8.

Purpose: To train the pupil to appreciate and select good design in well-made common articles; to develop accuracy and good workmanship; to intensify the pupil's appreciation of art in all its phases. **Design:** Design in its relation to the home and the community; borders and surface designs using conventionalized motifs; with careful study of line, space division, values and color; book covers and posters with lettering and ornamental initials; interior decoration; theory of color. **Construction:** Basketry, clay modeling, the decoration of table runners, pillow covers, etc., by block printing; card board construction. **Pictorial Drawing:** Study of perspective; drawing from memory; rapid sketching; pictorial composition; nature drawing. **Picture Study:** In each grade a number of good pictures are selected for study. In this way the children in the eight grades of the elementary school get acquainted with a large number of good pictures suitable to their ages, and gain markedly in art appreciation. The children are encouraged to make collections of the reproductions of the pictures studied.

NATURE STUDY

Nature-study aims to place the child in first-hand sympathetic touch with nature, by putting him in intimate contact with the common things of the everyday world in which he lives. This can only come where first-hand, discriminating, accurate observations are made, and where, more than this, some attempt is made to have the children grasp the significance of the facts observed, to relate these to the other things they have learned, and to their own activities.

We believe that the commonest things of the out-door world form the best material for nature-study; that the hills and plains, the streams, lakes, and sky, and all that lives there, hold many secrets, which are all the more mysterious because they are so familiar, and which are all the more valuable, because they are so near to the child.

The school garden is one of the best laboratories for the study of nature. Here first-hand observations can be made and first-hand training in turning soil, planting and rearing plants, can be

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given. Here, in addition, a large greenhouse offers many opportunities for the study of plants in winter, while the poultry yard is another source of valuable laboratory lessons. Everywhere, with everything, direct, first-hand observation by the children is emphasized, with the attempt to have these interpret the significance of the facts learned as well. The structural side is not considered very much, but the functional side of everything is emphasized, tho this is not pursued to the extreme to find a use for everything.

In general, the following procedure is followed in the nature study lessons:

1. Direct observation of the object as it is, as it lives, and in relation to the other things of its environment.
 2. The important fact is looked for.
 3. The significance of the fact.
 4. The relation to other facts that may have been learned.
- The inquiry left in the mind of the pupil.

In the lower grades, the work is mainly observational, and concerns itself with acquaintanceship with the commonest animals, plants and inanimate things of the child's everyday world. As the child grows older, more stress is laid upon the significance of the simpler facts observed, until, in the upper grades the entire procedure given is followed. Here, too, the agricultural side is brought in in the relation of nature-study to agriculture. In the eighth grade actual practice is given in growing crops, and caring for animals, while other phases or industries of agriculture are studied. The work is so outlined that there is no repetition, altho the same material may be used in several grades, for different phases, and relationships may be studied. The following is a suggestive outline showing somewhat the scope of the work:

Lower Grades—Fall and Winter: Fall work in the garden; the maturing of growth; the office of the flower; the production of seed; collecting seeds; the harvest; the harvest on the farm; dispersal of seeds and fruits; uses of fruits; the storage of crops; preparations for winter; the ripening or growth in plants; autumnal coloring and the fall of leaves; how plants spend the winter; the cutting off of the food supply for animals; the migration of birds; insect studies; insect homes; how the reptiles spend the winter; how the four-footed animals spend the winter.

Weather observations; studies of the skies; snow, frost, ice; the class calendar; winter studies of trees; the non-migratory birds; birds from more northerly regions; mountain birds that spend the winters here; hibernation of animals; the preparations of the farmer for winter; winter occupations of the farmer; domestic animals; the poultry yard; studies of chickens, pigeons, turkeys, horses, swine, sheep, and cows; studies of domestic pests; bird and animal protection; winter feeding of birds; work in the greenhouse; the germination of seeds; the growth of plants.

Spring and Summer: The return of spring; temperature changes and their effects on all nature; the growth of trees and plants; budding

and blooming of trees; studies of buds and leaves; preparations on the farm; plowing, harrowing and fitting the land; planting of early crops; the effect of the winter on all life of the farm; garden preparations; thoro fitting of the soil; preparation for early crops; planting of early salad and flower crops; planting of tender crops in greenhouse or hot-bed and transplanting to garden; cultivation and watering of gardens; care of same; enemies; insect pests; weeds; names and recognition of native flowering plants; Arbor Day celebration; planting of trees and shrubs in home and school; the improvement of the home grounds; cleaning up the home grounds; planting; the return of the birds; recognition and names; studies of song and plumage; nest building and rearing of young; food getting; life habits; life habits of the commoner four-footed animals of field and home.

Upper Grades—Fall and Winter: Insect studies; offices of flowers; relation of insects to seed and fruit production; studies of caterpillars and larvæ; insect homes; economic aspects; the destruction of harmful species; spraying for biting and suching insects; insects that destroy stored grains; birds as insect destroyers; migration of birds; birds as weed destroyers; adaptation of flowers to secure insect visitations to the flower; adaptations of seeds and fruits to insure dispersal; protective adaptations of plants, of insects; principal crops of the region; how grown; their harvest, storage, sale, and use; harvest of crops grown in school garden; preparation for market or table; storage; fall operations of the garden; seed collection and selection; preparation on the farm for winter; feeding of animals; winter preparations of the soil.

How animals spend the winter; food for winter, storage of; manner of getting thru winter; protective adaptations; winter pelage of the furbearers; winter habits; relation of birds and mammals to man; studies of animal tracks; study of the rodents; game laws; protection of animals; destruction of harmful species; winter studies of trees; identification by winter characteristics; adaptations of plants for conserving moisture; studies of the evergreens; the soils of the region; effect of elements in soil making; wind and water as carriers of soil; the work of plants in making soil; the plant in relation to the soil; adaptations of plants to the soil; uses of soil; elementary studies of plant physiology; movements of plants; how plants get their food; propagation of plants; experiments to determine soil properties.

Spring—The Return of Spring: Weather changes and effect on all nature; the relation of climate to crops grown; the changes in plant life; the budding and blooming of trees; studies of plant societies and adaptations; studies of fishes and reptiles; the return of the birds; bird calendar; spring plumage of birds; song; nests and rearing of young; food and manner of getting; economic bird studies; bird protection.

Spring plowing; value of thoro tilling of the land; planting of crops; subsequent cultivation; cultivation to kill weeds and to conserve moisture; similar preparations in the garden; planting of early crops and their care; preparation for special crops.

Studies of dairy breeds of cattle; care and handling of milk; the milk test; water supply of the farm; danger of contamination; sanitation on the farm.

Poultry; the egg breeds and meat breeds; feeding for these purposes; construction of poultry houses; care; rearing of young; improvement of home grounds in city and country; orderliness and cleanliness the first means; subsequent improvement and beautification; varieties of shrubs and trees best suited for the region; Arbor Day; planting of trees and shrubs in the home grounds; civic improvement.

SPELLING

In the first two grades spelling is taught for the most part in connection with reading, phonics and written language. Drills in word recognition, phonic analysis, and writing, assist in fixing the order of letters in the mind. From the third grade on, formal drills in spelling are more sharply differentiated from the incidental instruction that occurs in connection with other studies.

In the drill work it is the function of the teacher not merely to hear the children recite words which they have learned by their own devices, but to train them to spell. The words selected for the spelling lesson are chosen from words in which errors have occurred in the written work of the children or in which experience has shown errors are likely to occur. The teacher is requested to check up the words used by comparison with those found in a standard speller.

The instruction in spelling consist of three parts—the development of the new words, the drill exercise, and the correction of errors. In introducing new words an attempt is made to make the meaning clear if the children are not already familiar with them. The words are written upon the board one at a time, preferably subdivided into syllables or larger parts. The meanings of the words are developed if they are not already known, and the children are required to use them in sentences. To facilitate the task of learning to spell, the familiar parts of the words may be pointed out, for example, “disease” written “dis-ease,” difficult letters or combinations of letters (not more than one or two in a word) may be altered in size, color, and form, or on the other hand the congruity of the spelling and the pronunciation may be brought to the mind of the child. Rules for spelling are applied where practicable. In the development part of the lesson, also, words in which mistakes were made in the previous spelling lesson are treated as new words in so far as consideration of their form is concerned. If preferred, this analysis of the form of the word may be reserved for words in which errors have occurred in the previous spelling lesson.

In the drill exercise each word is written, preferably on a sheet of white cardboard, with a rubber pen and in black ink. All words are presented in script. The chief points to be observed in the drill process are the following:

1. One word only should be presented at a time and a preparatory signal should be given about two seconds before it is exposed.
2. The time of exposure should be so brief as not to allow the attention to flag. The time should be varied with the nature of the word and the grade, from probably five to ten seconds.

3. When the word is shown it should be pronounced twice, first with a short pause, and then as a whole.

4. After the children have seen the word, they should be given some time to recall it in a purely memorial fashion, using whatever kind of memory they prefer.

5. If the word is difficult it might be advantageous to show it a second time with a second memorial recall.

6. The children reproduce the word in writing. It may be best to write the word in parts.

(Teachers who desire to do so may try using the oral method in the reproduction as well as the written, and also the oral method in the impression. It is desirable, however, that these methods shall be tried at different times and that the teacher shall try to determine the merits of using the oral presentation and reproduction as compared with the method described above.)

7. The time for this reproduction shall be as short as possible, from five to ten seconds is suggested.

8. After this, or the next day, the words should be dictated and written as wholes.

9. The words should not be presented more than once or twice during the same lesson. Errors should be corrected before a second presentation is made.

It is desirable to drill upon a comparatively small number of new words each day, probably from two to five. In addition, from five to ten old words should be reviewed by the same method. The old words, especially those that give trouble, should be reviewed daily until they are thoroughly mastered. After this they may be tested at increasingly long intervals in dictation exercises.

The correction of errors may be accomplished in various ways, but must not be neglected. Emphasis should be directed to the correct forms rather than to the incorrect. Hence, a record should be made by the teacher to the words which are misspelled and these, as already indicated, should be taken up again for careful study and drill on the succeeding day. Notice should be taken of the kinds of errors made by individual children and their attention called to these where a knowledge of the error would be helpful to the child.

A few of the more important rules for spelling should be taught inductively and applied to all new words to which they are applicable until they can be readily used by the children. Attention may be called particularly to rules for adding suffixes to words ending in silent "e," and to monosyllables ending in a single consonant preceded by a single vowel; also to the order of the letters "e" and "i" in the diagraph "ei" or "ie"; as well as to the rules for forming the more difficult plurals of nouns.

Homonyms should be taught together, attention being called to the different spelling of the same sound.

WRITING

In the first and second grades writing is confined to work on the blackboard or large sheets of paper. Words and short sentences, closely related to the reading, story telling, and other thought studies of the children, are chosen for their written expression. The children write with the whole arm or forearm movement rather than with the fingers. Beginning in the third grade and continuing thru the eighth grade writing is given a

place on the daily program with definite instruction and drill. The lessons planned have a definite relation to the children's needs, ascertained by a study of the written exercises. Words or sentences which constitute the largest part of the drill lessons are written on the board for visualization. They are then erased and the children write from memory. Letters that have been poorly formed may be selected for drill. Formal exercises in making ovals, loops, etc., at the beginning of the writing period, if used, must have definite relation to the letters or words to be written in the lesson that follows and must be used with a specific purpose in view.

The pupil should sit directly facing his desk, both arms on the desk nearly to the elbows, both feet on the floor, head erect, chest up; any bending forward should be from the hips. The left hand should hold the paper firm. The right arm should rest on the fleshy part of the forearm and the nails of the third and fourth fingers; no other part of the hand or wrist should touch the paper. The flat part of the wrist should be parallel with the plane of the desk top. The paper should lie obliquely so that the long edge is parallel to the direction of the forearm. The pen should lie between the knuckles of the thumb and first finger, and should point toward the right shoulder. The forearm movement is to be used. Children should be encouraged to practice at as high a rate of speed as is consistent with acceptable work.

The teacher should give each pupil some personal attention every day, trying to get him to criticise his own work. He must appreciate his trouble and consistently try to remedy it. Careless and unintelligent practice only fixes wrong forms. A pupil should show immediate and marked improvement after receiving the teacher's help.

Every two weeks specimens of the pupil's writing are to be taken. These are to be measured by the Ayers scale and filed for future comparison.

In all subjects in which the children use writing, the teachers are charged with the responsibility of insisting on the use of the correct position, movement, and form.

PHYSICAL EDUCATION

The purpose of these courses is to secure health, improved bodily development, recreation, promotion of growth and functions, discipline, 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 under-

standing of the individual health. This understanding is accomplished by the careful physical examination given at the beginning of each year. This investigation of the conditions of health, growth, and general and special development, is carried on by a specialist, and forms a valuable aid in the direction of the child's instruction. All the influences that bear upon the preservation of the best physical conditions for the child are scrutinized and regulated as far as possible.

GRADES 1 AND 2.

Aim: Development of co-ordination, muscular and rhythm senses; emphasis of recreative element; development of spontaneous activity and attention. **Means:** Use of imitative games, exercise songs and stories, minute plays; exercise of large fundamental muscle groups; running, skipping, simple marching; bean-bag and ball tossing; folk dances and rhythm. This work occurs several times during the day, for a few minutes between classes.

GRADES 3 AND 4.

Aim: Training, discipline, attention, and development of muscular co-ordination 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 co-ordination, so highly desirable in all physical exercises for children. Special attention is given to carriage and posture thru corrective exercises.

GRADES 5 AND 6.

Aim: Emphasis of development of discipline; relaxation from class work; correction of posture and carriage; improvement of general appearance of class. **Means:** Swedish free exercises; fancy steps and marching; military drill with organization of company; setting up exercise; manual of arms with wands; competitive games; field day sports. At this period, increased growth requires a large amount of carefully adjusted exercise, and attention is given to the physical condition of the child in planning for his activities.

GRADES 7 AND 8.

Aim: In these grades, individual conditions of growth and development receive special attention. The teacher directs exercise to assist the formation of correct habits of posture and carriage, and to correct defective habits. Discipline and orderly habit is still a direct aim. **Means:** Free exercise, marching, dumb bell exercise, wand drill, games, sports and folk dancing for the girls. The boys have military drill, setting up exercises with wands, dumb bells, etc., and some simple work on the heavy apparatus. Plays, games, and athletic sports are especially emphasized. This work is given daily during recess periods and for the older boys after school hours.

COOKING

GRADE 5.

Very simple cooking is begun. Methods of measuring, weighing, care of utensils and proper methods of cleaning are emphasized. Something of the source, production and uses of the foods cooked is studied, together with simple tests for those foods. Rules of table service are

begun with special emphasis on the formal service. During the year, the children serve three meals—breakfast, luncheon and dinner—using the Russian method of service.

GRADE 6.

Simple cookery is continued, and the same points concerning other foods are discussed. The additional problem of counting the cost of foods and comparing the cost of different foods is taken up. Marketing trips are advised if possible. Table service is reviewed, and the English form of service is emphasized. As in the fifth grade, three typical meals are served.

GRADE 7.

In this grade principles of cookery are presented in a more specific way. Leavening agents are studied and appropriate experiments performed; batters and doughs are classified; different fats are compared, and deep fat frying is taken up. The English and Russian forms of table service are reviewed; the compromise service is taken up, and three meals are served according to this method.

GRADE 8.

From previous work, the methods and principles of simple cookery and a knowledge of the three forms of Table Service have been acquired so that it is possible to study a larger problem in connection with the cooking. In all the grades the purpose is to relate the work to the home as closely as possible, but in this grade this is done thru the study of an ideal family. An average family such as might live in a cottage similar to the Model Cottage and with a typical income (\$1,200) is selected. The following problems are worked out and discussed in a general way:

1. What points would need to be considered in planning the meals for this family? a. Number in family; b. Amount of income; c. Per cent. allowed for food; d. Requirements of different members of the family as influenced by (1) age, (2) occupation, (3) size, (4) seasons, (5) climate; e. Proper balance of food.

HOUSEHOLD ART

The purpose of the work is to give the child proper methods of the manipulation of material in the construction and decoration of materials for garments and like articles. Special attention is given to the study of materials, as to their suitability and adaptability to different uses. Accuracy of construction is stressed thru-out. In the upper grades the use of design as related to costume and the decoration of the home is given intensive study. The work as far as possible is correlated with the other parts of the curriculum, particularly that of the art department.

GRADE 5.

Construction and decoration of articles involving the simplest forms of construction. Correct methods of manipulation of materials and tools are stressed.

GRADE 6.

Construction of more difficult garments involving new forms of construction and more extensive use of the machine. The care and repairing of clothing are given special attention.

GRADE 7.

* Study of the home from the view of good decoration. The use of color in the home is carefully considered and worked out in the decoration of articles for the home. An intensive study is made of materials; their structure, manufacture and design.

GRADE 8.

The use of commercial patterns, the drafting of simple patterns, stressing particularly the use of the machine in garment construction.

2. Methods of marketing and selection of food.

3. Working out typical breakfasts, luncheons, and dinners, which could be served on this income.

MANUAL TRAINING

GRADE 1.

The work done in the first grade is entirely suggested by the subjects developed in the regular lessons along the lines of history, literature, nature study, etc. In connection with the history work on the development of the home, the children build and furnish a playhouse of four rooms, cook for Thanksgiving, make decorations and presents for the Christmas tree, and dress clothes pins and paper dolls. Many representative scenes are worked out on the sand-tables; for example, the Eskimo winter house with clay moulded into blocks, dogs, sledges, dolls, etc. These dolls are dressed in Eskimo fashion, with fur and eiderdown.

GRADE 2.

The homes of primitive people—the Cave Men, Lake Dwellers, the Cliff Dwellers—are built. Twigs, sand, bones, clay, and rocks are used as building material, and very simple architectural lines are followed. The home lives of these people, their food, clothing and industrial occupations are worked out and lived over by the children in this laboratory activity. Simple farming implements are made of clay, cardboard, and wood.

GRADE 3.

As in the other primary grades the constructive work of this grade is in the main related to the study of such subjects as history, English, nature-study, etc. The habitations of people studied in history; for example, and illustrated on the sand table, or one worked out on a larger scale out of doors. The children are also encouraged to design and construct wall decorations for their room.

GRADE 4.

Fundamental tools: Rule, try square, knife, hammer, brace, bits, nail set, block plane, jack plane, cross-cut saw, rip-saw, back-saw, chisels, scraper.

Fundamental exercises: Measuring, sawing, planing, boring, chiseling, testing.

Fundamental constructive joints: Half lap joint, butt joint, T-joint; together with sample assembling exercises, such as nailing, gluing, and finishing.

Drawing: Piece work, including drawings of length, breadth, and thickness of pieces to be made.

Type of work: Complete pieces of things of value as measured from the pupil's standpoint.

GRADE 5.

Fundamental tools: A review, as the work advances, of the tools named in grade four, together with new tools such as marking gauge, framing square, level, and mortise gauge.

Fundamental exercises: New exercises, involving more accurate measurement, cutting, sawing and planing to a line, boring to given points, boring for depth, mortising and chiseling to given depths, dressing irregular surfaces, assembling of constructed units of a whole.

Drawing: Piece work including sections and details.

Type of work: Completed pieces with emphasis on constructive detail.

GRADE 6.

Fundamental tools: New cabinet tools that are necessary in the applied exercises, such as gauges, drawing knife, rasps, woodscrews, etc.

Fundamental exercises: Emphasis laid on laying out and executing fundamental exercises outlined in former grades. Stress on accuracy and neatness.

Drawing: Simple working drawings, including plans and elevations.

Types of work: Home interests, individual interests, industries of the community. The idea is not to pin a pupil down to a set group of models, but have him work with things he is interested in.

GRADE 7.

Fundamental tools: All work will involve a complete knowledge of the use and care of the fundamental hand woodworking tools. Particular stress on grinding, truing, and sharpening of planes, chisels, gouges, etc.

Fundamental exercises: Jointing, tonguing, grooving, dowel-pinning.

Drawing: Complete working drawings of pieces under construction. Center of interest same as in the other grades.

GRADE 8.

Fundamental tools: General care; adjustment, and repair of broken hand working tools; use of extension clamps, rabbit planes, cabinet scrapers, panel plans, beaders, fillisters, hollows, and rounds; filing, sharpening and burnishing of scrapers.

Fundamental exercises: Blind mortising, relishing, dovetailing, draw boring, laying out and constructing panels for doors or cabinets.

THE HIGH SCHOOL**General Purpose**

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 electives, 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 electives, 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.

Mental Habits

Education should not only equip the student with a body of useful knowledge, but should assist him in forming good mental habits, such as modes of analyzing and organizing the material dealing with a problem and of drawing correct conclusions from the data at hand. These habits, to be of permanent value, should be formed in dealing with problems with which the student will be concerned in later life. The study of such subjects as industrial history, social economics, civics, and various applications of physical science to vital questions of present-day interest affords abundant opportunities of this kind. Hence, from the standpoint of both the knowledge and the habits acquired, the newer subjects being worked out in this school are believed to have the highest educational value.

The training of the emotional life, moreover, is considered of not less value than the cultivation of purely intellectual habits. For this purpose a great deal of emphasis is placed upon the teaching of such subjects as art, music and literature. In addition to work of this kind in the classroom, an earnest effort is made to surround the students with an environment that will have an elevating and refining influence upon their tastes and modes of life. In other words, the school considers that the best preparation for future living consists in an intelligent understanding of the life about one and a keen appreciation of its finer elements, rather than in the cultivation of technical ability to pass examinations in academic subjects that the student will never use outside of the school room.

Discipline

That discipline is best that soonest enables the youth to direct his own activities to useful ends, while at the same time he is learn-

ing to co-operate with others for the common good. The truest freedom is the result of the greatest self-restraint. In the College High School only such restrictions are enforced as will safeguard the individual and protects the rights of the student body. The student should learn to be dependable and self-reliant.

Discipline is important not only for the present interests of the student and of the school, but also as a preparation for citizenship. 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 effectively 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 administrative 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.

Equipment

High School students have the use of all the regular college equipment. This includes the library of 30,000 volumes; the laboratories for chemistry, physics, biology, sloyd, domestic economy, etc.; the very extensive 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 equipped state institution. This makes the College High School probably the best equipped secondary school in the state.

Physical Education

The subject of Physical Education occupies an important place in the High School. The aim is to reach every student in the school and to give every student the fullest development possible. The work is under expert direction. The stadium for outdoor sports is well equipped. The work covers the whole field of Physical Education, including physical examination, instruction in health and hygiene, gymnasium work, and all kinds of indoor and outdoor sports, including football, basketball, volleyball, track, baseball, and tennis, soccer football, etc.

The Curriculum

With the exception of the requirements in English and a few other subjects, the studies of the High School are elective. This does not mean, however, that the student may choose his work at random. On the contrary, he is expected to select his course under the guidance of the principal from some group of studies that are well-articulated with each other and which constitute from the standpoint of subject matter a substantial and practical high school education.

The subjects of the curriculum are accordingly organized into a number of groups, any one of which the student may choose as the basis of his course. Hence he may stress the commercial subjects, manual training, household arts, agriculture, etc., as well as the more usual subjects of the traditional high school curriculum. In the latter event, these studies may be chosen either with a view to meeting the college entrance requirements, or for their life values. A special arrangement is also made to meet the needs of adults who for various reasons may have been delayed in the completion of their high school course. A detailed outline of the studies offered will be found in the High School Bulletin, which may be obtained by writing to The State Teachers College, Greeley, Colorado.

Requirements for Graduation

Fifteen units are required for graduation. A unit consists of a forty-five minute recitation five days in the week for three terms. The time necessary to complete the course depends upon the ability, application, and character of the student. Capable students who come to the school with a clearly defined purpose may take five subjects a day and so make five units a year. Students who cannot carry five subjects without sacrificing the quality of their work, are reduced to four subjects a day, which is equivalent to four units a year. Credit will be allowed for high school work taken elsewhere provided satisfactory evidence regarding it is presented by the student.

Ungraded School for Adults

It often happens that for economic reasons boys and girls are compelled to leave school in the grades or in the early years of high school. Upon reaching maturity they realize the value of an education and are anxious to obtain one, but are unwilling to enter classes with children. The purpose of this school is to open the door of opportunity to just such students. The work will be

evaluated according to the strength shown, and the individual will be classified after sufficient time has elapsed, in accordance with power demonstrated, without the necessity of completing each omitted step.

Board and Room

Board and room for young men and women can be secured at reasonable rates in private houses. Many young men find work in the city sufficient to pay for a part or all of their living expenses.

Fees

The total fees paid by High School students amount to seven dollars a term. These fees cover the cost of materials, text-books, and supplies used in the various departments of the school, where the student works. They also help to defray the cost of the physical education and library equipment.

CATALOG OF STUDENTS

SUMMER SCHOOL

1915

College—1035

Aardsma, Alice	Cincinnati, O.
Adams, Donald	Greeley, Colo.
Adams, George D.	Greeley, Colo.
Adams, Roxie	Greeley, Colo.
Agnew, Edna	Tionesta, Pa.
Ahlberg, Ingrid	Mosca, Colo.
Aitchison, Annie T.	St. Joseph, Mo.
Akey, Ethel	Wray, Colo.
Alexander, Lucile	Brighton, Colo.
Alexander, May	La Veta, Colo.
Allen, Henry J.	Grand Junction, Colo.
Allen, Lucretia	Colorado Springs, Colo.
Allen, Mary E.	Greeley, Colo.
Allen, Richard	Greeley, Colo.
Alles, Adam	Greeley, Colo.
Allsworth, Sadie (Mrs.)	Trinidad, Colo.
Anderson, Blanche	Canon City, Colo.
Anderson, Hazel	Denver, Colo.
Anthony, Cornelia	Boulder, Colo.
Arnold, Mary Joe	Greeley, Colo.
Aquinas, Sister Agnes	Denver, Colo.
Babcock, Helen	Trinidad, Colo.
Baker, Ruth	Greeley, Colo.
Baker, W. E.	Nelson, Nebr.
Baker, Mrs. W. E.	Telluride, Colo.
Baker, Winifred	Lawton, Okla.
Baker, W. L.	Mt. Hope, Kans.
Balch, Mabel E.	Greeley, Colo.
Ball, Minnie	Herington, Kans.
Bardwell, Anna B.	Lake City, Colo.
Barger, Letha	Benkelman, Nebr.
Barkladge, Emma	Leadville, Colo.
Barkladge, Martha	Leadville, Colo.
Barkley, Dell	Pueblo, Colo.
Barkley, Nell	Pueblo, Colo.
Barkman, Eda	Jackson City, Kans.
Barnes, Mrs. Abbie C.	St. Joseph, Mo.
Barnes, Frances M.	Trinidad, Colo.
Barnes, May	Greeley, Colo.
Barnes, Leah	Mesita, Colo.
Barnhouse, Mary	Cleo, Okla.
Barrows, Paul T.	Denver, Colo.
Beattie, Helen	La Salle, Colo.
Beattie, Jesse F.	La Salle, Colo.
Bechtolt, Nora	Nunn, Colo.
Bell, Bessie	Pueblo, Colo.
Bennett, Pearl	Palco, Colo.
Benson, Grace	Graylin, Colo.
Benson, Mrs. Miriam	Canon City, Colo.
Benson, Ruth	Graylin, Colo.
Bentley, Frances	Pittsfield, Ill.
Benton, Lila	Greeley, Colo.
Bergen, Marjorie	Colorado Springs, Colo.
Bergin, Florence M.	Pueblo, Colo.
Berliner, Belle	Pueblo, Colo.
Bickel, Edith	La Junta, Colo.
Biddle, Sylvia	Waldona, Colo.
Bird, Paul	Masonville, Colo.
Blagg, Blanche	Neosha Falls, Kans.
Blair, Margaret	Gill, Colo.
Blair, Minnie D.	Denver, Colo.
Blaisdell, Edna I.	Grand Junction
Boggs, Erma	Pueblo, Colo.
Boggs, Ethel	Pueblo, Colo.
Bohn, Nellie A.	Denver, Colo.

Bonney, Julia K.	Rosedale, Kans.
Booth, Mrs. Florence	Pueblo, Colo.
Borden, Alice M.	Boulder, Colo.
Boresen, Martha	Greeley, Colo.
Bowman, Emily	Matheson, Colo.
Boyer, Monta J.	Denver, Colo.
Boyle, Helen T.	Morley, Colo.
Bradford, Scott M.	Brush, Colo.
Bradford, Florence	Grover, Colo.
Brainard, Daisy	Denver, Colo.
Brand, Lenora	Brighton, Colo.
Branden, Elizabeth	Otis, Colo.
Brawley, Nell	Fort Morgan, Colo.
Bricker, Nellie	Pallsade, Colo.
Briggerstaff, Jessie	Trinidad, Colo.
Briggs, James A.	Bridgeport, Nebr.
Brink, Marion	Greeley, Colo.
Brody, Nora Ann	Esbon, Kans.
Brooks, Mrs. Anna	Greeley, Colo.
Brooks, Byra	Greeley, Colo.
Brophy, Julia	Wray, Colo.
Brosius, Olive Helen	Pueblo, Colo.
Brown, Alta	Garden City, Kans.
Brown, Corinne	Colorado Springs, Colo.
Brown, Mary L.	Victor, Colo.
Brown, Serena	Mancos, Colo.
Brownlie, Mary F.	Denver, Colo.
Brubaker, Evelyn	Denver, Colo.
Brunelle, Horace P.	Greeley, Colo.
Brunner, Blanche	Johnstown, Colo.
Brunton, Jessie	Fort Collins, Colo.
Brush, F. Thelma	Salida, Colo.
Bryson, Cleo	Fort Morgan, Colo.
Bryson, Mrs. R. L.	Rocky Ford, Colo.
Buckland, Gertrude E.	Denver, Colo.
Burbridge, Edgar W.	Platteville, Colo.
Burch, George E.	Saguache, Colo.
Burger, Ella V.	Wiley, Colo.
Burke, Lulu C.	Denver, Colo.
Burks, A. L.	Weatherford, Colo.
Burtis, Louise	Montrose, Colo.
Burtis, Mabel	Montrose, Colo.
Burtis, Ruth	Akron, Colo.
Buss, Ida H.	Rowena, Nebr.
Butin, Leila	Pueblo, Colo.
Butler, Effie	Fort Collins, Colo.
Butler, Helen	Estes Park, Colo.
Cage, Mary L.	Pueblo, Colo.
Cain, Florence	Lamar, Colo.
Cain, Leona	Lamar, Colo.
Calkins, Anna M. Lorimer	Dunlap, Kans.
Calkins, Franklin D.	Dunlap, Kans.
Callahan, Bessie M.	Aspen, Colo.
Campbell, Vera	Wellington, Colo.
Canfield, Anna	Morrison, Colo.
Carroll, Katherine	Denver, Colo.
Carroll, Margaret	Aspen, Colo.
Carlson, Anna	Independence, Colo.
Carson, Jennie	Denver, Colo.
Carson, Myra A.	Denver, Colo.
Carter, Ruth F.	Paonia, Colo.
Cary, Sue M.	Chicago, Ill.
Case, Bertha	Silverton, Colo.
Case, Ruby	Ordway, Colo.
Casey, Katherine E.	Trinidad, Colo.
Cash, E. C.	Pinon, Colo.
Cash, Franc	Pinon, Colo.
Cash, Mildred	Pinon, Colo.
Cassill, Harold	Ft. Morgan, Colo.
Cavenah, Anna	Agular, Colo.
Caverly, Edna	Ft. Collins, Colo.
Cazin, Frances	Denver, Colo.
Chandler, Cora	Burlington, Colo.
Chandler, Mrs. Hulda	Trinidad, Colo.
Chandler, Miller	Trinidad, Colo.
Chandler, Wilma	Trinidad, Colo.
Chandler, Winifred	Trinidad, Colo.
Chaney, Lydia	Boulder, Colo.

Chaplin, Ruth	Cheyenne, Wyo.
Chapman, Sophia	Hillrose, Colo.
Charles, Miss C. W.	Denver, Colo.
Chase, Bernice	Burlington, Colo.
Chase, Mrs. E. A.	Denver, Colo.
Cheney, Lucy	Fairplay, Colo.
Choury, Armade	San Luis, Colo.
Choury, Clotilda	San Luis, Colo.
Christenson, Lulu	Sterling, Colo.
Churchill, Harry V.	Greeley, Colo.
Clair, Helen T.	Denver, Colo.
Clark, Laura D.	Longmont, Colo.
Clarke, Mary S.	Leadville, Colo.
Cleary, Edward D.	Sahresville, Ohio
Clayton, Patti	Kirkwood, Mo.
Cleavinger, Myrtle	Rugby, Colo.
Clement, H. Herman	Greeley, Colo.
Cline, Mrs. Linna	Eads, Colo.
Cline, Sylvia	Beloit, Kans.
Clough, Edwene	Greeley, Colo.
Clough, Gertrude	Greeley, Colo.
Coates, Elizabeth	Granada, Colo.
Coats, Elbert	Sterling, Colo.
Cochran, Mary F.	Denver, Colo.
Cole, Laura	Camfield, Colo.
Cole, Lavinia A.	Chalk Bluffs, Colo.
Colegrove, Rose	Goodrich, Colo.
Coleman, Marjory	Haxtun, Colo.
Coleman, Nell	Little Rock, Ark.
Collins, Mrs. David	Grand Junction, Colo.
Collins, Mrs. F. W.	Fort Morgan, Colo.
Collins, F. W.	Fort Morgan, Colo.
Collins, Nannie	Vinita, Colo.
Collins, Will H.	Fort Morgan, Colo.
Combs, Mrs. Bedia	Hugoton, Kans.
Comin, Mary	Greeley, Colo.
Conant, C. B. S.	Fort Collins, Colo.
Conley, Pearl M.	Flagler, Colo.
Conley, W. I.	Flagler, Colo.
Connell, Helen	Salem, Colo.
Conner, B. F.	Pagosa Springs, Colo.
Conner, Minnie	Canon City, Colo.
Conquist, Minnie	Kiron, Iowa
Converse, Barbara	Pueblo, Colo.
Cornell, Laura E.	Denver, Colo.
Counter, Mildred	Brighton, Colo.
Coverston, Helen H.	Denver, Colo.
Conway, Agnes A.	Wichita, Kans.
Cowell, Carolyn	Clay Center, Kans.
Cox, Mrs. Miriam E. Barker	Denver, Colo.
Crawford, Julia	Leadville, Colo.
Crawford, Mrs. Myrtle D.	Otis, Colo.
Craze, Hyacinth	Greeley, Colo.
Crenshaw, Kate	Maysville, Mo.
Crittenden, Mabel	Paonia, Colo.
Crocker, Martha	Greeley, Colo.
Cummings, Mrs. Maggie	Wichita, Kans.
Cunningham, Rose	Kansas City, Mo.
Curtin, Zella	Boulder, Colo.
Czaplinski, Lydia	Caldwell, Kans.
Curtis, H. W.	Greeley, Colo.
Dailey, Hattie	Fort Morgan, Colo.
Dallinger, Flora	Atlantic, Iowa
Damon, J. G.	Kanapolis, Kans.
Daniels, Grace	Wray, Colo.
Daniels, Winifred C.	Brush, Colo.
Daniels, Winifred, Mrs.	Denver, Colo.
Daugherty, Madge	Fort Morgan, Colo.
Dauth, Louise	Greeley, Colo.
Davis, Ida	Mack, Colo.
Davis, Mary R.	Ordway, Colo.
Davis, Reginald	Greeley, Colo.
Davis, Ruth	Fort Morgan, Colo.
Davidson, Pearl	Grand Valley, Colo.
Dawson, Alma	Chivington, Colo.
Day, Anna P.	Denver, Colo.
Dehart, Mae	Glenn, Colo.
Demmell, Margaret	Fort Collins, Colo.

Denham, Bertha	Byers, Colo.
Denney, Earl C.	Springfield, Colo.
Denniston, Eleanor	Blackhawk, Colo.
Devinny, Cecelia	Edgewater, Colo.
Devlin, Melda	Holly, Colo.
DeWitz, Gertrude M.	Greeley, Colo.
DeWitz, Esther P.	Cheyenne Wells, Colo.
Diggs, Chas. A.	Childress, Texas
Dille, Florence A.	Denver, Colo.
Dillon, Bertha	Golden, Colo.
Dillon, Mary V.	Golden, Colo.
Dixon, Anna	Junction City, Kans.
Donley, Herman H.	Cortez, Colo.
Doran, Marguerite	Denver, Colo.
Duboff, Sarah	Greeley, Colo.
Dunmire, Maude	Rugby, Colo.
Durning, Bertha	Greeley, Colo.
Dyer, Josephine (Mrs.)	Boulder, Colo.
Eckhart, Elizabeth	Trinidad, Colo.
Eastman, Sarah W.	Colorado Springs, Colo.
Edgerton, Iva	Carbondale, Colo.
Edwards, Joy	Fowler, Colo.
Elam, Velma	Greeley, Colo.
Eldred, Ora	Glen Elder, Kans.
Elliott, Clara	Cedaredge, Colo.
Elmer, Colgate	Greeley, Colo.
Ely, Clara	Wagner, S. Dak.
Emerson, Inez	Greeley, Colo.
Epperson, Ina	Wray, Colo.
Epple, Florence	Roggen, Colo.
Erdman, Margaret	Montrose, Colo.
Erickson, Enid	Monte Vista, Colo.
Erwin, Eva	Greeley, Colo.
Estabrook, Evelyn	Greeley, Colo.
Estus, Albert	Colorado Springs, Colo.
Estus, Mary D. Mizener	Colorado Springs, Colo.
Evans, Minnie B. (Mrs.)	Durango, Colo.
Everitt, Elva	Denver, Colo.
Fankhouser, Nora M.	Denver, Colo.
Farmer, G. E.	Russel Gulch, Colo.
Farnsworth, Mrs. Mary	Fort Morgan, Colo.
Farr, Gladys	Greeley, Colo.
Farr, Jennie	Denver, Colo.
Farr, Ruth	Greeley, Colo.
Filkins, Grace C.	Brush, Colo.
Filson, Emma	Tarkio, Mo.
Finch, Callie	Greeley, Colo.
Fink, Jessie A.	Greeley, Colo.
Fish, C. E.	Greeley, Colo.
Fish, Florence	Pueblo, Colo.
Fisher, Mrs. Otto.	Georgetown, Colo.
Fisher, Tina	Trinidad, Colo.
Fitzmorris, Ray	Greeley, Colo.
Flagg, Laura	Lawrence, Kans.
Fleming, Sadie J.	Sterling, Colo.
Floyd, M. R.	Miami, Okla.
Fluharty, Ada D.	Silverton, Colo.
Foltz, Blanche V.	Deer Trail, Colo.
Fonda, Lorena	Weldona, Colo.
Force, Anna Laura	Denver, Colo.
Force, Herriet	Denver, Colo.
Forsythe, Edith	Fort Morgan, Colo.
Foss, Evelyn	Salida, Colo.
Foster, Evelyn T.	Concord, N. H.
Foster, Jessie	Paonia, Colo.
Foster, Lucy B.	Denver, Colo.
Foulk, Lola	Greeley, Colo.
Fox, Mrs. Lottie M.	Greeley, Colo.
Frakes, Orville E.	Greeley, Colo.
Frances, Sister	Denver, Colo.
Freedle, J. C.	Saguache, Colo.
French, Helen	Denver, Colo.
Fuller, Hattie (Mrs.)	Meade, Colo.
Fuller, Pauline	Denver, Colo.
Fuller, Violet	Colorado Springs, Colo.
Fyfee, Carrie	Sterling, Colo.

Gage, Edith M.	Leadville, Colo.
Galbriath, Edna F.	Pagosa Springs, Colo.
Gale, Moe A.	Canon City, Colo.
Gammill, F. I.	Meade, Colo.
Gammill, Mrs. F. I.	Meade, Colo.
Gannett, Annie.	Canon City, Colo.
Garber, Vera	Esbon, Kans.
Gard, Pearl	Loveland, Colo.
Garrison, Nannie	Vinita, Okla.
Garwood, Margaret	Wichita, Kans.
Gibson, Grace	Denver, Colo.
Gill, Elizabeth	Mexico, Mo.
Gill, Eula B.	Fort Morgan, Colo.
Gillespie, Mrs. Anna H.	Greeley, Colo.
Gillmore, W. B.	Whitewater, Colo.
Gilmore, Faith Wightman.	Denver, Colo.
Gilmore, Angela	Denver, Colo.
Gilpin-Brown, Helen (Mrs.)	Fort Collins, Colo.
Ginther, Eva	Denver, Colo.
Glasse, Gertrude.	Fort Morgan, Colo.
Goodin, Ella	Windsor, Mo.
Gookins, Mrs. Clara	Greeley, Colo.
Gorneman, Louise	Denver, Colo.
Graham, Grant D.	Erie, Colo.
Grant, Stella	Pueblo, Colo.
Green, Jenny Lind.	Norris City, Ill.
Green, Prudence	Wellington, Kans.
Greenamyre, Katherine.	Fort Collins, Colo.
Greenlee, Ethel	Goodrich, Colo.
Griffin, Reba	St. Joseph, Mo.
Grosshaus, Helda	Peru, Nebr.
Gruber, Edna.	Las Animas, Colo.
Gunnison, Esther	Aurora, Nebr.
Gust, Katie	Denver, Colo.
Guthrie, Sara	Burlington, Colo.
Haaf, Clarence F.	Boulder, Colo.
Hall, Ruth	Fairplay, Colo.
Hamilton, Elsie B.	Milliken, Colo.
Hammond, Maude L. (Mrs.)	Pittsburg, Kans.
Hancock, Mildred	Telluride, Colo.
Hand, Effie	Manhattan, Kans.
Hand, Elida	Clay Center, Kans.
Hanna, Helen.	Garden City, Kans.
Hanna, Winifred	Mankato, Kans.
Hanno, Charlotte	Durango, Colo.
Hans, Genette S.	Salida, Colo.
Hansen, Bertha	Denver, Colo.
Hansen, Marie	Denver, Colo.
Harbottle, Mrs. Florence E.	Greeley, Colo.
Harden, Flora A.	Sheridan, Wyo.
Harmless, Edith M.	Loveland, Colo.
Harman, Zaily.	Siloam Springs, Ark.
Harmon, Beulah	Boulder, Colo.
Harmonson, Nettie	Norton, Kans.
Harris, Ira	Grover, Colo.
Harris, Lucy	Bennett, Colo.
Harris, Luella	Eagle, Colo.
Harris, Ruth	Akron, Colo.
Harrison, Clara A.	Chicotah, Okla.
Harrison, Coy	Canon City, Colo.
Hartman, Marguerite	Alamosa, Colo.
Hasenkamp, Eleanor L.	Ft. Lupton, Colo.
Hathaway, Ella	Mankato, Kans.
Haven, Lella	Vinita, Okla.
Havens, Ella	Wellington, Kans.
Hawke, Julia	Pueblo, Colo.
Hawkins, Myrtle	Trinidad, Colo.
Hawley, Sarah F.	Trinidad, Colo.
Hayes, James H.	Fletcher, Okla.
Hays, Harold	Greeley, Colo.
Hays, Julia V.	Sterling, Colo.
Hayton, Kate W.	Alamosa, Colo.
Haywood, Louise	Denver, Colo.
Head, Mrs. Twyla	Jefferson, Colo.
Heath, Herbert	Greeley, Colo.
Heath, Lena	Montrose, Colo.
Heenan, Florence M.	Denver, Colo.
Heilman, Clara	Greeley, Colo.

Hellyer, Stella	Eaton, Colo.
Helm, Marguerite	La Junta, Colo.
Helm, Marion F.	La Junta, Colo.
Henning, Anna	Gasco, Kans.
Henderson, Ethel	Lucerne, Colo.
Hennes, Olive	Greeley, Colo.
Henning, Hattie	Gasco, Kans.
Herren, C. M.	La Junta, Colo.
Hersum, Evalyn	Olathe, Colo.
Hewitt, Mildred	Cascade, Colo.
Hicks, Helen	Alamosa, Colo.
Hicks, Marie	Ordway, Colo.
Hilderbrand, Lulu	Benkelman, Nebr.
Hill, Inez	Pendelton, N. M.
Hill, Marian	Fairplay, Colo.
Hill, Olive	Lamar, Colo.
Hinckley, Winifred	Windsor, Colo.
Hindman, R. E.	Grand Junction, Colo.
Hinds, Atossa L. (Mrs.)	Denver, Colo.
Hoagland, Mary	Silverton, Colo.
Hoaglin, Clair	Manhattan, Kans.
Hoberton, Sibyl	Cripple Creek, Colo.
Hodge, Edna	Wichita, Kans.
Hoffman, Mary Ely	Eureka, Kans.
Holdren, Eunice	Lyons, Colo.
Hollearin, Susan Dotson	Ludlow, Colo.
Hollenbeck, Myrtle	Victor, Colo.
Hollewell, Minnie	Brush, Colo.
Holt, Ethelyn F.	Assumption, Ill.
Hopkins, Wallace	Greeley, Colo.
Horn, Ella B.	Trinidad, Colo.
Horn, Ida	Akron, Colo.
Houston, Butler	Checotah, Okla.
Howard, Helen	Greeley, Colo.
Howard, Ruth	Saguache, Colo.
Howe, Nolan	Canon City, Colo.
Howells, Edna	Florence, Colo.
Huberta, Sister Mary	Denver, Colo.
Hudnut, Nina	Denver, Colo.
Hudson, Hattie I.	Athol, Kans.
Huff, John F.	Denver, Colo.
Huiatt, Rose	Thatcher, Colo.
Huizel, J. H.	Sheyenne, N. Dak.
Hull, E. Beryl	Tarkio, Mo.
Hungerford, Lora	Loda, Ill.
Hunsaker, Lucy	Atlanta, Kans.
Hunter, Anne	Muskogee, Okla.
Hunter, Mabel	Longmont, Colo.
Hurley, Ethel	Blanca, Colo.
Hurley, Jessie B.	Blanca, Colo.
Hurley, Will R.	Greeley, Colo.
Huston, Mabel (Mrs.)	Boulder, Colo.
Huston, Pearl	Salida, Colo.
Hutchison, Alodia	Greeley, Colo.
Irvine, Lois	Little Rock, Ark.
Irving, Elizabeth J.	Cripple Creek, Colo.
Jackman, Lena	Greeley, Colo.
Jacobs, Charlotte M.	Denver, Colo.
Jacobs, Clara	Monte Vista, Colo.
James, White (Miss)	Huntsville, Tenn.
Jamieson, Margaret	Wheatridge, Colo.
Jefferies, Bernice	Hillrose, Colo.
Jeffrey, Edith	Bingham Canon, Utah
Jensen, Mattie	Junction City, Kans.
Job, Henry J.	Rockvale, Colo.
Johnson, Alta	Akron, Colo.
Johnson, Edith	Akron, Colo.
Johnson, Edna	Eastlake, Colo.
Johnson, Everet	Checotah, Okla.
Johnson, Georgie	Blanca, Colo.
Johnson, Hilda	Briggsdale, Colo.
Johnson, Irene M.	East Lake, Colo.
Johnson, Rita	Greeley, Colo.
Johnston, Earl L.	Evans, Colo.
Jones, Alva	Genoe, Colo.
Jones, Ethel	McPherson, Kans.
Jones, Gladys	Lamar, Colo.

Jones, Le Lona.....	McPherson, Kans.
Jones, Margaret.....	Benkelman, Nebr.
Jones, Mollie.....	..... Pueblo, Colo.
Jones, Ruth M.....	..... La Junta, Colo.
Jones, Stella E.....	..... Lawton, Okla.
Jones, W. R.....	..... Eaton, Colo.
Jordan, Beulah.....	..... Jewell City, Kans.
Jordan, Katie.....	..... La Junta, Colo.
Jordan, Mary Alice.....	..... Hastings, Nebr.
Jordan, Mary Arline.....	..... Old Orchard, Maine
Jorgerson, Olive.....	..... Leadville, Colo.
Joy, Pearl.....	..... Greeley, Colo.
Judson, Beulah Lea (Mrs.).....	..... Greeley, Colo.
Jurgenson, Anna.....	..... Julesberg, Colo.
Karlson, Elvina.....	..... Gothenburg, Nebr.
Karlson, Ruth.....	..... Gothenburg, Nebr.
Kasten, Irma.....	..... Greeley, Colo.
Keating, Madeline.....	..... Denver, Colo.
Keeley, C. W.....	..... Olney Springs, Colo.
Keeley, Esther.....	..... Ordway, Colo.
Kellogg, Jay L.....	..... La Junta, Colo.
Kellum, Mrs. Lela.....	..... Frederick, Colo.
Kenehan, Katherine.....	..... Denver, Colo.
Kennedy, Anna.....	..... Hot Sulphur Springs, Colo.
Kennedy, Lyrra.....	..... Greeley, Colo.
Kennedy, Mrs. R. R.....	..... Greeley, Colo.
Kermode, Mary Gentille.....	..... Cortez, Colo.
Kessler, F. C.....	..... Kremmling, Colo.
Kessler, Mrs. Kate E.....	..... Camp Shumway, Colo.
Ketner, Sarah P.....	..... Golden, Colo.
Kidder, Ethel.....	..... Denver, Colo.
King, Mamie.....	..... Garro, Colo.
King, Nettie.....	..... Garro, Colo.
Kirk, Grace.....	..... Cripple Creek, Colo.
Kirk, Helen C.....	..... Denver, Colo.
Knous, Elizabeth.....	..... Greeley, Colo.
Knous, Lucile.....	..... Greeley, Colo.
Knous, Mildred.....	..... Greeley, Colo.
Knous, Miram.....	..... Greeley, Colo.
Knox, Mary.....	..... Mauricka, Okla.
Knitzen, Marguerite.....	..... Alamosa, Colo.
Kropp, Harriet.....	..... Berthoud, Colo.
Kyler, Lela.....	..... Greeley, Colo.
Lagershausen, Emma.....	..... Greeley, Colo.
Lake, Della.....	..... Norton, Kans.
Lake, Louise.....	..... Colorado Springs, Colo.
Lambert, Iva.....	..... Cherry, Colo.
Lamborn, Cora.....	..... Greeley, Colo.
Landram, Anne B.....	..... Cripple Creek, Colo.
Langdon, May.....	..... Pueblo, Colo.
Lanning, Charles W.....	..... Austin, Colo.
Larson, Kate R.....	..... Leadville, Colo.
Larson, Ruth.....	..... Grand Junction, Colo.
Lashier, Virginia.....	..... Fowler, Colo.
Lawler, Celia.....	..... Aspen, Colo.
Lay, Edith.....	..... Lamar, Colo.
Lay, Anna B.....	..... Greeley, Colo.
Laylander, Virda.....	..... Pueblo, Colo.
Layton, Mrs. Nellie B.....	..... Grand Junction, Colo.
Leach, Dora M.....	..... Cheyenne, Wyo.
Lee, Lyndall.....	..... Denver, Colo.
Lee, J. Walter.....	..... Greeley, Colo.
Leese, Viola E.....	..... Boone, Iowa
Lefler, Grace.....	..... Greeley, Colo.
Lehikers, Clara Auld (Mrs.).....	..... Brighton, Colo.
Lemons, Leo M.....	..... Nimm, Colo.
Lenardson, Alta.....	..... Paonia, Colo.
Lenu, Bertha B.....	..... Hobart, Colo.
Lengel, Anna.....	..... Landsman, Colo.
Leshar, Mabel.....	..... La Junta, Colo.
Lewis, Adele.....	..... La Salle, Colo.
Lewis, Mrs. James.....	..... Greeley, Colo.
Lewis, Madeline.....	..... Hotchkiss, Colo.
Lillis, Florence.....	..... Walsenburg, Colo.
Lilly, Grace.....	..... Denver, Colo.
Lloyd, Jane.....	..... Rockvale, Colo.
Lloyd, Sarah E.....	..... Rockvale, Colo.

Lockhart, Lee	Greeley, Colo.
Loman, Mabel	Wray, Colo.
Long, Svea	Longmont, Colo.
Longenbaugh, Emily	Cortez, Colo.
Longstrom, Clara M.	Flagler, Colo.
Looney, Ethel	Vinita, Colo.
Loughey, Katherine	Trinidad, Colo.
Lowe, Grace	Denver, Colo.
Luce, Mrs. Vola	Hubbell, Nebr.
Ludwick, Samuel M.	Louisville, Colo.
Luff, Flora	Kit Carson, Colo.
Lundy, Lydia	Fort Morgan, Colo.
Lybarger, Mabel J.	Zanesville, Ohio
Lyons, Florence	Hotchkiss, Colo.
Lytle, Ruth	Rocky Ford, Colo.
MacArthur, Lillian	Denver, Colo.
MacLiver, Elizabeth	Trinidad, Colo.
MacLiver, May	Trinidad, Colo.
Madarasz, Irma	Denver, Colo.
Maggard, Gertrude	Stoneham, Colo.
Mahon, Mrs. Maude	Denver, Colo.
Mahuron, I. D.	Garden City, Kans.
Mallon, Vera	Denver, Colo.
Mantey, Anastesia	Carr, Colo.
Margaret, Sister Mary ..	Denver, Colo.
Marolt, Mary	Aspen, Colo.
Mars, Elsie Gertrude	Trinidad, Colo.
Martin, B. Frank	Newton, Kans.
Martin, Esther	Monte Vista, Colo.
Martin, Ida	Tuttle, Colo.
Martin, Mary	Monte Vista, Colo.
Martin, Maude	Greeley, Colo.
Marvin, Grace H.	Greeley, Colo.
Mason, Alice	Greeley, Colo.
Mason, Blanche	Moberly, Mo.
Mason, Lela	Moberly, Mo.
Massey, Joyce	Trinidad, Colo.
Matthews, William R.	Marion, Ill.
Maxey, Effie H.	St. Louis, Mo.
Mazzone, Frieda	Walsenburg, Colo.
McAleer, Elena	Victor, Colo.
McAllister, Nellie	Denver, Colo.
McAllister, Winifred E. ..	Denver, Colo.
McArthur, Ethel	Salina, Kans.
McBride, Bess	Cedaredge, Colo.
McCann, Florence	Greeley, Colo.
McCarty, Minerva	Simla, Colo.
McCauley, Estella	La Junta, Colo.
McClintock, Alva	Niwot, Colo.
McClintock, Mildred	Denver, Colo.
McCray, Blanche	Paonia, Colo.
McCullough, W. C.	Westminster, Colo.
McCune, Letha	Greeley, Colo.
McCunniff, John T.	La Jara, Colo.
McCurdy, Mary B.	Pueblo, Colo.
McDermott, Jessie A.	Trinidad, Colo.
McEnerney, Evarista	Aguilar, Colo.
McEnerney, May	Aguilar, Colo.
McFarland, Mary	Fort Morgan, Colo.
McGee, Edna G.	Oklahoma City, Okla.
McHenry, Della	Las Animas, Colo.
McIntyre, Katherine	Pueblo, Colo.
McIntyre, Mrs. Mary L.	Pueblo, Colo.
McIntyre, Ruth	Hotchkiss, Colo.
McKelvy, Kathryn	New Windsor, Colo.
McKissick, Ethel R.	Loveland, Colo.
McLaurin, Mary M.	Jacksonville, Fla.
McMenamin, Fay	Telluride, Colo.
McNamara, Margaret	Denver, Colo.
McNutt, Sarah A.	Silverton, Colo.
McQuie, Fannie	Hobart, Okla.
Merris, Lena	Conan City, Colo.
Metzger, Myrtle M.	Trinidad, Colo.
Michaels, Hollis	DeBeque, Colo.
Miller, DeFoe	Trinidad, Colo.
Miller, Geo. C.	Byers, Colo.
Miller, Katherine	La Junta, Colo.
Miller, Mabel	Greeley, Colo.

Miller, M. Elizabeth.....	Denver,	Colo.
Mills, Agnes	Pueblo,	Colo.
Milyard, Bessie	Alamosa,	Colo.
Mitchell, Lula May.....	Leadville,	Colo.
Mitchell, Minnie B.....	Sterling,	Colo.
Mitchell, Nellie	Mapleton,	Iowa
Molholm, Edna	Broomfield,	Colo.
Monahan, Aileen	Greeley,	Colo.
Moore, Claude E.	Fruita,	Colo.
Moore, Dorothy	Denver,	Colo.
Moore, Fanny	Rockport,	Mo.
Moore, Neal	Greeley,	Colo.
Morand, Earl C.	Trinidad,	Colo.
Moreland, Grace A.....	Raymond,	Colo.
Morey, Norma A.	Denver,	Colo.
Morris, Clara D.	Brandon,	Colo.
Morrison, Nellie	Boulder,	Colo.
Morrison, Walter	Greeley,	Colo.
Morton, Hallie D.....	Muskogee,	Okla.
Mott, Irene B.....	Greeley,	Colo.
Mount, Leila.....	La Jara,	Colo.
Mowe, Winifred	Pueblo,	Colo.
Muir, Dolphus A.....	Greeley,	Colo.
Munter, Violet	Burlington,	Colo.
Murphy, Dorothea	Caldwell,	Colo.
Murphy, Katherine L.....	Wichita,	Kans.
Murphy, Miss Lou.....	Denver,	Colo.
Murray, Rose	Denver,	Colo.
Myers, Blanche	Denver,	Colo.
Myers, Emma Gertrude.....	Del Norte,	Colo.
Myers, Gladys E.....	Alamosa,	Colo.
Naeve, Clara E.....	Louisville,	Colo.
Neeb, Lenore.....	Grand Junction,	Colo.
Neely, Alva S.....	Walsenburg,	Colo.
Negley, K. H.....	Las Animas,	Colo.
Nelson, Alma	Lawrence,	Kans.
Nelson, Esther	Denver,	Colo.
Nelson, H. Gilbert.....	Brush,	Colo.
Nelson, Nellie E.....	Boone,	Iowa
Nelson, Rose	Greeley,	Colo.
Neville, Anne	Boulder,	Colo.
Newton, Bessie L.....	Durango,	Colo.
Nichols, Irene	Muskogee,	Okla.
Nims, Mrs. F. A.....	Greeley,	Colo.
Nissen, Lillian	Alamosa,	Colo.
Noble, Iva	Thomasville,	Colo.
Noce, M. C. (Lillian).....	Denver,	Colo.
Nolon, Michael	Trinidad,	Colo.
Northrop, Edith	Trinidad,	Colo.
Nowlin, E. W.....	Hannibal,	Mo.
O'Banion, Lela	Austin,	Texas
O'Boyle, Mrs. Georgie M.....	Grand Junction,	Colo.
O'Boyle, Lila M.....	Grand Junction,	Colo.
O'Brien, Edith B.....	Manhattan,	Kans.
O'Connor, Agnes L.....	Cripple Creek,	Colo.
O'Conner, Florence	Claremore,	Okla.
O'Dea, Irene	Leadville,	Colo.
O'Dea, Kathryn	Leadville,	Colo.
O'Kelly, Katherine	Telluride,	Colo.
O'Neal, Emma F.....	Wichita Falls,	Texas
O'Neill, Anna M.....	Central City,	Colo.
Onerson, Ora	Festil,	Ia.
Onstine, Geraldine	Greeley,	Colo.
O'Rourke, Mary A.....	Fleming,	Colo.
O'Toole, Clara E.....	Denver,	Colo.
O'Toole, Mary B.....	Letts,	Iowa
Otto, Lena.....	Canon City,	Colo.
Overman, Valeria.....	Canon City,	Colo.
Page, Mrs. Alida.....	Greeley,	Colo.
Page, Helen	Greeley,	Colo.
Painter, Edith	Greeley,	Colo.
Palm, Frances	Larkspur,	Colo.
Palm, Helen E.....	Larkspur,	Colo.
Palmborg, Sigrid E.....	Kutch,	Colo.
Pantall, Myrtle	Sterling,	Colo.
Park, Grace	Concordia,	Kans.

Parker, Evelin	Eaton, Colo.
Parsons, Jessalyn	Denver, Colo.
Pate, Ethel	Hobart, Okla.
Patrick, Grace	Durango, Colo.
Patrick, Pearl M.	Mapleton, Iowa
Patterson, Anna	Independence, Kans.
Paul, Blanche	Seibert, Colo.
Paulson, Easter	Arroya, Colo.
Peers, Katherine E.	Boulder, Colo.
Perkins, Birdie	Eagle, Colo.
Perkins, Josie	Eagle, Colo.
Peterson, Alice	Ottumwa, Iowa
Peterson, Ida	Boise, Idaho
Phillips, Edith	Oktaha, Okla.
Phillips, Stowe S.	Rocky Ford, Colo.
Pickett, Blanche	Plattville, Colo.
Phippeny, Lucile	Eckhart, Colo.
Pingrey, Jennie	Estherville, Iowa
Pingrey, Maria Z.	Estherville, Iowa
Pond, Clarence B.	Parker, Colo.
Pond, Georgia	Parker, Colo.
Pond, Mrs. Mae.	Parker, Colo.
Pool, Annie	Pueblo, Colo.
Poole, Alice L.	Wichita, Kans.
Porter, Mary M.	Grover, Colo.
Porter, Ralph M.	Grover, Colo.
Potter, Lucia	Greeley, Colo.
Pound, Olive	Julesburg, Colo.
Price, Floy	Greeley, Colo.
Priddy, Bessie	Pierce, Colo.
Priest, Zella	Seibert, Colo.
Pugh, Gladys	Stratton, Colo.
Purdy, Rena	Belmond, Iowa
Putnam, Callie	Gaylord, Kans.
Putnam, Grace	Gaylord, Kans.
Putzell, Louise	Aspen, Colo.
Pyles, Edna	Eads, Colo.
Quayle, Margaret	Little Rock, Ark.
Quinlan, Agnes	Gypsum, Colo.
Quinlan, Elizabeth	Gypsum, Colo.
Quinlan, Mary	McCoy, Colo.
Raber, Carrie	Del Norte, Colo.
Rackerby, Sue	Kansas City, Mo.
Rait, Mary	Greeley, Colo.
Ramsdell, Fred	Greeley, Colo.
Ramsejer, Emma	Idalia, Colo.
Randall, Bertha	Fort Collins, Colo.
Ransdell, Gladys	Greeley, Colo.
Ranson, Lena	Wichita, Kans.
Ranson, Lucy	Longmont, Colo.
Rapp, Leila M.	Pueblo, Colo.
Ray, Zoa	Lamar, Colo.
Reardon, Gertrude	Ottumwa, Iowa
Reardon, Julia	Ottumwa, Iowa
Reatherford, Kate	Wichita, Kans.
Reckord, Blanche K.	La Junta, Colo.
Reece, Jose I.	Greeley, Colo.
Reed, Edith	Norton, Kans.
Reed, Isa Dolores	Pueblo, Colo.
Reed, Truman G.	Lucerne, Colo.
Reich, Mrs. Ida	Julesburg, Colo.
Reilly, Marguerite M.	Salida, Colo.
Reinkin, Emma	Elko, Nebr.
Renner, Jennie	Burr Oak, Kans.
Rennolds, C. E.	Lane, Kans.
Retsloff, Florence	Greeley, Colo.
Reynolds, Beatrice	Greeley, Colo.
Reynolds, Elizabeth	Greeley, Colo.
Reynolds, Louise	Larned, Kans.
Rhoades, Jessie	Mt. Vernon, Wash.
Rice, Marjorie	Boulder, Colo.
Richardson, LoElla	Holly, Colo.
Richardson, Ruth V.	Colorado Springs, Colo.
Ricketts, Blanche	Boulder, Colo.
Rider, Ida M.	Colorado Springs, Colo.
Riedel, Gladys A.	Denver, Colo.
Riley, Ione	Carbondale, Colo.

Riley, Laura V.	Haxtun, Colo.
Rimmer, Minnie	Las Animas, Colo.
Rindskapf, Paula	Denver, Colo.
Ringle, Helen	Greeley, Colo.
Ritter, Esther C.	
Robbins, Esther	Pueblo, Colo.
Roberts, Lula	Norton, Kans.
Roberts May	Pueblo, Colo.
Robertson, Margaret	Brookfield, Colo.
Robertson, Margaret Leona	Trinidad, Colo.
Robinette, Sarah J.	Cripple Creek, Colo.
Robinson, Beulah	Colorado Springs, Colo.
Robinson, Rachel C.	Fort Collins, Colo.
Roche, Catherine E.	Leadville, Colo.
Rodman, Grace	Fowler, Colo.
Roe, Mrs. Myrtle	Sterling, Colo.
Rogers, Ivalou	Denver, Colo.
Rogers, Iva M.	Trinidad, Colo.
Rohr, Frieda B.	Denver, Colo.
Roman, Edith	Aspen, Colo.
Rondle, R. M.	Weatherford, Okla.
Rooney, Helen	Edgewater, Colo.
Root, Elizabeth	Fort Collins, Colo.
Root, Mrs. Nevada	Fort Collins, Colo.
Rose, Lila Mae	Manhattan, Kans.
Rosenbrough, Vera	Colo.
Rossell, Flosie	Bristol, Colo.
Ross, A. B.	Oakwood, Okla.
Rote, Orville	Greeley, Colo.
Rourke, Sophia	Avondale, Colo.
Ruggles, Maude	Lamar, Colo.
Rumley, Maude	Denver, Colo.
Rundquist, Winona	Loveland, Colo.
Rupp, M. Ethel	Colorado Springs, Colo.
Russell, Helen Gould	Brandon, Colo.
Rutherford, Harry H.	Manzanola, Colo.
	Arriola, Colo.
Saddoris, Eva	Fremont, Nebr.
Salmon, Norma	Denver, Colo.
Saltus, Drucilla (Mrs.)	Boulder, Colo.
Samuelson, Esther	Colorado Springs, Colo.
Sansburn, Alvin	Fort Collins, Colo.
Sansburn, Lena (Mrs.)	Fort Collins, Colo.
Sarvis, Effie	Norton, Kans.
Saunders, Lee	Boulder, Colo.
Sawyer, Carrie (Mrs.)	Greeley, Colo.
Sawyer, Marion L.	Greeley, Colo.
Scanlan, Ella	Aspen, Colo.
Schneider, Bessie	Greeley, Colo.
Schoonmaker, Noble	Montrose, Colo.
Schrader, Bonita M.	Denver, Colo.
Schruman, Mary	Trinidad, Colo.
Segwarz, Caroline	Wilson, Kans.
Schwin, Luella	Flagler, Colo.
Scott, Beatrice	Henry, Colo.
Scott, Chas. E.	Loveland, Colo.
Scott, Ethel M.	Caldwell, Kans.
Scott, Gladys K.	Haxtun, Colo.
Searcy, Hazel F.	Flagler, Colo.
Sedgwick, Myrtle M.	Greeley, Colo.
Sellers, William A.	Doddsville, Ill.
Setzer, Elizabeth	Fort Collins, Colo.
Sexson, John A.	Franklin, Nebr.
Shaffer, Dorothy	Greeley, Colo.
Shane, Dora	Akron, Colo.
Shank, Hazel	Grand Valley, Colo.
Sharp, Bernice M.	Pueblo, Colo.
Shay, Verna	Norton, Kans.
Shelton, Ada L.	Hobart, Okla.
Shelton, Byrd	Windsor, Mo.
Shelton, Floy	Hobart, Okla.
Sherar, Ethel S.	Rochester, N. Y.
Shillington, Ada	Rosedale, Kans.
Shinn, Grace	Concordia, Kans.
Shirley, Mary	Canon City, Colo.
Shively, Josephine	Fremont, Nebr.
Shriber, Eva	Boulder, Colo.
Shriber, J. H.	Boulder, Colo.
Shultis, Lorraine	Greeley, Colo.

Shultis, Mabel	Greeley, Colo.
Sibley, Bella B. (Mrs.)	Trinidad, Colo.
Siess, Ermie M.	Grand Junction, Colo.
Simms, Ethel S. (Mrs.)	Paonia, Colo.
Slater, Hazel	Idaho Springs, Colo.
Slater, May	Ottumwa, Iowa
Sladd, Ollie Mae	Lyons, Kans.
Slyder, Edna	Denver, Colo.
Small, Hazel M.	Littleton, Colo.
Smathers, John O.	New Raymer, Colo.
Smelsor, Leah	Julesburg, Colo.
Smelsor, Reva	Julesburg, Colo.
Smiley, Josephine	Boulder, Colo.
Smith, Cora W.	Parsons, Kans.
Smith, Erna	Kansas City, Mo.
Smith, Eula	Fairplay, Colo.
Smith, Eula A.	Greeley, Colo.
Smith, Frances	Loveland, Colo.
Smith, Hazel	Pueblo, Colo.
Smith, Marguerite	Longmont, Colo.
Smith, Marie	Pueblo, Colo.
Smith, Mary George	Aspen, Colo.
Smith, Nettie P.	Atwood, Colo.
Smith, Robt. J.	Greeley, Colo.
Smith, Wilbur C.	Carr, Colo.
Smoth, Charlotte	Denver, Colo.
Snedden, Jessie R.	Walsenburg, Colo.
Soulen, Elma	Mancos, Colo.
Spahr, Dot	Pawnee Rock, Kans.
Spaulding, Mrs. Gertrude C.	Greeley, Colo.
Spencer, Jennette S.	Denver, Colo.
Spicker, Wilma O.	Colorado Springs, Colo.
Spurgeon, Irma	Chivington, Colo.
Staines, Florence	Hampton, Iowa
Stanard, Rachel	Denver, Colo.
Stanforth, Delah	Denver, Colo.
Starbuck, Etta M.	Alamosa, Colo.
Steadman, H. A.	Billings, Mont.
Stebbins, Marie	Boulder, Colo.
Steck, June A.	Greeley, Colo.
Steele, Mary Francis	La Salle, Colo.
Stein, Mrs. Ethel	Akron, Colo.
Stelty, Anna A.	Allentown, Pa.
Stephenson, Elizabeth	Florence, Colo.
Stevens, Hazel	Fraser, Colo.
Stevens, Mary M.	La Junta, Colo.
Stevenson, Elsie	Fruita, Colo.
Stevenson, Walter	Fruita, Colo.
Stewart, Alice	Salisbury, Mo.
Stockham, Ima	Sedgwick, Colo.
Stolt, Edna	Odebolt, Iowa
Stone, Ethel	Anita, Iowa
Stone, Martha	Colorado Springs, Colo.
Stone, Mayfield	Anita, Iowa
Stotts, Alta	Chicotah, Okla.
Stout, Opal	Paonia, Colo.
Strong, Florence	Greeley, Colo.
Sullivan, M. S. (Mrs.)	Canon City, Colo.
Sullivan, Vera Faye	Greeley, Colo.
Surbeck, Nell R.	Sedan, Kans.
Swain, Lottie	Brighton, Colo.
Swanson, Anna	Fruita, Colo.
Swanson, Elsie M.	Manhattan, Kans.
Sweet, Maude R.	Denver, Colo.
Swinehart, Blanche	Somerseset, Ohio
Swift, Jessie	Greeley, Colo.
Switzer, Ella S. (Mrs.)	Denver, Colo.
Tangerman, Alice	Rockville, Nebr.
Taylor, Audrey	Vinita, Okla.
Taylor, Edna	Loveland, Colo.
Taylor, Elizabeth	Siloam Springs, Ark.
Taylor, Laura	Craig, Colo.
Taylor, Lela	Trinidad, Colo.
Taylor, Mattie	Valdez, Colo.
Taylor, Vena	Siloam Springs, Ark.
Thichins, Thelma	Greeley, Colo.
Thomas, Addie N.	Wichita, Kans.
Thomas, Dora	Manzanola, Colo.

Thomas, Laura R.	Greeley,	Colo.
Thomas, Lelah	Ordway,	Colo.
Thompson, Elizabeth R.	Holyoke,	Colo.
Thompson, Josephine	Carbondale,	Colo.
Thompson, Lettie	Carbondale,	Colo.
Thompson, Lillian	Durango,	Colo.
Thompson, Marietta (Mrs.)	Boulder,	Colo.
Tilyou, Mable L.	La Salle,	Colo.
Timmons, Elizabeth	Lawton,	Okla.
Timmons, Mildred	Lawton,	Okla.
Tobey, Frances	Greeley,	Colo.
Torbit, Pauline Mary	Fountain,	Colo.
Trachsel, Bernice	Denver,	Colo.
Traylor, Ruby M.	Denver,	Colo.
Tredwell, Florence	Denver,	Colo.
Tressel, Jennie L.	Burlington,	Colo.
Tuck, Frederick	Greeley,	Colo.
Tucker, Jennie	Fort Morgan,	Colo.
Turcotte, Adelaide	Denver,	Colo.
Turnbull, Elizabeth	Hobart,	Okla.
Turner, Lena	Pueblo,	Colo.
Unger, John C.	Genoa,	Colo.
Ure, Frances M.	Greeley,	Colo.
Van Atta, Clara	Telluride,	Colo.
Van Atta, Mrs. W. B.	Telluride,	Colo.
Van Ullen, Lois	Edgewater,	Colo.
Vanwinkle, Grace I.	Cope,	Colo.
Vertress, Rhea	Greeley,	Colo.
Vezzetti, Antonette	Florence,	Colo.
Vezzetti, Mary T.	Canon City,	Colo.
Voeltz, Eva	Parkersburg, Ia.	
Vogel, Ida	Broomfield,	Colo.
Wagner, Clarence	Mead,	Colo.
Waldraven, Jean	Pueblo,	Colo.
Waldron, Mary G.	Leadville,	Colo.
Walek, Anna	Sterling,	Colo.
Walek, Mary	Sterling,	Colo.
Walker, Dexter B.	Denver,	Colo.
Walker, Erdeena	Hifi,	Colo.
Walker, Silvia	Sterling,	Colo.
Wallace, Alberta	Leadville,	Colo.
Wallace, Jessie	Leadville,	Colo.
Waller, Gretna	Denver,	Colo.
Waller, Marie	Lamar,	Colo.
Walter, Laura	Windsor,	Colo.
Walter, Mary E.	Greeley,	Colo.
Walters, Alice	Denver,	Colo.
Walton, Bettie	Hugo,	Okla.
Ward, Daniel	Rocky Ford,	Colo.
Ward, Elsie	Eaton,	Colo.
Ward, Maud	Eaton,	Colo.
Wardle, Mildred	Agate,	Colo.
Watkins, Alice	Muskogee,	Okla.
Watkins, Beulah	Muskogee,	Okla.
Watson, Effah May	Kiefer,	Okla.
Watson, Fern	Greeley,	Colo.
Watson, Olga	Fowler,	Colo.
Watterberg, Alice	Walden,	Colo.
Webb, Anna C.	Wichita,	Kans.
Webber, Helen	Creede,	Colo.
Weber, Mrs. Adelaide	Denver,	Colo.
Webster, Florence G.	Cascade,	Colo.
Webster, Lillian C.	Wichita,	Kans.
Weed, Helen	Leadville,	Colo.
Weed, J. F.	Rye,	Colo.
Weger, Lois	Edgewater,	Colo.
Weirick, Edna Genieve	Denver,	Colo.
Weisz, Ruby C.	Denver,	Colo.
Weld, Amy C.	Colorado Springs,	Colo.
Weller, William H.	Bennett,	Colo.
Werner, Emily	Colorado Springs,	Colo.
West, Helen	Denver,	Colo.
Wester, Ellen Mae	Chattanooga,	Tenn.
Westen, Georgia	Cedaredge,	Colo.
Weyerts, Freda	Vernango,	Nebr.
Wheaton, Lillie	Denver,	Colo.

Wheeler, Katherine	Greeley, Colo.
Whelpley, Dorothy	Fremont, Nebr.
White, Edna	Sterling, Colo.
White, Mable A.	Kendrick, Colo.
White, Mary Eleanor	Wellington, Kans.
Whiteley, Mona	Boulder, Colo.
Whiteman, Virgin	Greeley, Colo.
Whiteman, Bertha H.	Greeley, Colo.
Wichmann, Irene	Telluride, Colo.
Wiedmann, D. E.	Panora, Iowa
Wilder, George	Fort Collins, Colo.
Wiles, Jennie	Butler, Pa.
Wilkie, Anna C.	Longmont, Colo.
Williams, Hazel	Pueblo, Colo.
Williams, Mabel	Trinidad, Colo.
Williams, Sarah	Sterling, Colo.
Williams, Velma	Pryor, Colo.
Williams, Vida Ventres (Mrs.)	Pueblo, Colo.
Willson, Adam M.	Greeley, Colo.
Wilson, Edna	Purcell, Colo.
Wilson, Jessie M.	Denver, Colo.
Wilson, Lorena	Julesburg, Colo.
Wilson, Maude	Bennett, Colo.
Wilson, Mary S.	Greeley, Colo.
Winans, Ella K.	Longmont, Colo.
Wolfensberger, Alice	Castle Rock, Colo.
Wolfer, Dora	Fort Collins, Colo.
Wood, Lena	Griffith, Colo.
Woodley, Vera	Platteville, Colo.
Woods, Alberta	Pueblo, Colo.
Woodside, Eva	Fort Morgan, Colo.
Wrenn, Izetta	Siebert, Colo.
Wright, Cecil	La Junta, Colo.
Wright, Faye	Fremont, Nebr.
Wycoff, Merle	Cameron, Mo.
Yerion, Grace	Greeley, Colo.
Youberg, Lois	Denver, Colo.
Young, Chas. A.	Panora, Iowa
Young, Edith	Loveland, Colo.
Zilar, Bessie B.	La Salle, Colo.
Zilar, John I.	La Salle, Colo.
Zuech, Mary	Trinidad, Colo.

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Abdill, Jessie	Greeley, Colo.
Ackerman, Lloyd	Patterson, N. J.
Adams, Albert	Greeley, Colo.
Adams, Donald	Greeley, Colo.
Adams, Ella	Steamboat Springs, Colo.
Adams, Mary	Greeley, Colo.
Alexander, Lucille	Brighton, Colo.
Alexander, May	La Veta, Colo.
Allen, Florence	Grand Junction, Colo.
Allen, Grace	Montrose, Colo.
Allen, H. H.	Greeley, Colo.
Allen, Mary E.	Greeley, Colo.
Alles, Adam	Greeley, Colo.
Allman, Clifford	Keyser, Colo.
Ames, Winifred	Denver, Colo.
Anderson, Edna	Denver, Colo.
Anthony, Florine	Hudson, Colo.
Arkwright, Charlotte	Colorado Springs, Colo.
Arnold, Emily	Durango, Colo.
Atkenson, Mabel I.	Colorado Springs, Colo.
Austin, Muriel	Denver, Colo.
Babcock, Hazel	Colorado Springs, Colo.
Babcock, Helen	Trinidad, Colo.
Babcock, Orville G.	Berthoud, Colo.
Baker, Ada	Greeley, Colo.
Baker, W. L.	Mt. Hope, Kans.
Bakke, Ella	Sterling, Colo.
Banks, Leora	Alliance, Nebr.
Barber, Florence E.	Greeley, Colo.
Bardwell, Anna B.	Lake City, Colo.
Barnard, Gladys	Florence, Colo.
Barnhart, Irene	Greeley, Colo.
Barrows, Paul T.	Denver, Colo.
Barry, Ruth	Evans, Colo.
Bartels, Gertrude	Denver, Colo.
Bartholomew, Ione	Colorado Springs, Colo.
Bartholomew, Mrs. Mintie A.	Greeley, Colo.
Bateman, Mabel	Salida, Colo.
Baxter, Beulah	Greeley, Colo.
Baxter, Elizabeth	Trinidad, Colo.
Bayer, Mamie	Denver, Colo.
Bayles, Maud	Pagosa Springs, Colo.
Bean, Gertrude	Littleton, Colo.
Beck, Lillian	St. Onge, So. Dak.
Beer, Adeline	Greeley, Colo.
Benight, Cecile	Central City, Colo.
Bennett, Dorothy	Colorado Springs, Colo.
Bennett, Pearl	Palco, Kans.
Bible, Rose	Rawlins, Wyo.
Biebush, Beatrice	Greeley, Colo.
Billington, Emma	Pueblo, Colo.
Bispham, Anna Nutz	Colorado Springs, Colo.
Blake, Alta	Denver, Colo.
Blair, Clara	Norwood, Colo.
Blair, Kate	Norwood, Colo.
Blair, Margaret	Gill, Colo.
Blair, Minnie D.	Denver, Colo.
Boston, Ina	Elizabeth, Colo.
Bliss, Harriett I.	Boulder, Colo.
Boit, Bess	Minturn, Colo.
Bowman, Lena	Durango, Colo.
Bragg, Stella M.	Florence, Colo.
Branson, Gladys	Trinidad, Colo.
Brawley, Nell	Fort Morgan, Colo.
Briggs, Nellie	Pueblo, Colo.
Brodie, Frances	Denver, Colo.
Broman, Anna R.	Greeley, Colo.
Brooks, Mrs. Anna	Greeley, Colo.
Brooks, Bernice	Greeley, Colo.

Browning, Ethel	Denver, Colo.
Browning, Violet	Denver, Colo.
Brubaker, Irma	Haswell, Colo.
Bruce, Margaret	Cheyenne, Wyo.
Bruckner, Clara	Greeley, Colo.
Bruckner, Grace	Greeley, Colo.
Brunton, Jessie	Fort Collins, Colo.
Bryant, Nettie	Pagosa Springs, Colo.
Bryson, Cleo	Fort Morgan, Colo.
Buchanan, Effie	Hot Springs, Colo.
Buchert, Louise	Greeley, Colo.
Buck, Nellie	Rifle, Colo.
Buck, Vera H.	Greeley, Colo.
Budd, Ruth	Delta, Colo.
Bunker, Ada	Greeley, Colo.
Burch, Mrs. Emma B.	Denver, Colo.
Burfield, Gail	Rocky Ford, Colo.
Burgess, Louise M.	Colorado Springs, Colo.
Burke, Grace E.	Denver, Colo.
Burke, Lulu G.	Denver, Colo.
Cadwell, Gladys	Canon City, Colo.
Caldwell, Hester	Denver, Colo.
Calkins, Savilla	Greeley, Colo.
Callahan, Catherine	Louisville, Colo.
Campbell, Vera	Wellington, Colo.
Candlin, Percy	Greeley, Colo.
Carlson, Anna Otilia	Greeley, Colo.
Carlson, Rose M.	Denver, Colo.
Carrel, Mary	Platteville, Colo.
Carson, Alma	Longmont, Colo.
Carter, Arthur B.	Greeley, Colo.
Carter, Albert F.	Greeley, Colo.
Cary, Sue M.	Chicago, Ill.
Casey, Veronica	Denver, Colo.
Castle, Edith	Delta, Colo.
Caverly, Edna	Fort Collins, Colo.
Champion, Edith	Arvada, Colo.
Chambers, Mrs. Maude	Alva, Okla.
Chaplin, Ruth	Cheyenne, Wyo.
Chase, Margaret	Boulder, Colo.
Cheek, Emma E.	La Salle, Colo.
Cheney, Lucy	Fairplay, Colo.
Child, Camille	Fountain, Colo.
Close, Vera	Longmont, Colo.
Clough, Edwene	Greeley, Colo.
Clough, Gertrude	Greeley, Colo.
Cochran, Mabel	Wright, Iowa
Coffey, Katherine	Denver, Colo.
Colegrove, Rosa	Great Bend, Kans.
Converse, Barbara	Pueblo, Colo.
Corlett, Abbie	Monte Vista, Colo.
Corlett, Maude	Monte Vista, Colo.
Corsberg, Esther	Kersey, Colo.
Coryell, Jesse	Marble, Colo.
Coverston, Helen H.	Denver, Colo.
Cox, Grace	Cripple Creek, Colo.
Craig, Edna	Denver, Colo.
Crayton, Lily	Greeley, Colo.
Craze, Hyacinth	Greeley, Colo.
Crie, Frank	Rock Springs, Wyo.
Crist, Alma	Georgetown, Colo.
Critzler, Ruth	Pueblo, Colo.
Crosby, Jean	Denver, Colo.
Cummings, Mildred G.	Florence, Colo.
Cummins, Mary	Durango, Colo.
Cunningham, Alice	Colorado Springs, Colo.
Curtiss, Frances	Paonia, Colo.
Curtis, Hazel	Saguache, Colo.
Curtis, Ruth	Saguache, Colo.
Dahlgren, Alice	Eaton, Colo.
Dakens, Irma Margaret	Colorado Springs, Colo.
Dauth, Louise	Greeley, Colo.
Davis, Edna	Holly, Colo.
Davis, Bess	Westcliffe, Colo.
Davis, John E.	Greeley, Colo.
Della, Josephine	Avon, Colo.
Dempewolf, Jennie	La Salle, Colo.

Desky, Catherine	Brush, Colo.
DeVinney, Ruth	Evans, Colo.
Dewey, Jane	Goldfield, Colo.
Dillingham, Mrs. Marion	Boston, Mass.
Dillon, Thomas	Greeley, Colo.
Downes, Irma	Golden, Colo.
Drummond, Mrs. Mary	Winnepeg, Can.
Dugger, Della I.	Bristol, Colo.
Dukes, Olive	Colorado Springs, Colo.
Dumas, Iris	Gilman, Colo.
Dunn, Cascadia	Brighton, Colo.
Durkee, Neill H.	Greeley, Colo.
Durning, Bertha	Greeley, Colo.
Edgerton, Iva	Carbondale, Colo.
Edmundson, Ruth	Littleton, Colo.
Edwards, Cordelia	Brighton, Colo.
Edwards, Grace E.	Pueblo, Colo.
Elam, Velma	Greeley, Colo.
Eldredge, Bernice	Greeley, Colo.
Ellis, Dorothy	Denver, Colo.
Eliason, Clarence	Sterling, Colo.
English, Lillian	Greeley, Colo.
Elmer, Colgate	Greeley, Colo.
Enright, Helen	Ingersoll, Can.
Epple, Florence	Foggen, Colo.
Erdbruegger, Elsa	Greeley, Colo.
Erickson, Ruth	Greeley, Colo.
Evans, Elsie	Elizabeth, Colo.
Everitt, Elva	Denver, Colo.
Everett, Lodice	Colorado Springs, Colo.
Farrelly, Clara	Denver, Colo.
Ferguson, Ruth	Eckert, Colo.
Fish, C. E.	Pueblo, Colo.
Fish, Florence	Pueblo, Colo.
Fisher, Mrs. Otto	Georgetown, Colo.
Fisher, Virginia	Georgetown, Colo.
Fleming, Bernice	Denver, Colo.
Fleming, Edna	Denver, Colo.
Flowers, Beulah	Fort Collins, Colo.
Foley, Ruth	Greeley, Colo.
Forsythe, Ethel	Dover, Colo.
Fowler, Alice	Cripple Creek, Colo.
Fox, Mrs. Lottie	Greeley, Colo.
Frear, Caroline	Golden, Colo.
Freed, Ruth	Castle Rock, Colo.
Frink, Hazel	Denver, Colo.
Fugate, Mrs. Emma	Plymouth, Ill.
Gage, Ethel M.	Leadville, Colo.
Gallup, Ruth	Denver, Colo.
Garchar, Anna	Greeley, Colo.
Gardner, Laura M.	Kersey, Colo.
Gerkin, Marie	Carbondale, Colo.
Gerstle, Regina	Aspen, Colo.
Gibson, Grace	Denver, Colo.
Gildea, Mary	Leadville, Colo.
Gill, Helen	Fort Morgan, Colo.
Gillett, Vera	Atlantic, Iowa
Gilligan, Pearl A.	Denver, Colo.
Gilpin-Brown, Mrs. Helen	Greeley, Colo.
Gilmour, Mary E.	Fort Collins, Colo.
Girvan, Mina	Greeley, Colo.
Glazier, Winifred	Greeley, Colo.
Gleeson, Anna	Greeley, Colo.
Gloystein, Hope	Hastings, Colo.
Golze, Clyde	Greeley, Colo.
Goodman, Catherine	Greeley, Colo.
Goodwin, Hazel	Greeley, Colo.
Gordon, Sarah W.	Anaconda, Mont.
Gorman, Helen	Lamar, Colo.
Graham, Katherine	Cripple Creek, Colo.
Gray, Mamie	Pueblo, Colo.
Gray, Beth	Colorado Springs, Colo.
Gray, Ruth	Denver, Colo.
Green, Mrs. Anna Scheffler	Greeley, Colo.
Green, Jenny L.	Denver, Colo.
Green, Myrtle	Greeley, Colo.

Greenlee, Ethel	Goodrich,	Colo.
Griffiths, Katherine	Canon City,	Colo.
Grimm, Katherine	Plateau City,	Colo.
Grindle, Beulah D.	Colorado Springs,	Colo.
Griss, Eda	Fairplay,	Colo.
Guiraud, Emma	Aurora,	Nebr.
Gunnison, Esther	Aurora,	Nebr.
Hall, Grace E.	Greeley,	Colo.
Hall, Kathryn	Denver,	Colo.
Hall, Sibbel K.	Denver,	Colo.
Hallberg, Ida	Idaho Springs,	Colo.
Hammond, Louise	Glenwood Springs,	Colo.
Hanna, Cornelia	Greeley,	Colo.
Hanno, Charlotte	Durango,	Colo.
Hanson, Nita	Eckert,	Colo.
Hanson, Viola	Arvada,	Colo.
Harbison, Mildred	Pueblo,	Colo.
Harbottle, Mrs. Florence E.	Greeley,	Colo.
Hardenbergh, Hilda	Greeley,	Colo.
Hardenburg, Norma	Fort Lupton,	Colo.
Harker, Annie	Florissant,	Colo.
Harris, Luella	Eagle,	Colo.
Hartford, Helen	Berthoud,	Colo.
Hartman, Marguerite	Alamosa,	Colo.
Hartman, Naomi	Clafin,	Kans.
Hatch, Mrs. Harry	Beloit,	Colo.
Hatfield, Mrs. Magdalin	Creede,	Colo.
Hawthorne, Rebecca	Colfax,	Ill.
Hayes, James H.	Fletcher,	Okla.
Hays, Harold	Greeley,	Colo.
Heale, Florence M.	Greeley,	Colo.
Heckert, Mabel	Olathe,	Colo.
Hedeen, Alice	Denver,	Colo.
Helm, Marguerite	La Junta,	Colo.
Helm, Marion F.	La Junta,	Colo.
Hemmingway, Ruth	Erie,	Colo.
Henderson, Ethel	Lucerne,	Colo.
Henry, Martha	Greeley,	Colo.
Herndon, Ruby	Norwood,	Colo.
Herrick, Anita	Denver,	Colo.
Hewitt, Clara	Colorado Springs,	Colo.
Hickman, Luther	Greeley,	Colo.
Hicok, Nancy Ebert	Cheyenne,	Wyo.
Higgins, Gladys	Eaton,	Colo.
Hikes, Linnie T.	Greeley,	Colo.
Histed, Ruth	University Park,	Colo.
Hodgin, Lena	Canon City,	Colo.
Hollister, Katherine B.	Pueblo,	Colo.
Holloway, Adeline	Denver,	Colo.
Hoon, Helen	Colorado Springs,	Colo.
Hooven, Mary Eleanor	Denver,	Colo.
Hopkins, Wallace	Greeley,	Colo.
Horner, Irene	Peltz,	Colo.
Horning, N. O.	Greeley,	Colo.
Housman, Virginia	Pueblo,	Colo.
Howard, Lavinia	Denver,	Colo.
Howarth, Erwin	Greeley,	Colo.
Howarth, Ralph	Greeley,	Colo.
Howe, Nolan	Canon City,	Colo.
Hudner, Mildred	Greeley,	Colo.
Hudnut, Nina	Denver,	Colo.
Huffman, Murl	Colorado Springs,	Colo.
Hunt, Neva M.	Denver,	Colo.
Hunt, Raymon H.	Greeley,	Colo.
Hunter, Margaret	Denver,	Colo.
Hurley, Ethel	Blanca,	Colo.
Hutchinson, Katherine	Brighton,	Colo.
Isom, Grayce	Brush,	Colo.
Jackson, Lois	Denver,	Colo.
Jacobs, Charlotte M.	Denver,	Colo.
Jay, Nelle	La Salle,	Colo.
Jefferies, Bernice	Hillrose,	Colo.
Jennings, Mary	Wray,	Colo.
Johnson, Alma	Cheyenne,	Wyo.
Johnson, Alta	Akron,	Colo.
Johnson, Augusta	Briggsdale,	Colo.

Johnson, Bevie	Greeley, Colo.
Johnson, Jessie	Barnum, Wyo.
Johnson, Laura	Denver, Colo.
Johnson, Shirley	Greeley, Colo.
Johnston, Ethel	Fort Morgan, Colo.
Johnston, Florencece	Loveland, Colo.
Jones, Carl	Greeley, Colo.
Jones, Lura	Berthoud, Colo.
Joseph, Beatrice	Cripple Creek, Colo.
Judson, Mrs. Beulah Lea	Greeley, Colo.
Kane, Katherine	Burlington, Colo.
Karlson, Lottie	Gothenburg, Nebr.
Kelly, Eileen	Mancos, Colo.
Kelly, Gladys	Greeley, Colo.
Kennedy, Anna	Hot Sulphur Springs, Colo.
Kennedy, Bessie	Louisville, Colo.
Kennedy, Jennie	Okmulgee, Okla.
Keyes, Margaret J.	Greeley, Colo.
Kidder, Ethel	Denver, Colo.
Kimball, Phyllis	Greeley, Colo.
Kimbley, Orville	Greeley, Colo.
Kindred, Roy	Greeley, Colo.
King, C. Harold	Denver, Colo.
King, Kathryn	Denver, Colo.
Kinney, Mathew B.	Greeley, Colo.
Kirkland, Nellie	Armel, Colo.
Kirkpatrick, Sadie	Albion, Nebr.
Klein, Caddie	Greeley, Colo.
Knight, Nellie	Lucerne, Colo.
Kohen, Nora	Boulder, Colo.
Konkel, O. G.	Evans, Colo.
Kouns, Zella	Fowler, Colo.
Kussart, Jeanette	Greeley, Colo.
Kyle, Veda	Greeley, Colo.
Latas, Carolyn	Colorado Springs, Colo.
Latronico, Mary	Louisville, Colo.
Lawler, Jacqueline	Aspen, Colo.
Laws, Irene	Denver, Colo.
Layton, Mrs. Nellie B.	Greeley, Colo.
Lee, Homer J.	Boulder, Colo.
Lefler, Grace	Bentley, Mich.
Lehman, Margaret	Victor, Colo.
LeMaster, Gladys	Colorado Springs, Colo.
Leonard, Gene	Pueblo, Colo.
Levell, Josephine S.	Victor, Colo.
Lewis, Adele	La Salle, Colo.
Lockhart, Lee	Greeley, Colo.
Lodwick, Bryan	Greeley, Colo.
Loper, Carrie	Montrose, Colo.
Logan, Ruth C.	Denver, Colo.
Love, Josephine	Colorado Springs, Colo.
Lovelady, Pearl	Fort Lupton, Colo.
Loveland, Ethel	Loveland, Colo.
Lowe, Florence	Greeley, Colo.
Lowenhagen, Elsie	Fruita, Colo.
Lyons, Anna B.	Denver, Colo.
Lyons, Florence	Hotchkiss, Colo.
MacLeod, Bernice	Greeley, Colo.
MacMillan, Ethel M.	Pueblo, Colo.
Madison, Harriet	Greeley, Colo.
Magor, Iris	Rifle, Colo.
Markle, Hazel	La Salle, Colo.
Markley, Bertha	Olathe, Colo.
Marron, Bernice	Denver, Colo.
Martinson, Emma	Lamar, Colo.
Mason, Luella	Denver, Colo.
Matson, Edna A.	Greeley, Colo.
Matthews, William R.	Marion, Ill.
Maxey, Effie H.	St. Louis, Mo.
Maxwell, Mrs. Ernestine	Fort Morgan, Colo.
McAleer, Elena	Victor, Colo.
McBee, Mary	Florence, Colo.
McClure, Ruby	Loveland, Colo.
McCune, Letha	Greeley, Colo.
McCunniff, John T.	Greeley, Colo.
McCutcheon, Frances	Greeley, Colo.

McCutcheon, Marjorie	Greeley, Colo.
McDaniel, Emable.....	Rocky Ford, Colo.
McGahan, Edith	Fruita, Colo.
McGirr, Lucy	Pagosa Springs, Colo.
McGuckin, Irene	Denver, Colo.
McKee, Genevieve	Denver, Colo.
McKelvey, Macy	Greeley, Colo.
McLane, Lucy N.	Greeley, Colo.
McLaughlin, Agnes	Trinidad, Colo.
McLaurin, Mary M.	Jacksonville, Fla.
McMenamin, Fay	Telluride, Colo.
McMurtry, Elithe	Holly, Colo.
McNee, Harriett	Greeley, Colo.
McNeel, Maybell G.	North Platte, Nebr.
McNutt, Sarah A.	Silverton, Colo.
Meacham, Hazel	Salida, Colo.
Menard, Mary	Denver, Colo.
Merriam, Ruth	Canon City, Colo.
Merryfield, Esther	Fowler, Colo.
Meyers, Rosa V.	Denver, Colo.
Miles, Helen Dean.	Denver, Colo.
Milholland, Fredonia	Kelly, Colo.
Miller, Evelyn	Ft. Lupton, Colo.
Miller, Katrine	Rawlins, Wyo.
Miller, Lucy	Cripple Creek, Colo.
Miller, Maggie	Denver, Colo.
Minns, Effie	Evans, Colo.
Mitchell, Paul	Greeley, Colo.
Mitchell, Pearl	Florence, Colo.
Monical, Doska	Pueblo, Colo.
Morgan, Alice	Denver, Colo.
Morris, Gertrude	Loveland, Colo.
Morrison, Mary	Colorado City, Colo.
Morrison, Walter	Greeley, Colo.
Mott, Alfonse	Greeley, Colo.
Moyer, Bernice J.	Sopris, Colo.
Munroe, Marcele	Victor, Colo.
Muntzing, Gindotta	Akron, Colo.
Murphy, Edna	Greeley, Colo.
Myers, Elizabeth	Monte Vista, Colo.
Naeve, Clara E.	Louisville, Colo.
Nankervis, Leota	Idaho Springs, Colo.
Naylon, Bernice	Pueblo, Colo.
Neeland, Mary	Greeley, Colo.
Neil, Jennie	Boulder, Colo.
Nelson, Gertrude	Loveland, Colo.
Neutz, John	Greeley, Colo.
Neville, Anne	Boulder, Colo.
Néwsome, Ruth	Colorado Springs, Colo.
Nichols, Stella	Eckert, Colo.
Nielsen, Ora	Oxford, Nebr.
Nims, Mrs. Lillian	Greeley, Colo.
Noble, Iva	Thomasville, Colo.
Nordstrom, Olga	Grand Valley, Colo.
Nye, Faye	Pierce, Colo.
O'Brien, Gladys	Colorado City, Colo.
O'Connor, Agnes L.	Cripple Creek, Colo.
O'Kelly, Kathleen	Telluride, Colo.
Oldfather, Carrie	Loveland, Colo.
Oliver, Luella	Toulon, Ill.
Onstein, Geraldine	Greeley, Colo.
Organ, Bertha	Rico, Colo.
Oster, Martha	Gilcrest, Colo.
Ouverson, Ora	Festil, Ia.
Paden, Grace	Carr, Colo.
Paden, Mary	Greeley, Colo.
Page, Helen	Greeley, Colo.
Pancake, Florence	Berthoud, Colo.
Parker, Mrs. Bruce	Boulder, Colo.
Parker, Opal	Greeley, Colo.
Parker, Palmer A.	Greeley, Colo.
Parsons, Alice	Denver, Colo.
Patterson, Jessie	Pueblo, Colo.
Pearce, Ruth	Grand Junction, Colo.
Pearson, Esther	Lafayette, Colo.
Peck, Caryl G.	Limon, Colo.

Peck, Elvira.....	Grand Junction,	Colo.
Peck, Ruby L.....	..... Limon,	Colo.
Pelta, Helen.....	..... Buena Vista,	Colo.
Pengra, Ray F.....	..... Buffalo Gap, N.	Nak.
Perry, Edith.....	..... Braymer,	Mo.
Peters, Grace A.....	..... Ft. Morgan,	Colo.
Peters, Leona.....	..... Longmont,	Colo.
Peterson, Mrs. Eugenia.....	..... Lusk,	Wyo.
Peterson, Alice.....	..... Greeley,	Colo.
Petticrew, Abbie.....	..... Edgewater,	Colo.
Petit, Avis.....	..... Anita,	Colo.
Phillips, Edith.....	..... Oktaha,	Okla.
Phippeny, G. O.....	..... Greeley,	Colo.
Pickett, Blanche.....	..... Platteville,	Colo.
Pierce, Fanny.....	..... Powder Horn,	Colo.
Pingrey, Jennie.....	..... Estherville,	Iowa
Piper, Grace.....	..... Colorado Springs,	Colo.
Pixler, Donova.....	..... Cripple Creek,	Colo.
Porter, Harriet.....	..... Ault,	Colo.
Porter, Virginia.....	..... Collbran,	Colo.
Power, Alice.....	..... Pueblo,	Colo.
Priddy, Roy.....	..... Pierce,	Colo.
Proctor, Mildred.....	..... Bellvue,	Colo.
Prunty, Iona E.....	..... Greeley,	Colo.
Pughe, Charlotte.....	..... Boulder,	Colo.
Quigley, Anna M.....	..... Ellensburg, Wash.	
Quinn, Alice.....	..... Kenosha,	Wis.
Ramsay, Bernice.....	..... Greeley,	Colo.
Ramsay, Edith.....	..... Twin Falls,	Idaho
Randall, Bertha.....	..... Fort Collins,	Colo.
Randol, Josephine Ruth.....	..... Salida,	Colo.
Ransdell, Gladys.....	..... Greeley,	Colo.
Rardin, Florence.....	..... Colorado Springs,	Colo.
Rauscher, Kathrine.....	..... Berlin, Germany	
Rayl, Blanche.....	..... Pueblo,	Colo.
Ray, Zoe.....	..... Lamar,	Colo.
Rea, Inez G.....	..... Lucerne,	Colo.
Reece, Genevieve.....	..... Columbus, Nebr.	
Reed, Erika.....	..... Cripple Creek,	Colo.
Reed, Truman G.....	..... Lucerne,	Colo.
Reese, Benita.....	..... Longmont,	Colo.
Reitzel, Ferne.....	..... Colorado Springs,	Colo.
Reynolds, Naomi.....	..... Denver,	Colo.
Rhiner, Ethelwyn.....	..... Greeley,	Colo.
Rhodes, Esther.....	..... Leadville,	Colo.
Rice, Marjorie.....	..... Boulder,	Colo.
Richardson, LoElla.....	..... Holly,	Co.o.
Richey, Anna L.....	..... Ault,	Colo.
Richey, Ethel.....	..... Ault,	Colo.
Ricketts, Elizabeth.....	..... Boulder,	Colo.
Riley, Stanley.....	..... Greeley,	Colo.
Ringle, Helen.....	..... Greeley,	Colo.
Roach, Marie.....	..... Cripple Creek,	Colo.
Roark, Edna.....	..... Hahns Park,	Colo.
Robb, Gladys.....	..... Cedar Rapids,	Colo.
Robinson, Helen.....	..... Holly,	Colo.
Robinson, Margaret.....	..... Denver,	Colo.
Robinson, Rachel C.....	..... Fort Collins,	Colo.
Roche, Mary.....	..... Colorado Springs,	Colo.
Rodda, Marguerite.....	..... Arvada,	Colo.
Rodgers, Blanche.....	..... La Salle,	Colo.
Ross, A. B.....	..... Sedan, Kans.	
Rowen, Gladys.....	..... Longmont,	Colo.
Rowe, Mabel.....	..... Greeley,	Colo.
Rundquist, Winona.....	..... Colorado Springs,	Colo.
Russell, Helen Gould.....	..... Manzanola,	Colo.
Saathoff, W. H.....	..... Bijou View,	Colo.
Salberg, Eleanor.....	..... Boulder,	Colo.
Samples, Nelle.....	..... Brush,	Colo.
Sandine, Agnes R.....	..... Denver,	Colo.
Sandberg, Edith.....	..... Omaha, Nebr.	
Sargent, Lela.....	..... Smith Center, Kans.	
Sawyer, Irene N.....	..... Greeley,	Colo.
Scanlan, Alice.....	..... Aspen,	Colo.
Schoonmaker, Louise.....	..... Greeley,	Colo.
Scotland, May.....	..... Denver,	Colo.

Seldomridge, Julia Etta	Colorado Springs, Colo.
Sharpnach, Hazel	Fowler, Colo.
Shattuck, Dorothy	Eaton, Colo.
Shattuck, Marian	Eaton, Colo.
Shawhan, Clarabel	Greeley, Colo.
Shelburn, Bessie	Greeley, Colo.
Shepard, Marian	Beaverdam, Wis.
Sherar, Ethel S.	Rochester, N. Y.
Sherman, Mary Olive	Trinidad, Colo.
Shifflett, Blanche	Cambridge, Nebr.
Shillady, Miriam	Greeley, Colo.
Shriber, Esther	Greeley, Colo.
Shultis, Lorraine	Greeley, Colo.
Shultis, Mabel	Greeley, Colo.
Sibley, Mrs. Bella B.	Greeley, Colo.
Simpson, Lettle	Colorado City, Colo.
Skinner, C. C.	Colorado Springs, Colo.
Skinner, Mary E.	Chicago, Ill.
Smiley, Helena	Manzanola, Colo.
Smith, Clara Hays	Pueblo, Colo.
Smith, Edith	Greeley, Colo.
Smith, Eleonore P.	Greeley, Colo.
Smith, Flora Alice	Glenwood Springs, Colo.
Smith, Gratia Hyde	Boulder, Colo.
Smith, Hazel	Pueblo, Colo.
Smith, Helen R.	Florence, Colo.
Smith, Katherine	Greeley, Colo.
Smith, Martha	Greeley, Colo.
Smith, Mary Olive	Greeley, Colo.
Smith, Mildred	Louisville, Colo.
Smith, Miriam	Greeley, Colo.
Smith, Rena L.	Denver, Colo.
Smith, Sadie	Arvada, Colo.
Smith, Vivian	Aurora, Colo.
Smith, Sybil	Aurora, Colo.
Sonner, Verna	Cokedale, Colo.
Sprague, Isa	Greeley, Colo.
Stanforth, Delah	Denver, Colo.
St. Clair, Mary	Longmont, Colo.
Stephens, Edith F.	Greeley, Colo.
Stevens, Dorothy	Drake, Colo.
Stewart, Eugene	Golden, Colo.
Stewart, Mildred	Paonia, Colo.
Stimson, Helen	Greeley, Colo.
Stodghill, Corinne	Greeley, Colo.
Stodghill, Gilbert	Greeley, Colo.
Stone, Geneva	Eaton, Colo.
Stone, Hattie	Greeley, Colo.
Stone, Lulu	Denver, Colo.
Stoneking, Lorena	Magdalena, N. M.
Strawbridge, Vera	Aspen, Colo.
Stout, Opal	Paonia, Colo.
Strong, Etta	Greeley, Colo.
Strong, Florence	Greeley, Colo.
Stryker, Grace	Brush, Colo.
Sullivan, Grace	Olathe, Colo.
Sumner, George Elsworth	Greeley, Colo.
Svedman, Anne	Windsor, Colo.
Swope, Mildred	Colorado Springs, Colo.
Tandy, Edna	Greeley, Colo.
Taylor, Abbie L.	Bayfield, Colo.
Taylor, Alice	Louisville, Colo.
Taylor, Edith	Boulder, Colo.
Taylor, Laura	Craig, Colo.
Taylor, Mattie	Valdez, Colo.
Taylor, Opal	Denver, Colo.
Taylor, Ruth	Boulder, Colo.
Temple, Juanita	Johnstown, Colo.
Tennis, Marguerite	Oskaloosa, Iowa
Tepley, Pete	Galena, Nebr.
Thickins, Thelma	Greeley, Colo.
Thomas, Carrie	Canon City, Colo.
Thomas, Mary Ann	Trinidad, Colo.
Tinch, Mildred	Colorado Springs, Colo.
Tobey, Frances	Greeley, Colo.
Toplitzky, Sadia	Greeley, Colo.
Torbit, Pauline	Denver, Colo.
Towie, Elizabeth	Fontain, Colo.
	Henderson, Colo.

Townsend, Beryl	Greeley, Colo.
Tracey, Irene	Leadville, Colo.
Travis, Marion	Fort Collins, Colo.
Tredwell, Florence	Detroit, Mich.
Trent, Gertrude	Pueblo, Colo.
Turner, Clara	Greeley, Colo.
Turner, Elmer	Greeley, Colo.
Turner, Mae	Walsenburg, Colo.
Turney, Mary E.	Golden, Colo.
Tyler, Mildred	Pueblo, Colo.
Tyrrell, Florence	Arvada, Colo.
Tyvold, Helen	Laramie, Wyo.
Van Atta, Clara	Telluride, Colo.
Vanderlip, Verner V.	Greeley, Colo.
Vandiveer, Maude	Ridgway, Colo.
Van Gorder, Gladys	Greeley, Colo.
Van Winkle, Grace I.	Cope, Colo.
Veal, Olive	Aspen, Colo.
Vertress, Rhea	Greeley, Colo.
Vickers, Florence G.	Colorado Springs, Colo.
Von Rucan, Elsa	Denver, Colo.
Walek, Anna	Sterling, Colo.
Walker, E. A.	Lyndon, Kans.
Waller, Marie	Lamar, Colo.
Walter, Lavernia	Windsor, Colo.
Walter, Nellie	Greeley, Colo.
Walters, Alice	Denver, Colo.
Warberg, Anna	Loveland, Colo.
Water, Gladys	Colorado Springs, Colo.
Watson, Mrs. H. C.	Greeley, Colo.
Watson, Iva C.	Fort Collins, Colo.
Watson, Rozina	Norwood, Colo.
Webber, Edgar	Greeley, Colo.
Weber, Mrs. Adelaide	Denver, Colo.
Weidman, Blanche	Greeley, Colo.
Weidman, Vera	Greeley, Colo.
Weller, William H.	Bennett, Colo.
Welsh, Edna F.	Greeley, Colo.
Werner, Emily	Harrisburg, Pa.
Wester, Ellen May	Chattanooga, Tenn.
Westen, Georgia	Cedaredge, Colo.
Weyerbacher, Lois	Boulder, Colo.
Wharton, Carrie	Cripple Creek, Colo.
Wheaton, Anna A.	Fort Collins, Colo.
Wheaton, Esther A.	Fort Collins, Colo.
Wheeler, Alice	Bayfield, Colo.
White, Esther L.	Norwood, Colo.
White, Hazel	Sterling, Colo.
White, J. B.	Greeley, Colo.
Whitehead, Josephine	Denver, Colo.
Whitman, Bertha H.	Greeley, Colo.
Wichman, Irene	Telluride, Colo.
Wickstrum, Ethel	Colorado Springs, Colo.
Wilkie, Anna C.	Longmont, Colo.
Will, Dorothy	McArthur, Ohio
Williams, Loma	Alamosa, Colo.
Williams, Frances	Greeley, Colo.
Williams, Hazel	Pueblo, Colo.
Willson, Lois	Greeley, Colo.
Wilson, Bertha	Denver, Colo.
Wilson, Edna	Purcell, Colo.
Wilson, Florence	Paonia, Colo.
Wilson, Grace	Greeley, Colo.
Wilson, Isabel	Trinidad, Colo.
Wilson, Martha	Denver, Colo.
Wilson, Stella	Erie, Colo.
Woland, Julia	Greeley, Colo.
Wolfe, Lily	Loveland, Colo.
Wolfe, Raymond	Greeley, Colo.
Wolfe, Rose	Loveland, Colo.
Wood, Cora V.	Florence, Colo.
Wolf, Mabel	Greeley, Colo.
Wyekoff, Dorothy	Cameron, Mo.
Young, Mildred M.	Denver, Colo.
Youberg, Lois	Denver, Colo.
Yourd, Paul H.	Greeley, Colo.
Yust, Dorothy	Kremmling, Colo.

NON-RESIDENT STUDENTS

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Ahlberg, Ingrid	Mosca, Colo.
Alderson, Harriet A.	Eaton, Colo.
Alexander, Mae.	La Veta, Colo.
Allan, Margaret	Ludlow, Colo.
Allen, Mrs. Myrtle Camp.	Gypsum, Colo.
Anderson, May	Fort Collins, Colo.
Anderson, Ruth L.	Denver, Colo.
Anthony, Florine	Hudson, Colo.
Augustin, Mabel	Albion, Idaho
Bachman, Rosa E.	Akron, Colo.
Baird, Nellie	Trinidad, Colo.
Baker, Frances S.	Weldona, Colo.
Baker, W. E.	Trinidad, Colo.
Ball, Minnie B.	Amherst, Mass.
Banda, Edith M.	Denver, Colo.
Barnes, Abbie C. (Mrs.)	St. Joseph, Mo.
Barnes, Frances	Trinidad, Colo.
Barret, Mary	Trinidad, Colo.
Beattie, Nettie	Sterling, Colo.
Bechtolt, Nora	Nunn, Colo.
Bennet, Edna	Greenland, Colo.
Bickett, Mabel	Trinidad, Colo.
Biggerstaff, Jessie	Trinidad, Colo.
Blagg, Blanche	Neosho Falls, Kans.
Bond, Margaret.	Idaho Springs, Colo.
Booth, Florence (Mrs.)	Pueblo, Colo.
Bourke, E. U.	Denver, Colo.
Bowman, Emily	Matheson, Colo.
Bowman, Inda F.	Austin, Colo.
Boyle, Helen	Trinidad, Colo.
Bradford, Lenore	Boulder, Colo.
Bradley, Hazel M.	Trinidad, Colo.
Brainard, F. E.	Denver, Colo.
Briggs, James A.	Moffat, Colo.
Brunner, Ruth	Johnstown, Colo.
Bryson, Mrs. R. L.	Rocky Ford, Colo.
Burks, Arthur L.	Holdenville, Okla.
Butcher, Carol C. (Mrs.)	Livermore, Colo.
Butler, Effie	Estes Park, Colo.
Butler, Helen	Estes Park, Colo.
Cain, Florence	Lamar, Colo.
Cain, Leona	Lamar, Colo.
Calloway, A. B.	Newton, Kans.
Campbell, Eva	Denver, Colo.
Carlson, Eloise	Pueblo, Colo.
Carmichael, Helen	Pueblo, Colo.
Carman, Edith B.	Grand Junction, Colo.
Carter, Ruth	Paonia, Colo.
Casey, Kathryn	Trinidad, Colo.
Cash, Mildred	Pinon, Colo.
Cash, Ranc	Pinon, Colo.
Caverly, Edna.	Fort Collins, Colo.
Clark, Nora	Trinidad, Colo.
Coghlan, Kathleen	Pueblo, Colo.
Collins, F. W.	Fort Morgan, Colo.
Collins, F. W. (Mrs.)	Fort Morgan, Colo.
Collins, Mary	Denver, Colo.
Conboy, Irene	Denver, Colo.
Conesny, Hero L.	Denver, Colo.
Copeland, Ada B.	Grand Junction, Colo.
Crawford, Ethel D.	Denver, Colo.
Crenshaw, Kate	Maysville, Mo.
Crie, Robert R.	Rock Springs, Wyo.
Crocker, Martha E.	Niwot, Colo.
Czaplinski, Lydia	Caldwell, Kans.

Dalton, Lillian	Pueblo, Colo.
Damon, J. G.	Kanopolis, Kans.
Davis, Ruth	Pinon, Colo.
Davison, Pearl	Grand Valley, Colo.
Deitrich, Carrie	Monte Vista, Colo.
Denno, Helen	Akron, Colo.
Diggs, Charles A.	Kirkland, Texas
Donahue, Jessie	Pueblo, Colo.
Donnelly, Celeste	Sterling, Colo.
Dunn, Elsie	Des Moines, Iowa
Duray, Minnie	Denver, Colo.
Dyer, Mrs. Josephine S.	Louisville, Colo.
Eagleton, W. H.	Denver, Colo.
Earhart, Nell R.	Aztec, N. M.
Ebner, George	Placerville, Colo.
Eckert, Elizabeth	Trinidad, Colo.
Elliott, Nellie	Salida, Colo.
Engels, Bernice	Sterling, Colo.
Estus, Mrs. Mary M.	Fort Morgan, Colo.
Farnsworth, Mrs. Mary	Fort Morgan, Colo.
Finch, J. F.	Bennington, Kans.
Fisher, Mabel	Rye, Colo.
Fisher, Tina	Weston, Colo.
Fitzmorris, Mrs. Elvira	Barnesville, Colo.
Fleckenstein, Felicia	Telluride, Colo.
Fluharty, Ada	Eureka, Colo.
Foss, Mrs. Mary	Salida, Colo.
Gage, Ethel M.	Leadville, Colo.
Gaunett, Anne	Dawson, N. M.
Gibbs, Elizabeth	La Junta, Colo.
Gigax, Agnes	Grand Junction, Colo.
Gigax, Minnie	Grand Junction, Colo.
Gill, Elizabeth	St. Louis, Mo.
Glassey, Gertrude	Fort Morgan, Colo.
Glassey, Mrs. Helen F. R.	Fort Morgan, Colo.
Godfrey, Maude C.	Trinidad, Colo.
Goodin, Ella	Windsor, Mo.
Gordon, Wildar	Pueblo, Colo.
Gosage, Thelma	Sterling, Colo.
Griest, Anna L.	Pueblo, Colo.
Hall, Luella A.	Colorado Springs, Colo.
Hamilton, Elsie B.	Gilcrest, Colo.
Hamilton, Nellie	Denver, Colo.
Hannahs, Ada B.	Denver, Colo.
Hansen, Norma	Denver, Colo.
Harmless, Edith	Telluride, Colo.
Harmonson, Nettie	Norton, Kans.
Harris, Ruth	Akron, Colo.
Haslett, Elizabeth	Pueblo, Colo.
Hawley, Frances	Trinidad, Colo.
Hayes, Mattie A.	Greeley, Colo.
Heizer, Nell	Deer Trail, Colo.
Helm, Marian F.	La Junta, Colo.
Hennes, Marie	Santa Barbara, Calif.
Hewitt, Mildred M.	Cascade, Colo.
Hikes, Linnie T.	Greeley, Colo.
Hill, Marian F.	Fairplay, Colo.
Hiscox, Dulcie	Wynot, Nebr.
Hollearin, Susan	Ludlow, Colo.
Hopkins, Wallace	Greeley, Colo.
Horn, Ilda	Windsor, Colo.
Houston, Butler	Checotah, Okla.
Howland, Elizabeth	Denver, Colo.
Hudson, H. T.	Granada, Colo.
Hudson, Lillian	Weston, Colo.
Hudson, Lola	El Moro, Colo.
Huiatt, Rose	Barela, Colo.
Hull, O. B.	Porterville, Calif.
Hungerford, Lora	Salida, Colo.
Hurley, W. R.	Clifton, Colo.
Huston, Pearl	Salida, Colo.
Irvine, Lois	Little Rock, Ark.
Johnson, Edna B.	Model, Colo.

Johnson, Everitt	Checotah,	Okla.
Johnson, Hannah	Denver,	Colo.
Johnstone, Lucile	Telluride,	Colo.
Jones, Mollie	Pueblo,	Colo.
Joy, Pearl	Greeley,	Colo.
Joyce, Elizabeth	Louisville,	Colo.
Kasten, Irma	Rawlins,	Colo.
Kavanaugh, Louise	Denver,	Colo.
Kellogg, J. L.	La Junta,	Colo.
Kelley, L. P.	Pueblo,	Colo.
Kendall, A. I.	Walden,	Colo.
Kennedy, Etta R.	Telluride,	Colo.
Kennedy, Lyrra	Douglas,	Ariz.
Kent, H. H.	Redvale,	Colo.
Kessler, F. C.	Kremmling,	Colo.
Kessler, Kate E. (Mrs.)	Camp Shumway,	Colo.
Kirkland, Nellie	Armel,	Colo.
Kiser, Freda	La Junta,	Colo.
Klinkenburg, Pauline	Sugar City,	Colo.
Langdon, May	Pueblo,	Colo.
LaShier, Virginia	Fowler,	Colo.
Lattin, Marie	Visalia,	Calif.
Laylander, Virda	Pueblo,	Colo.
Leddy, Beulah	Pueblo,	Colo.
Lenau, Bertha B.	Hobart,	Okla.
Leonard, Sadie	Denver,	Colo.
Libby, Jennette M.	Sterling,	Colo.
Likes, Myrton D.	Erie,	Colo.
Lloyd, Jane	Rockvale,	Colo.
Lohman, Mabel D.	Fleming,	Colo.
Looney, Ethel	Vinita,	Okla.
Lowe, Grace E.	Sterling,	Colo.
Lowney, Mary	Berkeley,	Calif.
Loy, Mrs. Anna B.	Tarkio,	Mo.
Lucero, Felicito	Trinidad,	Colo.
Ludwick, S. M.	Louisville,	Colo.
Luff, Mrs. Flora	Kit Carson,	Colo.
Lyndon, Katherine U.	Fort Collins,	Colo.
McArthur, Ethel	Salina,	Kans.
McCray, Blanche	Telluride,	Colo.
McCullough, W. O.	Denver,	Colo.
McCurdy, Mary B.	Undercliffe,	Colo.
McGetrick, Ada	Soda Springs,	Idaho
McGuinsey, Lillian N.	Longmont,	Colo.
McGinn, Helen	Denver,	Colo.
McIntire, Katherine	Pueblo,	Colo.
McIntire, Mary L.	Pueblo,	Colo.
MacLean, Mae	Boulder,	Colo.
MacLiver, Mary	Trinidad,	Colo.
Madrid, Sophia	Weston,	Colo.
Mahuron, Ira D.	Garden City,	Kans.
Mars, Elsie G.	Trinidad,	Colo.
Martin, Mrs. B. F.	Newton,	Kans.
Martinez, Jose A., Jr.	Segundo,	Colo.
Marvin, Grace	Telluride,	Colo.
Merriman, Vivien	Denver,	Colo.
Mettling, A. B.	Kiefer,	Okla.
Metzger, Myrtle	Windsor,	Colo.
Michelson, Alma	La Junta,	Colo.
Miller, Gladys	Sterling,	Colo.
Miller, Katherine	La Junta,	Colo.
Miller, Mrs. Mary L.	Snyder,	Colo.
Mills, Rose	La Junta,	Colo.
Mitchell, Lula Mae	Leadville,	Colo.
Moore, Claude	Wenatchee,	Wash.
Moore, C. T.	Phoenix,	Ariz.
Moore, Edith B.	Pueblo,	Colo.
Moore, Grace G.	Huntington Beach,	Calif.
Moore, Lellan	Telluride,	Colo.
Moore, Marie	La Junta,	Colo.
Moore, Maude	Santa Paula,	Calif.
Morrison, Benjamin H.	Ault,	Colo.
Mowe, Winifred	Pueblo,	Colo.
Munn, Jennie W.	Pueblo,	Colo.
Murphy, D. H.	Battle Ground,	Ind.
Murphy, Katherine	Trinidad,	Colo.

Murphy, Mary	Salida, Colo.
Naeve, Emma	Louisville, Colo.
Nedwideck, Mrs. J. T.	Grand Junction, Colo.
Nelson, Gertrude E.	Loveland, Colo.
Noce, Lillian	Denver, Colo.
Nordstrom, Florence.	Grand Junction, Colo.
Northrop, Edith	Segundo, Colo.
Nowlin, E. W.	Missouri City, Mo.
O'Boyle, Georgia.	Grand Junction, Colo.
O'Boyle, Lila M.	Denver, Colo.
O'Brien, Mary Rose.	Trinidad, Colo.
O'Dea, Irene	Leader, Colo.
O'Dea, Katherine	Avon, Colo.
Oliver, Georgia	Salida, Colo.
O'Neill, Mary C.	Denver, Colo.
Ormond, Anna L.	Denver, Colo.
Orton, Mrs. Ivah.	Granada, Colo.
O'Toole, Clara F.	Denver, Colo.
Pantall, Myrta	Sterling, Colo.
Pate, Ethel	Hobart, Okla.
Patterson, Anna	Independence, Kans.
Patrick, Grace	Durango, Colo.
Peers, Katherine	Boulder, Colo.
Peery, Clara M.	Greeley, Colo.
Pengra, Ray.	Buffalo Gap, S. Dak.
Perry, Abby	Salida, Colo.
Perry, C. R.	Model, Colo.
Phillips, Edith	Oktaha, Okla.
Phillips, Fay	Hoehnes, Colo.
Phoenix, V.	Greeley, Colo.
Pierce, Fanny	Greeley, Colo.
Pingrey, Jennie N.	Spencer, Iowa
Pool, Anna	Pueblo, Colo.
Purdy, Rena	Belmond, Iowa
Quinlan, Agnes	Gypsum, Colo.
Ragle, Amy	Pueblo, Colo.
Ramsey, Lillian	Carbondale, Colo.
Randall, Edna M.	Telluride, Colo.
Record, Blanche	La Junta, Colo.
Reese, W. P.	Bronson, Kans.
Reig, Martha	Newton, Kans.
Rennolds, C. E.	Lane, Kans.
Rider, Bertha L.	Grand Junction, Colo.
Roberts, Mrs. C. H.	Sterling, Colo.
Roberts, J. W.	La Junta, Colo.
Robinson, Henrietta	Pueblo, Colo.
Roe, Mrs. Myrtle A.	Sterling, Colo.
Rogers, Hattie M.	Salida, Colo.
Rogers, Iva Maude.	Snyder, Okla.
Rourke, Justine	La Junta, Colo.
Rowe, Blanche	Longmont, Colo.
Rowe, Florence	Longmont, Colo.
Rumley, Maude	Loveland, Colo.
Russell, Helen G.	Manzanola, Colo.
Russell, S. Alice.	Denver, Colo.
Ruth, Mabel M.	Grand Junction, Colo.
Rutherford, Harry	Alma, Colo.
Saltus, Drucilla (Mrs.)	Sterling, Colo.
Sandoval, Rafaelita Vigil.	Trinidad, Colo.
Sansburn, Alvin (Mrs.)	Starkville, Colo.
Saul, Anna	Messex, Colo.
Savers, Jessie	Madrid, Colo.
Scandrett, Iva	Telluride, Colo.
Schoonmaker, N. B.	Montrose, Colo.
Schrader, Bonita M.	Denver, Colo.
Schurman, Mary	Trinidad, Colo.
Schuster, Mrs. Carrie D.	Grand Lake, Colo.
Schwyn, Luella	Flagler, Colo.
Scott, Mrs. Beatrice	Henry, Colo.
Scott, Mary G. H.	Denver, Colo.
Sedgwick, Mrs. Myrtle.	Edgmont, S. Dak.
Sharp, Bernice	Pueblo, Colo.
Shay, Vena	Norton, Kans.

Shelton, Ada	Frederick, Okla.
Shelton, Floy	Hobart, Okla.
Shriber, Eva	Louisville, Colo.
Siess, Ermie	Grand Junction, Colo.
Simmons, Ruby	Montrose, Colo.
Slater, Sara	Trinidad, Colo.
Slattery, Mary	Pueblo, Colo.
Smith, Della	Victor, Colo.
Smith, Eula	Sterling, Colo.
Smith, Nettie	Sterling, Colo.
Smith, Ruth	Sterling, Colo.
Stanard, Rachel	Hugo, Colo.
Stansfield, Helga M.	Strasburg, Colo.
Staub, Isabel	Denver, Colo.
Stein, Mrs. Ethel E.	Akron, Colo.
Stephens, Gertrude A.	Denver, Colo.
Stevenson, Walter	Niwot, Colo.
Stoelzing, Katrina	Colorado City, Colo.
Stone, Martha E.	Florence, Colo.
Stout, E. W.	Manassa, Colo.
Stubbs, Elda	La Junta, Colo.
Sutton, Julia M. (Mrs.)	Trinidad, Colo.
Taylor, Edna R.	Loveland, Colo.
Taylor, Emma H. (Mrs.)	Glendale, Calif.
Taylor, Lela	Trinidad, Colo.
Tanton, Clarence E.	Salida, Colo.
Thomas, Elizabeth	Trinidad, Colo.
Thompson, Lillian	Pagosa Springs, Colo.
Treadway, Jessie M.	Denver, Colo.
Trent, Gertrude S.	Pueblo, Colo.
Tressel, Jennie L.	Burlington, Colo.
Tucker, Jennie	Weldona, Colo.
Tuggy, Mrs. Harriet	Denver, Colo.
Turnbull, Mrs. Elizabeth	Hobart, Okla.
Turner, Clarence	Greeley, Colo.
Valdez, Teresa	Trinidad, Colo.
Van Buren, G. A.	Westcliffe, Colo.
Van Winkle, Grace	Carey, Colo.
Vogel, Ida D.	Denver, Colo.
Walde, Gena F.	Telluride, Colo.
Wallace, Alberta	Sterling, Colo.
Wallace, Jessie	Laird, Colo.
Walsh, Eva	Denver, Colo.
Watkins, Beulah	Checotah, Okla.
Weber, Edith	Denver, Colo.
Webber, M. Alice	Boulder, Colo.
Welch, Elizabeth	Telluride, Colo.
West, Miss Wallace	Trinidad, Colo.
Westlund, Nellie	Center, Colo.
Wheeler, Winnie E.	Montrose, Colo.
White, Mrs. Edna	Sterling, Colo.
White, Mrs. Mary E.	Wellington, Kans.
Wieland, Alice	La Junta, Colo.
Williams, Mabel	Trinidad, Colo.
Willson, Adam M.	Greeley, Colo.
Wilson, Mary A.	Denver, Colo.
Witter, Nellie L.	Aspen, Colo.
Wimmer, Elva	La Junta, Colo.
Winterbourne, E. M.	Trinidad, Colo.
Woods, Alberta	Pueblo, Colo.
Wolff, Jessica M.	Denver, Colo.
Young, Edith	Loveland, Colo.
Young, Leila	Sterling, Colo.
Zahn, Gertrude	Walla Walla, Wash.

High School

ELEVENTH GRADE—67

Allman, Clifford
 Anderson, Ruth
 Annett, Olive
 Boot, Ruth
 Briggs, Glen
 Bracewell, Harold
 Browning, Ethel
 Bruce, Maude
 Bruckner, Clara
 Bruckner, Grace
 Bryson, Cleo
 Crews, Mary
 Chestnut, Grace
 Chapman, Sophia
 Crayton, Lily
 Della, Josephine
 Doney, Nellie
 Dumas, Viola
 Durkee, Neil
 Durning, James
 Erickson, Oscar
 Foley, Irene
 Fuller, Louanna
 Glassey, Josephine
 Grey, Beth
 Green, Myrtle
 Hayden, Russel
 Hedeem, Edith
 Hays, Robert
 Horner, Irene
 Igo, Jerome
 Jakeman, Maude
 Johnson, Leonard
 Kindred, Dorothy

Kirk, John
 Kane, Claude
 Landers, Hazel
 Madison, Harriet
 MacNee, Harriet
 McCleary, Ruth
 Marsh, Bertha
 Martin, Jessie
 Mitchell, Ula
 Morrison, Beatrice
 McClelland, Alvin
 McMullen, Alice
 Oldfather, Carrie
 Palmer, Sarah
 Parsons, Alice
 Randall, Verlene
 Reed, Barbara
 Roberts, Margaret
 Roark, Edna
 Selburg, Donna
 Siebring, Sievert
 Schenk, Eric
 Schoonmaker, Louise
 Steele, Syrena
 Stoneking, Lorena
 Stryker, Grace
 Summ, Johanna
 Turner, Mae
 Wolfe, Elizabeth
 Winslow, Mary
 Yoder, Minnie
 Youberg, Grace
 Zilar, Stella

TENTH GRADE—56

Adams, Margaret
 Ahrend, Roy
 Anderson, Henry
 Anderson, Janette
 Annett, Amy
 Blair, Mildred
 Briggs, Ida
 Brooks, Berdell
 Boyer, Ruth
 Burton, Minnie
 Calvin, Lenna
 Carney, Elizabeth
 Dehoney, Cecil
 Della, Hortense
 Delling, Rex
 Dempewolf, Mary
 Dillon, Dorothy
 Ennes, Hazel
 Evans, Basil
 Faith, Elsie
 Fanning, Bertha
 Gabriel, Maude
 Gibson, Mary
 Hardenberg, Karl
 Henney, Martha
 Hill, Arthur
 Johnson, Dorothy
 Jones, Elsie

Jones, Bernice
 Kimball, George
 Kimbley, Ruby
 Kuecke, Fredolin
 Lambie, Jean
 Lambie, May
 Lawrence, Carl
 Lesh, Edwin
 Magunson, Lily
 Martin, Maxwell
 McCollum, Edith
 McWharter, Fanny
 McVey, Philip
 Mundy, Edwin
 Preston, Harold
 Prunty, Leuty
 Prunty, Lloyd
 Pumphrey, Grace
 Selberg, Edith
 Shrewsbury, Mary
 Thomason, Dorothy
 Thurlby, Grace
 Veach, Edna
 Vanwhy, Mary
 Wadsworth, Syrena
 Wahl, Freda
 Wolfe, Lucile
 Wilson, Louise

NINTH GRADE—52

Adams, Elizabeth	Lowrance, Ward
Anderson, Gladys	Mathews, Paul
Anderson, Grace	Minns, Emma
Arnold, June	Monroe, Ethel
Bell, Curtis	Mott, Frank
Bruckner, John	Onstine, Eunice
Calvin, Van	Offerle, Edwin
Cullings, Margaret	Priddy, Ina
Dickerson, Elizabeth	Randall, Genevieve
Dillon, Sarah	Reese, Ruth
Donovan, Herbert	Reynolds, Frances
Dunn, Errette	Sitzman, Anna
Eklund, Edith	Schoonmaker, Gertrude
Erickson, Lily	Smith, Gladys
Forsythe, Henry	Smith, Ralph
Foster, Emma	Speers, Ruth
Fulk, Eunice	Spath, Olga
Garland, Charles	Stemler, Clara
Gunnison, Elizabeth	Stodghill, Daphne
Hays, Helen	Sprague, Irna
Henney, Catherine	Stoneking, Mae
Hillen, Georgia	Straley, Fay
Hobbs, Alice	Tarr, Adraith
James, Leota	Tarr, Noble
Kitchen, Harry	Thompson, Clyde
Kyle, Blanche	Veidran, Opal

The Elementary School

EIGHTH GRADE—39

Adams, Harold
 Budwell, George
 Collins, Reubin
 Crispin, Lois
 Duboff, Minnie
 English, Harold
 Finney, Loretta
 Fisher, Simrall
 Carter, Albert
 Hays, James
 Howarth, Marion
 Jacobs, Eastman
 Kyle, Blanche
 Lawrence, Alfred
 Lawrence, Wray
 Marcus, Emma
 Martin, Earl
 Milton, Anna
 Milton, Elsie
 Mott, Irving

Mondt, Eleanor
 Mitchell, Louise
 Nolan, Mildred
 O'Farrell, Esther
 Ostling, Lillian
 Palmer, Ruth
 Race, Helen
 Raymond, Harry
 Southworth, Nathaniel
 Stemler, Clara
 Sprague, Erna
 Stodghill, Dalphine
 Tarr, Noble
 Veldran, Opal
 Weber, Rose
 Williams, Mary
 Wineger, George
 Wood, Louis
 Woods, Annie

SEVENTH GRADE--41

Anderson, Archie
 Arnold, Herbert
 Baker, Rachael
 Bickel, Eva
 Carter, Albert
 Cheney, James
 Cheney, Redmund
 Christman, Lloyd
 Cornin, Dorothy
 Cronin, Helen
 Cronin, Rodney
 Dille, Elizabeth
 Dozier, Max
 Draper, Eileen
 Finley, Winona
 Gaines, Aletha
 Hamilton, Wilma
 Hart, June
 Hobbs, Marjorie
 Houston, Mabel
 Hays, James

Jacobs, John
 Jacobs, Eastman
 Johnson, Hazel
 Ketcham, Henrietta
 Klug, Cornelia
 Layton, Marcella
 McAlear, Myrtle
 McCoy, William
 Mead, Pauline
 Neill, Mildred
 Nims, Eleanor
 Ostling, Herbert
 Shriber, Josephine
 Shriber, Paul
 Smith, Gladys
 Timothy, Greeley
 Washburn, Charley
 Widlund, Irene
 Wood, Louis
 Woods, Agnes

SIXTH GRADE—52

Arnold, Jack
 Alber, Vera
 Brown, Fred
 Baker, Rachel
 Bruckner, Fred
 Comstock, Howard
 Campbell, Faye
 Campbell, Fern
 Courtney, Clifford
 Davis, John
 Davis, Sadie
 Dillon, Joseph
 Dillon, Winifred
 Durkee, Albert
 Frakes, Hoy
 Fry, Coral
 Hill, Myrtle
 Hokanson, Hulda
 Howes, Merril
 Howes, Lola
 Jewell, Joy
 Kindred, Katherine

Laurence, Alice
 Lovelady, Helen
 McCoy, William
 Mead, Pauline
 Mead, Paul
 McGaughey, Pherman
 McKelvey, Paul
 Negless, Joseph
 Norcross, Lyle
 O'Neil, Claude
 O'Neil, Mabel
 Onstine, Daniel
 Orton, George
 Pynch, Wendell
 Peterson, Cecil
 Rae, Boyd
 Rase, Hazel
 Schoonmaker, Joe
 Shields, Mildred
 Shriber, Josephine
 Smith, Drexel
 Smith, Sidney

Stephany, Alice
 Stephens, Eleanor
 Spaulding, Charlotte
 Thompson, Jennie

Widlund, Elmer
 Williams, Mary
 Williams, Charles
 Wood, Katherine

FIFTH GRADE—35

Babcock, Helen
 Bardwell, Electra
 Basse, Doris
 Baum, Inez
 Brockway, Donald
 Brown, Earl
 Cross, Carl
 Dillon, Winifred
 Downer, Hattie
 Drummond, Ruth
 Galland, Wilbur
 Hays, Florence
 Jewell, Robert
 Jones, Josephine
 Kindred, Katherine
 Mashburn, Ivan
 McGaughey, Pherman
 Milton, Selma

Moore, Orville
 Murdock, Elmer
 Orton, Ralph
 Pynch, Wendel
 Royer, Rowena
 Schoonmaker, Joachim
 Scott, Kenneth
 Sebring, May
 Shields, Mildred
 Sitzman, John
 Smith, Reeta
 Spaulding, Charlotte
 Stephany, Alice
 Stephens, Eleanor
 Thurlby, Helen
 Timothy, Glendon
 Wood, Katherine

FOURTH GRADE—24

Baker, Ruth
 Barker, Lida Lea
 Bruckner, Floyd
 Cushman, Miriam
 Dille, Frank
 Downer, Earl
 Friedman, Jacob
 Galland, Arthur
 Gosselin, Marjorie
 Gustafson, Ruth
 Haun, Josie
 Hill, Maxine

Kindred, Gordon
 Laeffler, Carl
 Logan, Blanche
 Mitchell, George
 Murdock, Gladys
 Pynch, Claude
 Race, Della
 Sitzman, Lydia
 Travis, Charles
 Williams, Edward
 Williams, Roy
 Wood, Mary

THIRD GRADE—39

Allison, Hazel
 Baker, Ruth
 Barker, Lida Lea
 Brown, Madge
 Brown, William
 Carlson, Carl
 Craven, Frank
 Davis, Blanche
 Dempsey, Robert
 Dille, Frank
 Dillon, George
 Drummond, Will
 Ellis, Virginia
 Friedman, Jacob
 Galland, Alve
 Gosselin, Leslie
 Gustafson, Ruth
 Heighton, Edith
 Hill, Maxine
 Hokanson, Ephriam

Ketchem, Lyle
 Kindred, Gordon
 Kirts, Helen
 Long, Leland
 Marcus, Amelia
 Neill, Margaret
 Nye, Fern
 Prince, Henry
 Sitzman, Mollie
 Spaulding, Caswell
 Stevens, Pauline
 Strong, June
 Suttle, Ruth
 Thurlby, Dorothy
 Turner, Cora
 Walters, Earl
 Wheeler, Mary
 Wheeler, Eileen
 Wood, Willie

SECOND GRADE—49

Allison, Hazel
 Ahlstrand, Carrol
 Aikin, Arthur
 Barber, Mary
 Barber, Janice
 Bruckner, Arle
 Brown, William
 Bickle, Margaret
 Chambers, Ruth
 Courtney, Edna
 Courtney, Jesse
 Carter, Emma
 Carlson, Stanley

Dillon, George
 Davis, Blanche
 Dillingham, Roger
 Dempsey, Aubrey
 Ellis, Virginia
 Ellis, Victoria
 Hodgson, Marion
 Hill, Clifford
 Hoffman, Fredrick
 Hakanson, David
 Hamnet, William
 Jewel, Whitney
 Jewel, Lillian

Kirts, Donald
Kirts, Helen
Long, Leland
Lee, Freda M.
Marcus, Roland
Marcus, Amelia
Milton, Ruth
Moeller, Nettie
Moser, Mary
Neill, Margaret
Moses, Nina
Nye, Fern

Norcross, Edna
Owens, Harold
Patterson, Elmer
Sitzman, Mollie
Spaulding, Caswell
Strong, June
Stevens, Pauline
Shaffer, Maniel
Scott, Mildred
Turner, Lester
Wood, Frances

FIRST GRADE—62

Aiken, Arthur
Anderson, Harold
Anderson, Helen
Bickle, Margaret
Brohman, Frances
Burgess, Florence
Carlson, Stanley
Carter, Earl
Carter, Emma
Clark, Florence
Collins, Raymond
Cushman, Esther
Dempsey, Audrey
Draper, Arnold
Drummond, Evelyn
Ellis, Victoria
Ecker, Douglass
Freeland, Joe
Galland, Harold
Gaines, Alice
Gustason, Frances
Hadden, Margaret
Hamnett, William
Harbaugh, Robert
Harris, Iva May
Hegeman, Dorothy
Hislop, Inez
Hodgson, Mazella
Holmes, Delma
Jenkins, Galey
Keyes, Charles

Kindred, Ward
Leffler, Jennie
Lofgren, Ruben
Lofgren, Harold
Mann, Claron
McAleer, Milton
Miller, Guerdon
Mitchell, Nicholas
Moeller, Roy
Moses, Nina
Norcross, Edna
Ontz, Mary
Ortoy, Zetta
Patterson, Helen
Patterson, Lillian
Poole, Arden
Prunty, Beulah
Raymond, Joe
Rice, Frank
Shaffer, Mary
Sharp, Gwendolia
Scott, Mildred
Stroh, Harry
Smith, Ralph
Strong, Gray
Turner, Olive
Troft, Fay Grace
Urie, Dorothy
Wood, Henry
Woods, William

KINDERGARTEN—73

Adams, Harold
Ahlstrand, Charlene
Arnold, Louise
Baab, Robert
Babcock, Hazel
Basse, Robert
Bickle, George
Bishop, York
Brown, Bobby
Blue, Marjory
Bush, Hermann
Carter, Mildred
Clark, Florence
Chambers, Clarice
Collins, Raymond
Cross, Neil
Darrrough, Jessie
Darrrough, Mary
Derringer, Cecil
Edgar, Donald
Flint, Mary
Fuqua, John
Green, Gretchen
Gustason, Frances
Hall, Marian
Hamm, Ernest
Harbaugh, Robert
Harris, Ida May
Haruff, George
Hart, Alberta

Hayden, Billy
Hayden, Henry
Herring, Harold
Hoffman, Haymond
Hodgson, Mazella
Howe, Ronald
Jenkins, Galin
Johnson, Helen
Keyes, Charles
Kimbal, Mattie
Levine, Ida
Long, Jean
Lowry, Ruth
Madison, Gerald
Matson, Wilhelmena
McCarty, Bernice
Meyer, Joseph
Moeller, Arthur
Moody, Billy
Moses, Lillian
Muth, Duane
Neil, James
Nelson, Evelyn
Owens, Dorothy
Patterson, Helen
Petrikin, Nancy
Rayer, Dean
Saunders, Louise
Smith, Carleton
Smith, Ralph

Spaulding, William
Stroh, Reuben
Strong, Grey
Taylor, Leona
Thurlby, Harry
Terrence, Clyde
Tisdell, Maxwell

Walker, Grace
Walters, Inez
Wheeler, Catherine
Williams, Dorothy
Wilson, Elizabeth
Young, Hazel

SUMMARY OF ATTENDANCE

College Department

Summer Term, 1915	1035	
School Year, 1915-1916	681	
Non-Resident a. Individual Plan	351	
b. Group Plan	740	
	<hr/>	
Total, College Department	2807	
Counted Twice	142	
	<hr/>	
Net Total, College Department.....		2665

Training School Department

High School:		
Eleventh Grade	67	
Tenth Grade	56	
Ninth Grade	52	
Non-Resident	19	
Summer School	140	
	<hr/>	334
Elementary School:		
Eighth Grade	39	
Seventh Grade	41	
Sixth Grade	52	
Fifth Grade	35	
Fourth Grade	24	
Third Grade	39	
Second Grade	49	
First Grade	62	
Kindergarten	73	
Summer School	296	
	<hr/>	710
Total Training School.....	1044	
Counted Twice	278	
	<hr/>	
Net Total Training School.....		766
	<hr/>	
Net Grand Total.....		3431

1091
2340

SUMMARY

Class of 1891.....	12
Class of 1892.....	16
Class of 1893.....	23
Class of 1894.....	35
Class of 1895.....	32
Class of 1896.....	31
Class of 1897.....	45
Class of 1898.....	58
Class of 1899.....	75
Class of 1900.....	70
Class of 1901.....	69
Class of 1902.....	74
Class of 1903.....	82
Class of 1904.....	87
Class of 1905.....	107
Class of 1906.....	155
Class of 1907.....	202
Class of 1908.....	180
Class of 1909.....	187
Class of 1910.....	287
Class of 1911.....	251
Class of 1912.....	316
Class of 1913.....	361
Class of 1914.....	459
Class of 1915.....	475
*Class of 1916.....	460
Total.....	4079

ALUMNI

Officers

Victor E. Keyes, President.....	Greeley, Colo.
Mrs. Lulu Wright-Heilman, Vice-President.....	Greeley, Colo.
Mrs. Elmer Royer, Secretary.....	Greeley, Colo.
Vernon McKelvey, Treasurer.....	Greeley, Colo.

Trustees

Mrs. John A. Weaver.....	Greeley, Colo.
J. C. Kendel.....	Greeley, Colo.
John R. Bell.....	Greeley, Colo.

*Estimated.

SUMMARY OF ATTENDANCE BY STATES

Arizona	2
Arkansas	7
Canada	2
California	7
Colorado	1,737
Florida	2
Germany	1
Idaho	4
Illinois	13
Indiana	1
Iowa	30
Kansas	98
Maine	1
Massachusetts	2
Michigan	3
Missouri	29
Montana	2
Nebraska	32
New Hampshire	1
New Jersey	1
New Mexico	4
New York	2
North Dakota	2
Ohio	3
Oklahoma	45
Pennsylvania	4
South Dakota	4
Tennessee	3
Texas	4
Utah	1
Washington	4
Wisconsin	2
Wyoming	14

Total Registration exclusive of Nonresident Group Plan 2,067

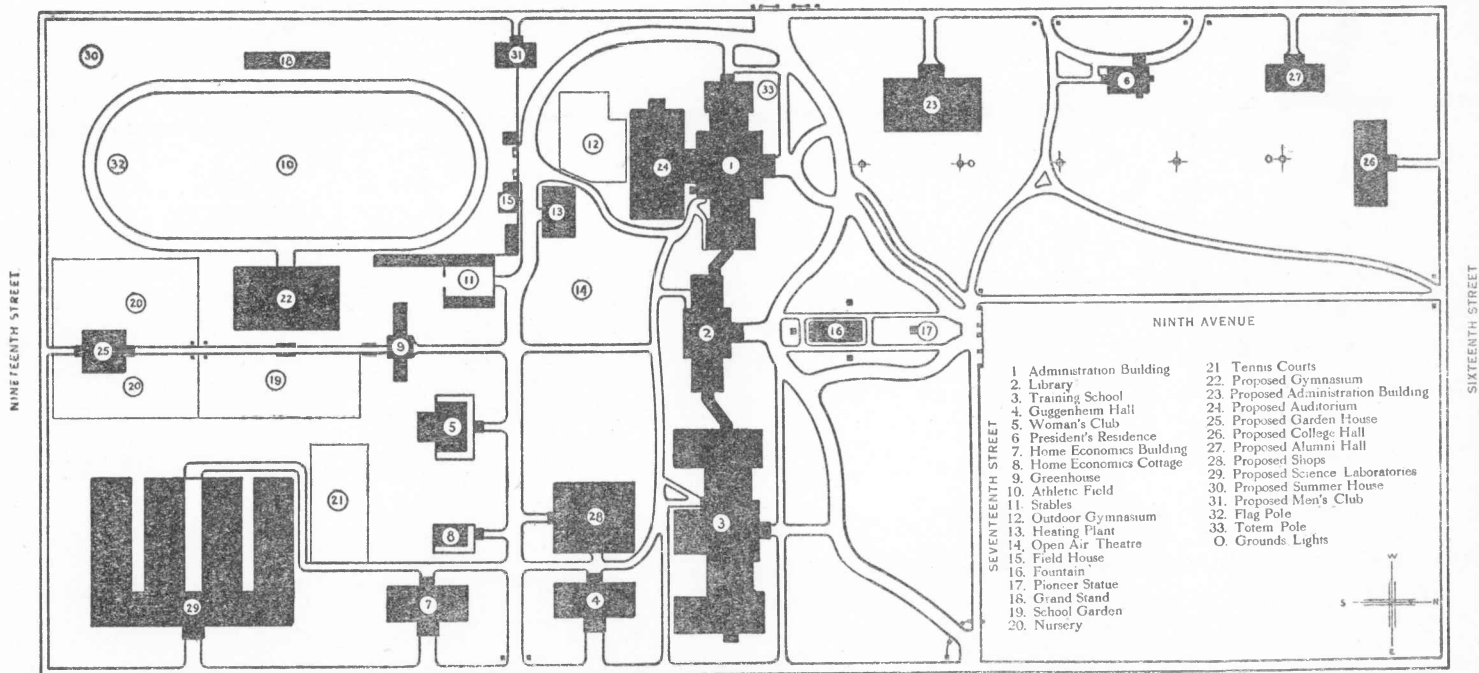
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TENTH AVENUE

THE STATE TEACHERS COLLEGE

TENTH AVENUE



EIGHTH AVENUE

MAP OF THE CAMPUS

ROOM NUMBERS

- Numbers 1 to 10—Basement, Administration Building.
Numbers 100 to 120—First floor, Administration Building.
Numbers 200 to 220—Second floor, Administration Building.
Numbers 300 to 306—Third floor, Administration Building.
Numbers L1 to L13—Library basement.
Rooms G1 to G205—Guggenheim Hall of Industrial Arts.
T1 to T221—Training School Building.
P—Playground.
C—Cranford Field.

DIRECTIONS FOR REGISTRATION

Maximum Hours

Twenty term hours is the maximum for which a student may enroll in any term. Bible Study or Community Co-operation may be taken in addition to the twenty hours. Not more than two required subjects each term, including teaching, may be included in a student's program. Physical Education may be taken in addition to the two required courses allowed.

Detailed Programs

On account of impending changes, a detailed schedule of hours and courses is not included in this catalog. Such programs will be published in ample time before the beginning of each term.

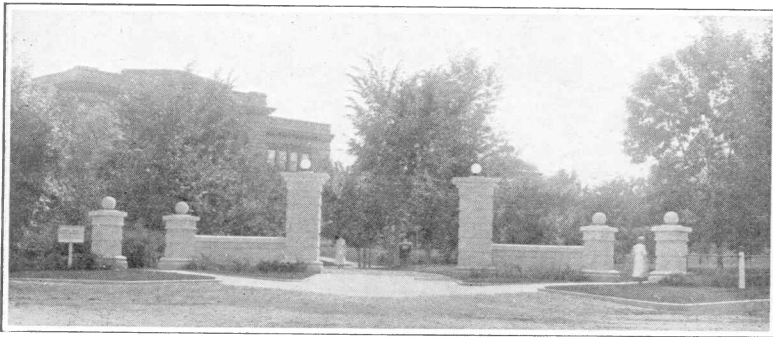
State High School of Industrial Arts

HIGH SCHOOL DEPARTMENT

OF THE

STATE TEACHERS COLLEGE

GREELEY, COLORADO



THE GATEWAY TO A VOCATION

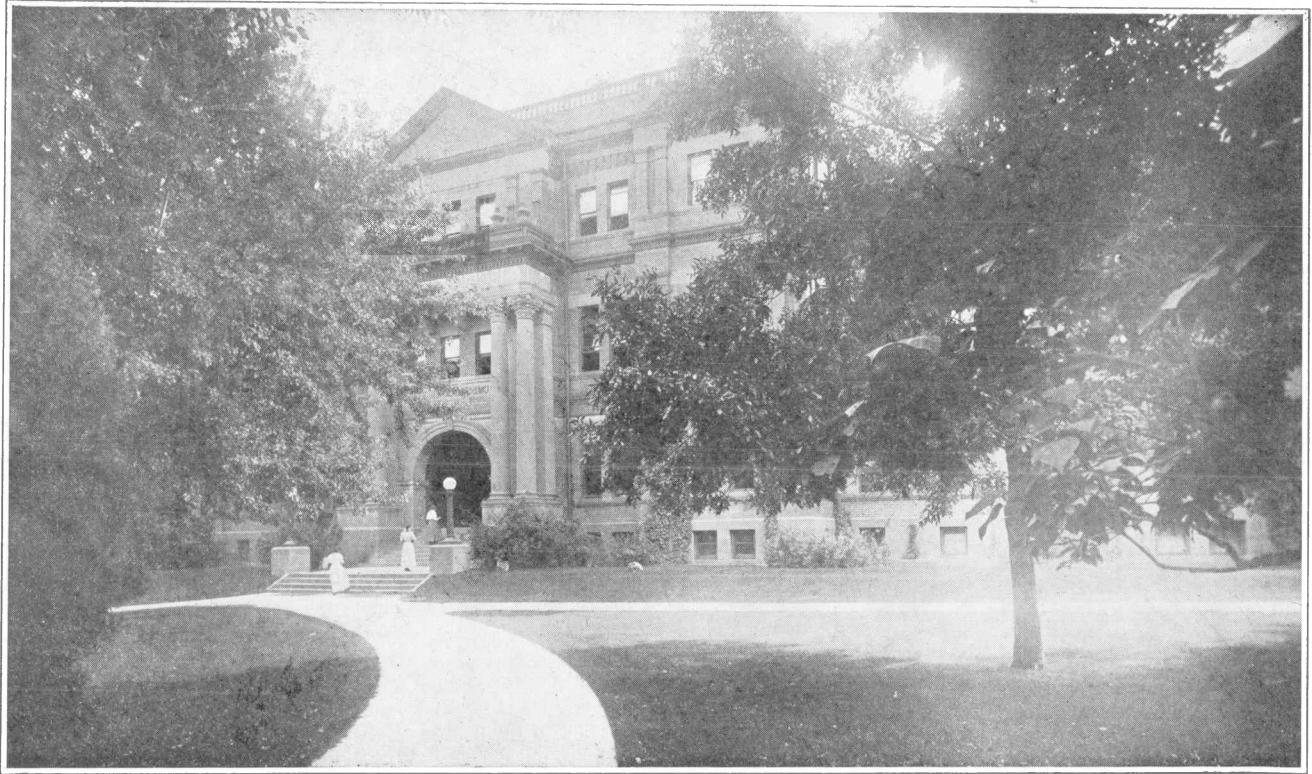
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Series XVI

MAY, 1916

No. 4

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APPROACH TO THE MAIN BUILDING

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FOREWORD

The High School Department of the State Teachers College has been reorganized along vocational lines and is now called The State High School of Industrial Arts.

The function of this particular high school is to stress those courses of study which best prepare for life. Each course offered is intended to give a definite kind of efficiency, and to enable young people to adjust themselves to the complex problems of American civilization without injury or loss.

The plan is, not to educate the boys and girls away from their homes and local communities, but to prepare them to enter into this life with contentment, enthusiasm, and power. To this end, vocational work is given a prominent place in the curriculum.

Realizing the importance of character building as an essential preparation for the duties and responsibilities of life, special emphasis is placed upon ethical training. A constant effort is made to instill high ideals, to develop the habit of painstaking work, and to teach the value and importance of clean thinking and clean living. The ideal of the school is to attain a moral tone so excellent that parents can intrust their boys and girls to the care of the faculty with the utmost confidence.

THE FACULTY

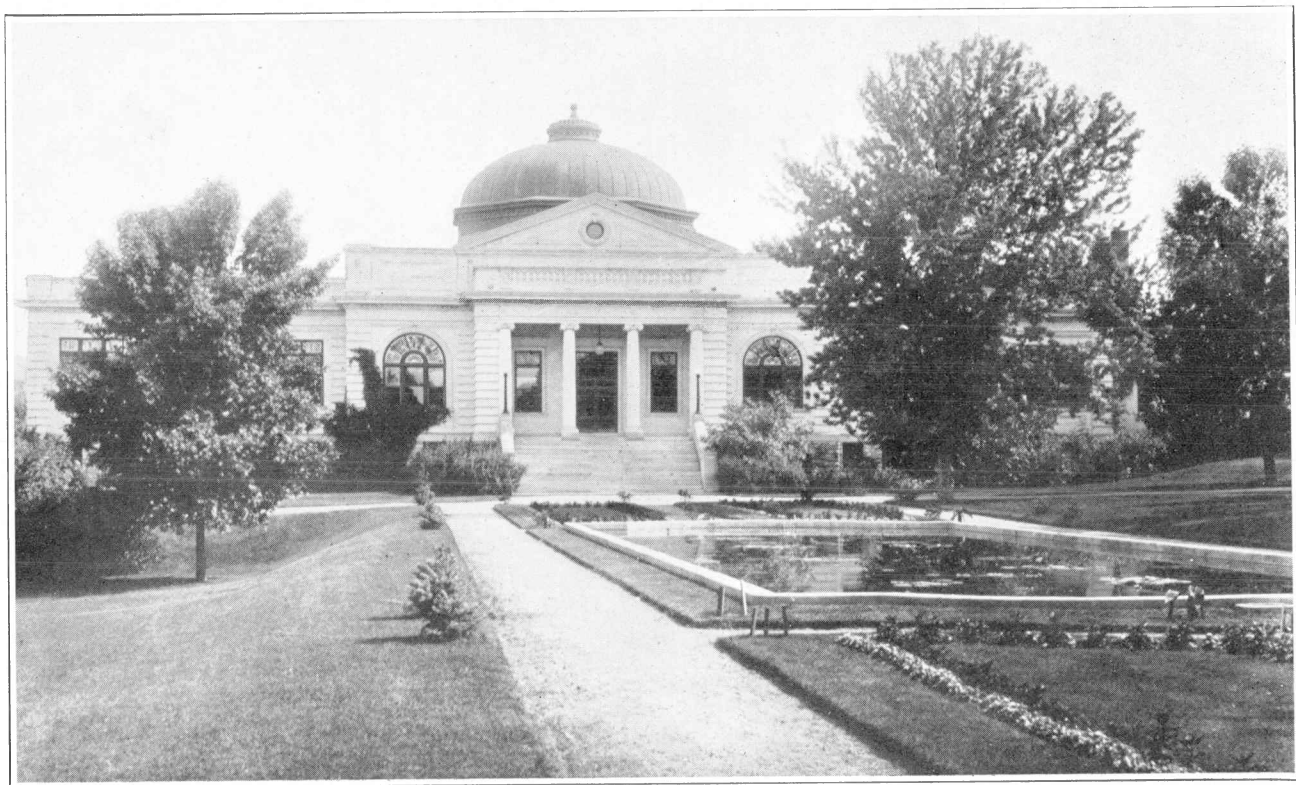
JAMES H. HAYS, A.M., Acting President of the College.
JOHN R. BELL, A.M., Principal of the High School.
RAE E. BLANCHARD, A.B., Preceptress, English Literature.
JEAN CROSBY, A.B., History and Economics.
CHARLES J. BLOUT, A.M., Physics and Chemistry.
GEO. W. FINLEY, B.S., Mathematics.
EMMA C. DUMKE, A.B., Modern Languages.
LUCY N. McLANE, A.B., English.
FRANK W. SHULTIS, A.M., Bookkeeping.
EDNA F. WELSH, Pd.B., Typewriting and Shorthand.
MARGARET JOY KEYES, A.B., Physical Education.

The following members of the College Faculty teach or supervise classes in the High School:

GEORGE A. BARKER, M.S., Physiography.
JOHN C. JOHNSON, M.A., Biology.
JOHN CLARK KENDEL, A.B., Music.
JOHN T. McCUNNIFF, A.M., Printing and Mechanical Drawing.
CHARLES FOULK, Pd.B., Building Construction.
GLADYS IRENE SCHARFENSTEIN, Ph.B., Sewing.
FLORENCE REDIFER, A.B., Cooking.
AGNES HOLMES, Pd.M., Art.
MAX SHENCK, Bookbinding.

FELLOWS

JAMES H. HAYES, Mathematics.
BERTHA MARKLEY, Reading.
CORNELIA HANNA, Music.



THE LIBRARY

Saving a Year

"Do not waste time, for time is the stuff of which life is made."—Benj. Franklin.

Do you want to save a year? In the ordinary high school, fifteen units, sometimes sixteen units, are made in four years. A unit, in most cases, consists of a study taken five times a week for thirty-six weeks, each recitation being forty-five minutes long. The customary procedure, therefore, is for a student to take four subjects a day, five times a week, and in this way complete the high school course in four years.

Now, if a pupil were allowed to take five subjects at a time, fifteen units could be earned in three years. The High School Department of the Teachers College permits a student to take five subjects, provided that he does them well. A standard of A or B must be attained in all subjects except one. If the individual fails to attain such a standard he is immediately reduced to four subjects.

The plan is to enable young people who come to us with high ideals and an earnest desire to improve to the uttermost the opportunities which the school affords to save a year of time, and thus a year of life. Those in charge do not believe that you can measure life as you measure a commodity. They believe that the dead level of standardization attained in the four-year course for every student tends to cramp, distort, and sometimes to blight the lives of those for whom the high schools were founded.

It is like the iron bed of Procrustes, in Greek mythology. When his victims were too long, he sawed them off, and when they were too short, he stretched them out, so that in each case the individual would exactly fit his bed. The four-year course is marvelously like the iron bed of Procrustes, for it, too, stretches the weak and saws off the talents of the strong. It utterly fails to provide an adequate incentive for the earnest and aspiring student.

The Summer Term

The organization of the State High School of Industrial Arts into four terms, one of which is held in the summer, when most students are having a vacation, also enables those individuals, who care to do so, to save additional time.

Broken Educational Careers

Only twenty-five per cent of the pupils who complete the eighth grade ever enter high school, and many of those who enter fail to finish their high school course. The reasons for this exodus are manifold. Prominent among them are ill health, the necessity of helping the home, and failure to appreciate the value of an education.

If by the use of the magic wand of some good fairy, the boys and girls in the "teen age" could be transformed into the full stature of men and women in middle life, so that these "boy-men" could see as men see and understand as men understand, and then, after a season, the "boy-men" were changed back into boys with men's vision, they would realize how tremendous the need of an education is.

The five or six dollars a week, which seems so attractive to the boy, would lose its charm, for he would see clearly that by accepting this he was permitting the golden years of youth to slip away—the only years given us to prepare for life. Yes, these boys with men's vision would understand that accepting the employment possible to boys, deprives them of the preparation essential to the largest success in life.

Mr. W. J. Bryan has said that it is better to go through life without an arm than to leave the brain undeveloped. He says that men need their brains more than they need their arms, and yet in almost every village and every rural district there are young men and young women who have left school because they did not think that they needed an education. By the time these young people are forty, experience, which effectively effaces from the minds of men the notion that an education is superfluous, teaches them their folly, but then they realize that it is too late to attain the highest development.

An Ungraded School for Adults

It is never well to point out the mistakes of young people without making clear the way in which their errors may be corrected. The all

important question, with reference to wasted educational opportunities, is, therefore, "How can the individual who has reached maturity without completing a high school course and who has come to know the value of a high school education, best attain the desired goal?"

The Ungraded School for Adults is the answer that the Teachers College of Colorado makes to this question. Adults feel humiliated upon entering classes with children, and they cannot afford to spend the time in school necessary to take the work which has been omitted, step by step. There is yet another and a still more important reason why special provision should be made for the educational needs of adults. It is that adults nearly always excel children in their intellectual grasp.

The experiences of life have a very high educational value. The various types of schools of America have been slow to recognize the real significance of the fact that life is itself a school in which character can be developed and mental growth attained. By doing any kind of work and doing it well, the mind is made stronger and the character more dependable. The individual of twenty years or more who has taught, worked on a farm, or in a factory, during the years that other boys and girls are going to school, usually manifests, upon returning to school, far more mental power than the pupils, fourteen or fifteen years of age, with whom he has been compelled to associate in the work of the classroom.

The Ungraded School for Adults provides a special school for adult students. It appreciates the value, in terms of character and intelligence, of the services rendered by the individual to the community and gives a reasonable amount of credit for the same. And, most significant of all, it substitutes the power-unit for the time-unit; that is, when a pupil enters this school he is not classified at once, but is given the opportunity of proving his ability, and the time necessary to complete the high school course is made to depend upon the excellence of the work done. The adult student is entitled to a special promotion as soon as his ability to do college work has been clearly demonstrated. No one can enter the Ungraded School for Adults who has not reached the age of eighteen years.

After the establishment of the Ungraded School for Adults, in the spring of 1914, many mature students took advantage of the opportunity which it afforded. Teachers who had been compelled for economic reasons to teach before completing their high school course found in this

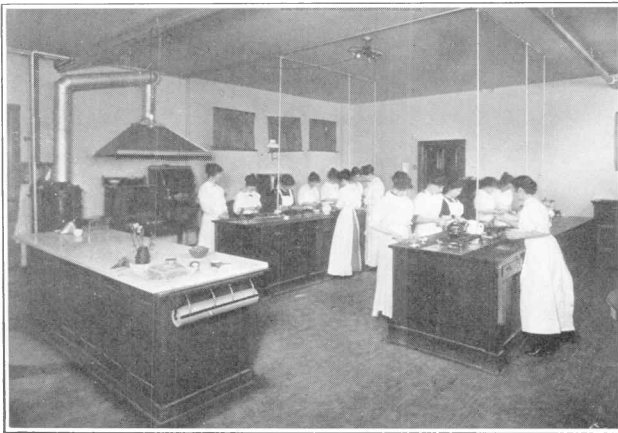
school the chance to show the strength which they had attained in many years of struggle and sacrifice, and, because the power which they had gained in life's hard school was taken into account, they were able to continue their education, and so vastly to increase their influence and helpfulness.

The experiment was a success from the first. The students in this group have shown remarkable strength. Their grades have been excellent, their attitude one of intense aspiration, and their conduct has been ideal. They have been enthusiastic, energetic, and untiring in their efforts at self-improvement, and they have rejoiced greatly in the opportunity to realize their hopes.

High School Extension Courses

The motto "a high school training for all children" is gaining ground, as the following quotation from a news letter issued by the United States Bureau of Education amply illustrates:

"Since the twentieth century opened, the number of public high schools has almost doubled, and the number of students is easily twice what it was at the beginning of the century. The most cheering feature of the whole matter for the American citizen is the very great increase in the proportion of those who go from the grades into the high school. Formerly (only a very few years ago, in fact) the high school was chiefly attended by children of the rich and moderately well-to-do. To-



COOKING

day nearly one-fourth of the children who enter the elementary school eventually pass into the high school. The exact figure is 22 per cent if negro children are included and 25 per cent if whites only are considered."

The extract quoted above shows what wonderful progress has been made in recent years in the cause of universal education. It reveals the fact that the American high school is to become a constantly more vital factor in the growth, prosperity, happiness, and character, of the whole people. It is to be, as the public schools have long been, a preparation for the needs of a democracy.

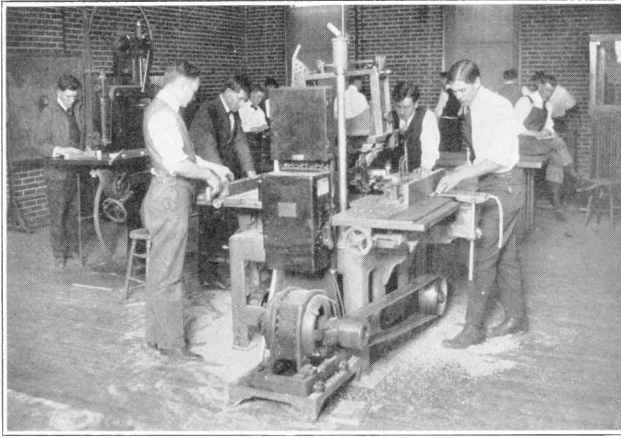
And yet there are many places on the plains and in the mountains of Colorado where high school facilities are inadequate, if not entirely wanting. In these communities those who have finished the eighth grade must leave home in order to attend high school. Economic reasons often make it impossible to do this, and so, those who desire to continue their education, under such circumstances, are denied the privilege of doing so.

Many high school principals testify to the fact that the young people who come from these rural districts often make the best students. When a way is provided for them to continue their studies, they enter school with a clearly defined purpose, work earnestly to obtain the best results, and prove themselves in every way to be worthy of the assistance which has been rendered.

Since the taxes of all the people go to support the educational institutions of the state, the State Teachers College feels under obligation to supply, to the fullest extent of its ability, the educational needs of the people of the entire state. With this duty clearly in mind, the State High School of Industrial Arts has organized the High School Extension Courses which are described in detail in another part of this bulletin.

These courses are not intended to take the place of any resident high school work which is being done in any part of Colorado. The Teachers College recognizes the fact that it is better for boys and girls to attend their own local high school, when they have one which they can attend.

The College also understands the importance of supporting and strengthening, in every way possible, the smaller high schools of the state. For this reason the work done in these schools is accepted, where



WOOD TURNING

teaching force and equipment are at all adequate to the needs of the schools in question, as the equivalent to work done in its own High School Department.

The sole purpose of the High School Extension Courses of the State High School of Industrial Arts is to make it easier for those pupils, who are so situated that they can not attend any high school, to obtain some of the privileges of the more favored communities. The hope of those who have organized these courses is that the time will come in Colorado when no student need discontinue his education at the eighth grade for the reason that no high school is available.

Resident Work is Preferable

While high school extension courses serve an excellent purpose in the educational economy of the state, they can never be made as helpful as resident courses. The personality of the teacher is lacking. We learn best from the earnest men and women who have touched our lives. They plant great aspirations in the depths of our being; they make us appreciate the value of earnest effort; and they inspire us to make the most of the talents with which we are endowed. No student should therefore, accept extension courses as a substitute for resident courses, who can possibly afford the expense involved in gaining an education, by resident work, at some thoroughly equipped and progressive high school.

The Question of Cost

The increasing cost of living has deprived many young people of an education. The rise in the price of agricultural products has not kept pace with the increase in the cost of those articles which the average citizen must use to supply the needs of the home. There is consequently a narrowing margin of profit left for the head of the household. Out of the net earnings the boy's education must come, and as these decrease beyond a certain point, his chances for further schooling vanish.

Because of the economic fact, outlined in the foregoing paragraph, it becomes the duty of all state educational institutions to reduce to the lowest figure possible the amount of money necessary to pay all the expenses incident to attending one of them. The State Teachers College feels deeply this responsibility, and is endeavoring to arrive at a practical solution of the student's economic problem.

Co-operative Boarding Clubs

Two Co-operative Boarding Clubs are to be organized in the year 1916-1917. Certain experiments have been carried on in the year 1915-1916, which convince the principal of the High School Department that a plan of co-operative boarding can be put in operation which will reduce the actual cost of board and room to fifteen dollars a month or one hundred and thirty-five dollars for the school year. This would enable the student to pay room, board, and fees for one hundred and fifty-five dollars. A part of this could, in most cases, be earned by the student outside of school hours.

The Girls' Co-operative Boarding Club can be run on a slightly less expensive basis than that indicated above. A group of girls, now in the high school, are planning to reduce the cost of living to one hundred and twenty-five dollars a year. Each girl in the group expects to can enough fruit and vegetables, while at home during the summer, to last through the winter months. In this way the entire group will be furnished with a part of their food supply, and the necessary expenditure will be materially reduced.

Any number of boys and girls can be taken care of on the co-operative basis, provided that the management of the school is informed in time to make adequate provision for them. All clubs of this type will be under the direct management of the principal of the high school. He, or some member of his faculty, will visit these groups each week.

A competent matron will be in charge of each club. An assistant manager will be appointed for each group, whose duty it will be to keep a set of books, which are to be audited once a month.

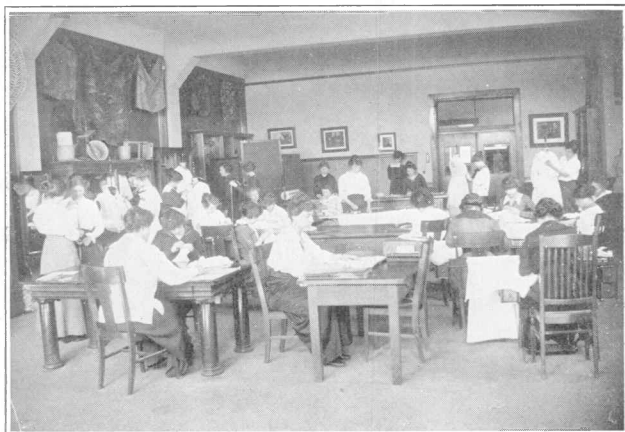
Admission to one of these clubs will be by the approval of the principal. No individual will be admitted who can not produce evidence of good moral character. The principal will exert the same authority over these organizations that he does over the high school as a whole. No one whose conduct does not prove satisfactory or whose attitude does not seem beneficial to the club will be permitted to remain in it.

Light Housekeeping

One of the least expensive ways to attend school is for a group of three or four girls or boys, as the case may be, to do light housekeeping. There are a number of places fitted up for this purpose in Greeley.

Working for One's Board

A number of young people pay a part of their expenses by working outside of school hours. The citizens of Greeley have a sympathetic attitude toward the students who are trying to work their way through school, and have provided many positions whereby young people are able to do this. It is not wise, however, to go away to school without enough money to last several months. Sometimes it takes a day or two, and sometimes several weeks, to find positions for those who need to work in order to get through school.



SEWING

The New Profession of Teaching

Many men a generation ago taught a few years merely as a stepping stone to some other profession. Few do this today. The profession of teaching is one of constantly increasing influence and power. As a result of the growing appreciation on the part of the public, of the duties performed by those who teach, the salaries of teachers have steadily advanced.

In many sections of America today men teachers are better paid than the average physician, lawyer, or engineer; while the contrast between the salaries of the men who teach and those who find commercial employment is still more marked.

Women teachers receive very much larger salaries than do the young women who work in stores and factories, and they are far more independent.

A Strong Demand for Men

Boys often look upon teaching as a woman's job. This is due to the large preponderance of women teachers in the grades. But there is an ever-growing demand for strong men in the profession of teaching.

Several very definite movements in education have contributed to this increased demand for men. They may be enumerated as follows:

1. The steady increase in population increases proportionally the superintendencies and principalships open to men.
2. The widening of the scope of education to include Manual Training, Commercial Arts and Agriculture, increases directly the number of desirable positions for men.
3. The consolidation of rural schools into larger and more efficient school units creates many new positions where the talents of strong men find ample scope.

Teachers College Graduates Obtain Good Positions

Just before the close of the winter term the State Teachers College bureau was in receipt of thirty-five requests for teachers and did not have on its lists a graduate who could be sent out to fill one of these positions. This meant that every graduate of the school had been placed and that there was an additional demand that could not be met.



THE I. H. S. BASKET BALL SQUAD

Defeated by the Fort Morgan Team, Champions of Colorado, by only one point.



THE SIMON GUGGENHEIM HALL OF INDUSTRIAL ARTS—EARLY SPRING VIEW

The Normal Department

The Normal Department of the High School is founded upon the basic belief that young people should know thoroughly the things they are to teach. Courses in arithmetic, geography, history, and grammar are given by experts in these subjects.

The common school branches are taught in this department from the standpoint of teaching those who are to impart them to others. The plan is to make the subjects enumerated above so clear, and to make so simple the great principles of psychology and pedagogy which apply to them, that the individual who receives the instruction will be able to go out, when his college course is complete, into the schools of the state and teach with efficiency and power.

Those students, who know when they enter high school that they want to become teachers, are able to direct their energies to this end throughout their high school life. They are able to attain a higher degree of excellence in the teaching art by the time they receive a state diploma, at the end of the two years college course, than those who have spent the years of their high school life taking courses which have no relation to the subjects which they are to teach.

The Five-Year Route to a Profession

The Normal Department in the State High School of Industrial Arts and the two-year course in the Teachers College when taken together constitute a five-year course in which pupils who have finished the eighth grade can prepare themselves for teaching. At the end of that time they receive a life diploma.

The Faculty

The High School Department of the State Teachers College is organized in accordance with the departmental plan. At the head of each department is a man or woman who has been selected because of special fitness for the work of that department. The fact that substantial salaries are paid enables the Trustees of the college to select individuals who have had unusual training, and whose success has been demonstrated in other fields. The aim of those whose duty it is to select members of the faculty, is to secure as departmental heads men and women whose scholarship, ideals, and devotion to duty, will make for the highest degree of excellence in the school.

The College Preparatory Course

Students who desire to spend four full years in high school can do so by taking the College Preparatory Course. This course requires sixteen units and four years of time. It will conform in all respects to the four-year accredited high school course.

The Department of Commercial Arts

The purpose of this department is to prepare young people for business life. It is intended that they shall be ready to enter commercial establishments, banks, railroad offices, secretaryships, and government positions; and that they shall be able to take advantage on their own account of the wider range of opportunities that the ever increasing complexity of American commercial life presents to those who understand the laws of trade, production, consumption, distribution, and are equipped with the technic of the business world.

The Department of Home Economics

Many high schools have been established in various parts of the United States, designed to give adequate training in the all-important group of subjects known as the home, or economic, arts. The purpose of this school is to give to the girls of Colorado the opportunity of obtaining a similar kind of culture, especially to that group of Colorado girls who expect to become teachers, and who want to know thoroughly those subjects which will enable them to enter the rural life of Colorado and teach with efficiency and power. The pedagogical aspects of the subjects taught will receive very careful attention.

Department of Manual Arts

This course is intended primarily to train the hand and to bring about that correlation between hand and brain which enables the individual to realize in forms of wood and metal the ideal art concepts of the mind.

The training, however, which the course provides in the practical arts is so varied and comprehensive, including as it does, mechanical, perspective, and architectural drawing, joinery, cabinet making, building construction, wood turning, etc., that the individual who desires to become a carpenter, contractor or architect will find that all the work he has done in the manual arts course directly prepares him for such a

vocation and that by continued study along any given line he can perfect himself in his chosen work.

At the present time Manual Training affords great opportunity to aspiring young men. There is a great demand in all parts of the United States for Manual Training teachers. The subject has been introduced in the grammar schools of all the great cities and in well equipped high schools; and many towns of but a few thousand inhabitants employ a supervisor for Manual Training. Numerous calls come to Teachers College from all parts of the West for young men qualified to fill such positions. The young man, therefore, who takes a thorough course in Manual Training may rest assured that he will be able to secure a position.

Those students are best prepared for positions in Manual Training who take this course in high school and continue their work along the same lines in the Teachers College.

Department of Agriculture

The tendency of high schools in the past, even those situated in farming communities, has been to emphasize those phases of education which had no vital relation to the farm, and which, if they prepared for anything definite, prepared for city life. Often the boy has been made to feel that all things connected with country life were common and



MAY POLE DANCE

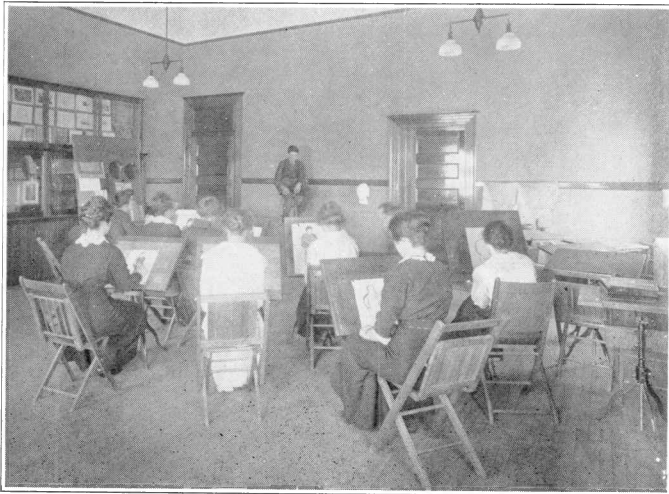
menial. But a new spirit is rising in education, one that recognizes the essential dignity, strength, and independence of life on the farm, and sets about definitely to fit young men and women for the largest measure of happiness and usefulness in rural life.

Special attention will be given to the pedagogical aspects of all subjects taught. Many teachers who enter rural school work fail to attain the highest possible results, simply because they are city trained and do not have a clear knowledge of the subjects best suited to rural schools; and they do not understand how to enter into the dominant interests of rural communities.

Those who are planning to teach in rural schools can, therefore, use this course to advantage in preparation for the more advanced work of the Teachers College.

Normal Department

This department is described at length in the introductory pages of this bulletin (see index). It is intended for those graduates of the eighth grade who know that they want to become teachers and who desire to utilize as much of their energy during the high school period as possible in preparing for their life work.



CLASS IN ART

The Ungraded School for Adults

This school is intended to meet the need of individuals who have attained the age of maturity without completing a high school course. It, also, is described in detail in the earlier pages of this bulletin (see index).

The School of Reviews

A large number of teachers in Colorado desire to use a part of their summer vacations in reviewing the common school branches in preparation for the August examinations. This work may be done in a superficial way without any thought other than the ability to pass the examinations. On the other hand, it is not a difficult matter to have these review classes taught by experts. In the latter case, the teacher not only gains the knowledge which enables her to pass the examination but is given such a clear vision of the great principles of psychology and pedagogy which the successful teaching of the common school branches involves, that she will in the future be able to teach them with greater success.

For the reason which is stated above review courses have been organized at the Teachers College for which high school credit will be granted.

High School Extension Courses

There are two methods of taking high school extension work for high school credit; namely, the group and the individual methods. Each is briefly outlined below.

1. *The Group Method.* In the group method a number of students work together in a class under the direction of an instructor approved in advance by the High School Department of the State Teachers College.

School work is always more interesting and is apt to be more thorough when a group of individuals who differ in outlook, purpose, personality, and knowledge, bring their diverse talents to bear on a given problem. Under these circumstances wit sharpens wit, interest deepens interest, and knowledge increases knowledge. There is the added advantage, also, in this system of having the teacher present, in person, to guide and correct the thought of the pupils.

The committee in charge of the high school extension work, therefore, strongly urges the organization of these study groups in all cases

where competent leadership is obtainable, and when a sufficient number of persons can be found who desire to make intellectual progress thru non-resident study. The conditions relative to this plan are as follows:

- a. There must be at least three persons in a group.
- b. All applicants for non-resident work for high school credit must be eighth grade graduates.
- c. Three recitations forty-five minutes long must be given weekly in each subject for which credit is desired.

These recitations may be given in the evenings and one of them on Saturday if this arrangement best suits the convenience of the pupils and local instructor.

- d. The teacher in charge of the group must demand two full periods of preparation (90 minutes), for each period of recitation in a given subject, and must give written lessons each month to test the quality of the work.

- e. Each pupil in a given group must also prepare and transmit to the High School Department of the Teachers College, as additional evidence of the thoroughness of the work, a transcript by chapters, of all work accomplished.

Outlines and syllabi will be issued from time to time to assist the students in the preparation of these lessons.

- f. When a given course is completed, it shall be the duty of the instructor to make a full report in writing which shall give the non-resident committee a clear conception of the attitude, energy, and success of each pupil in the class.

- g. At least ten of the fifteen units required for graduation must be taken in this or some other high school as resident work.

Experience clearly demonstrates that students who enter from smaller high schools which do not have a complete course are much stronger and better prepared for college if they attend our High School for a full year. In this case we can overcome many disadvantages which are due to inadequate equipment and to a small teaching force. The same would be true even to a greater degree of non-resident students.

Students vary so greatly, however, in the opportunities which they have enjoyed, in their intellectual power, and in their maturity, that it is not fair in all cases to insist upon a year's resident work, but no student will be permitted to graduate from our high school, no matter how large a fraction of the entire high school course he may have finished elsewhere without at least one term of resident work.

h. Courses will be arranged to cover the entire thirty-six weeks of the school year. For each course completed, in accordance with the terms set forth above, a unit of credit will be given, provided no person receives more than three units in any given year.

i. The fees for non-resident courses shall be three dollars per term or nine dollars per unit (a unit in resident work consists of a subject taken five times a week, each recitation being forty-five minutes long. A unit in non-resident work should be the equivalent of this and should take approximately a year of time). Of this amount one dollar per term or three dollars per unit is to be transmitted to the State Teachers College, the remaining six is to be paid to the local instructor as compensation for his efforts. Fees are payable when students enroll. If the board of education in any given district desires to provide compensation for the instructor, independent of these fees, then the pupils may be relieved of any charge other than the one dollar per term or three dollars per unit, which is to be forwarded to the High School Department of the State Teachers College.

2. *The Individual Method.* In case an instructor is not available, or it is impossible to organize a group of students for non-resident work, the following regulations will obtain:

a. A complete statement by chapters of all work accomplished must be forwarded as soon as each chapter is completed, to the High School Department of the Teachers College. The question of whether credit is to be given or not will depend upon the thoroughness of the work as demonstrated by these manuscripts.

b. Students taking non-resident courses without the aid of a local instructor must be mature. The plan is intended for students twenty years of age or over. Individuals, however, who are eighteen years of age and can submit evidence that they have the requisite ability and the earnestness of purpose essential to success may be allowed to enroll for these courses.

c. Inasmuch as it is more difficult to do non-resident work when depending entirely upon one's own resources, students using the individual method are only permitted to take two subjects each term, or two units per year.

d. When a given course is complete, the head of the department to whom the manuscripts may be referred for correction will give an examination or require a thesis as in his judgment may seem best.

e. In all other respects the regulations governing the group method are applicable to the individual method. Fees are one dollar per subject or three dollars per unit (see explanation of unit given above).

Inquiries will receive prompt attention.

Courses and Text-books

1. First Year Algebra.
Text-book—First Principles of Algebra, pp. 1-276.
Author—Slaught and Lennes.
Publisher—Allyn and Bacon, Chicago.
Price—\$1.20.
Credit—One Unit, or fifteen hours.
2. Second Year Algebra.
Text-book—First Principles of Algebra, pp. 276-476.
Author—Slaught and Lennes.
Publisher—Allyn and Bacon, Chicago.
Price—\$1.20.
Credit—One Unit, or fifteen hours.
3. English History.
Text-book—A Short History of England.
Author—Edward P. Cheyney.
Publisher—Ginn and Co., Chicago.
Price—\$1.40.
Credit—One Unit, or fifteen hours.
4. Botany.
Text-book—Principles of Botany.
Author—Bergen and Davis.
Publisher—Ginn and Co., Chicago.
Price—\$1.50.
Credit—One Unit, or fifteen hours.
5. Physical Geography.
Text-book—Physical Geography.
Author—Wm. M. Davis.
Publisher—Ginn and Co., Chicago.
Price—\$1.25.
Credit—One-half Unit, or seven and one-half hrs.

6. General Science.

Text-book—General Science.

Author—Caldwell and Eikenberry.

Publisher—Ginn and Co., Chicago.

Price—\$1.00.

Credit—One-half Unit, or seven and one-half hrs.

7. English Literature.

a. The Short Story.

Text-book—The Short Story.

Author—E. A. Cross.

Publisher—A. C. McClurg, Chicago.

Price—\$1.50.

Credit—One-third of a Unit, or five hours.

b. The Novel.

Text-book—Silas Marner (required).

Author—George Eliot.

Publisher—Houghton Mifflin, Chicago.

Price—30 cents.

(Two are to be chosen from the following):

Text-book—The Marble Faun.

Author—Hawthorne.

Publisher—Houghton Mifflin, Chicago.

Price—60 cents.

Text-book—Quentin Durward.

Author—Scott.

Publisher—Houghton Mifflin, Chicago.

Price—50 cents.

Text-book—The Tale of Two Cities.

Author—Dickens.

Publisher—Houghton Mifflin, Chicago.

Price—50 cents.

Text-book—The Spy.

Author—Cooper.

Publisher—Houghton Mifflin, Chicago.

Price—50 cents.

(N. B.—Three novels are to be read.)

Credit—Two-thirds of a Unit, or ten hours.

NOTE—If students who desire to use the individual method in their non-resident work will notify us promptly as to their choice of text-books, we will try to have any outlines which may not be included in this bulletin, reach them by the time the text-books (which they order themselves direct from the publishers), arrive.

Outline for Non-Resident High School Courses

I. ALGEBRA.

1. GENERAL INSTRUCTIONS:

The student should read the author's explanations very carefully before attempting to solve any of the exercises. Give special attention to the principles printed in italics and numbered from I to XVIII. Send in the exercises one chapter or less at a time.

Written tests will be required from time to time the questions for which will be sent by the instructor.

2. DETAILED INSTRUCTIONS:

Algebra (1). Work out in neat form and send in all the exercises from page 1 to page 92. If there are problems you cannot solve, either write for special help or work them out as far as you can in their proper place on the lesson sheet and make a note there concerning your difficulty. 5 hrs. credit.

Algebra (2). Work out and send in all exercises from page 92 to page 198. 5 hrs. credit.

Algebra (3). Work out and send in all exercises from page 199 to page 273. 5 hrs. credit.

Algebra (4). Advanced Course. Work out and send in all exercises from page 287 to page 364. 5 hrs. credit.

Algebra (5). Advanced Course. Work out and send in all exercises from page 365 to page 444. 5 hrs. credit.

Algebra (6). General Review. Work out the last two problems in each set of exercises. 5 hrs. credit.

G. W. FINLEY.

II. ENGLISH HISTORY.

1. GEOGRAPHY:

Surface. Climate. Rivers, Coasts. Products.

2. PEOPLES OF ENGLAND:

Contributions to English character, language, religion and government. Prehistoric group. Ancient peoples. Invading peoples.

3. CHURCH:

Organization. Influence. Struggle for supremacy. Monasticism—Crusades. Reformation—causes, leaders, results. Acts of government concerning church.

4. GOVERNMENT:

Primitive plan. Roman form. Saxon England.

Norman Government. Feudalism—growth, evils, advantages. Court system. Taxation. Army organization. Law making. Territorial policy. National Unity.

National Unity. Nationalizing influences. Foreign policy. Civil troubles—War of Roses; Baronial conflicts. Conflict between Absolute and Parliamentary ideals of government. Cromwell and Commonwealth—Stuart doctrine.

Development of Great Britain. Territorial expansion—India—New World. Mercantile Policy. Industrial development. Influence of French Revolution.

Age of Reform. Reform in government, religion, society, education, colonial policy.

5. INDUSTRIAL DEVELOPMENT:

Land—Manor—Feudal system. Labor—Statutes—Black Death—Conditions. Peasants Insurrection. Merchant and Craft Guilds. Commerce—towns. Inventions, factory system, industrial revolution, laws. Crystal Palace. Free trade policy.

6. INTELLECTUAL GROWTH:

Language. History. Science. Poetry. Authors. College and Universities. Monasteries. Printing. Artistic life. Architecture.

JEAN CROSBY.

III. THE SHORT STORY.

1. STUDY:

Chapter II, pp. 17-23.

Chapter III. What is meant by theme, pp. 26-30; the greatest themes, pp. 36-37.

Chapter V, pp. 59-63.

Chapter VI. Setting, p. 69; tone, pp. 70-71; style, p. 72.

Chapter VII. Point of View, pp. 80-81.

2. The following short stories are to be studied. A written report (from two to three pages in length) concerning each is to be made out according to the suggestions in the plan given below:

The Necklace.

The Prodigal Son.

Dr. Heidegger's Experiment.

The Adventure of the Speckled Band.

Will o' the Mill.

The Princess and the Vagabond.

Martha's Fireplace.

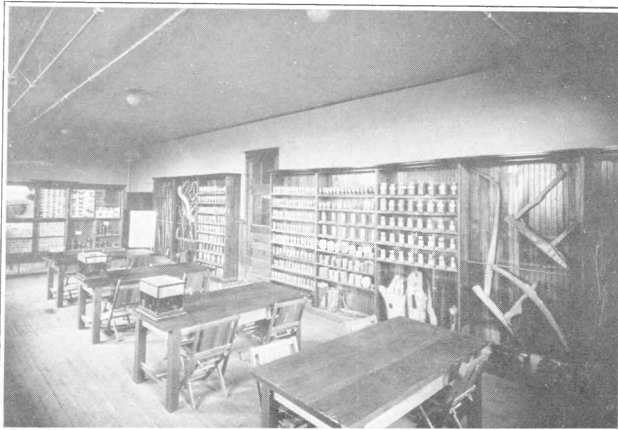
The Truth of the Oliver Cromwell.

Before attempting to write a report, study carefully the story, A Piece of String (page 46), and the author's comments on it (page 56); also, The Whirligig of Life (page 94) and the author's study (page 103).

3. PLAN FOR WRITTEN REPORT:

Use these questions as *suggestions* pointing the way to your study of the short stories. Combine the answers, making a unified essay of from two to three pages.

(1) Write a brief synopsis of the story using not more than three paragraphs—fewer if possible. (Study the synopsis on page 103.)



ELEMENTARY AGRICULTURE

- (2) State the theme.
- (3) What is the tone of the story: tragic, humorous, farcical, poetic, dreamy, etc?
- (4) Is this a story of character, incident, or setting?
- (5) Make a list of the characters: a. The principal characters; b. Those of secondary importance; c. Those used merely as background, if there are any such.
- (6) Is the setting interesting for its own sake, or is it used merely as a background for the characters and incidents?
- (7) What seems to have suggested the title?
- (8) What is the author's point of view?
- (9) The most effective short story is one that employs
 - (1) characters highly worth knowing and thru these works out
 - (2) a great theme upon a
 - (3) stage (background or setting) suited to the action
 - (4) and the people of the story.
 Does the story you are studying fall short in any of these four specifications? Comment at length upon this question.

4. DIRECTIONS:

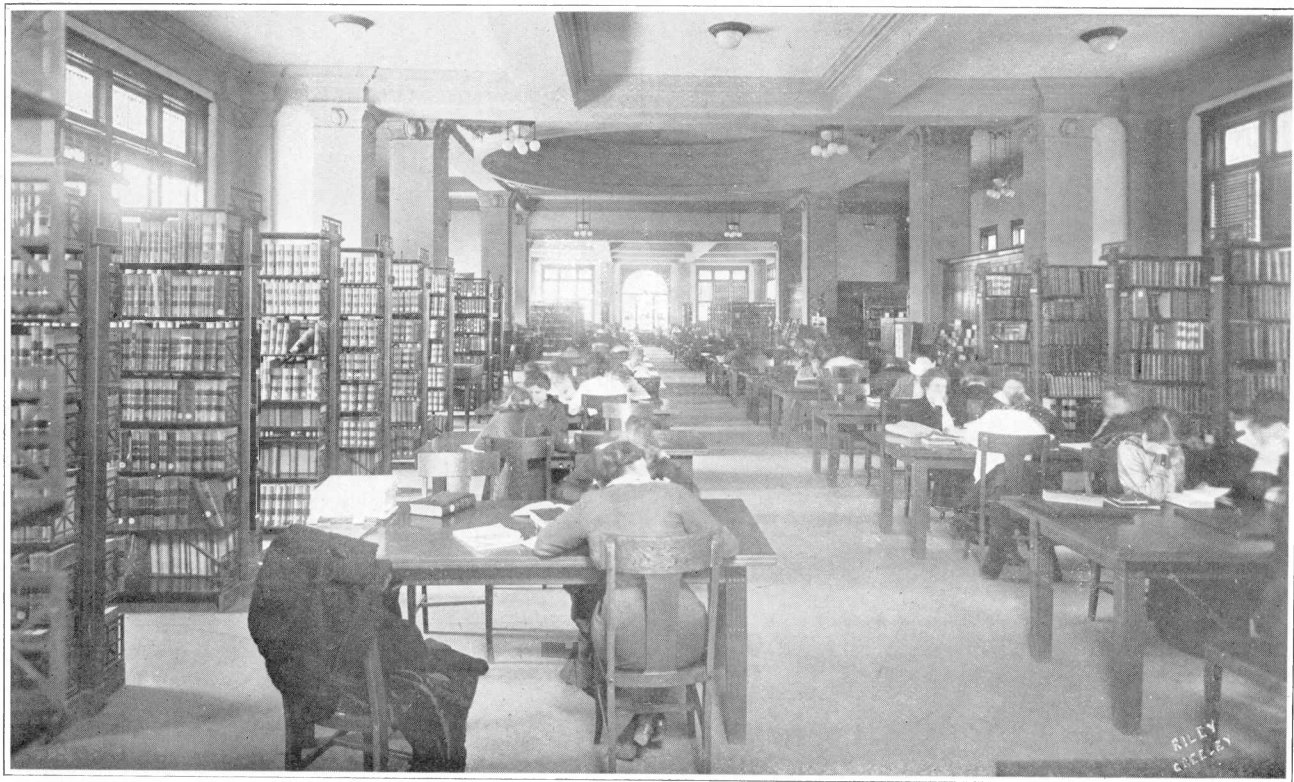
Write on one side of the paper, using pen and ink. Submit one or two reports at a time. RAE BLANCHARD.

Entrance Requirements

Persons who have completed the eighth grade in any of the public schools of Colorado may be admitted to the ninth grade of the High School Department of the State Teachers College without examination.

Graduation Requirements

The amount of work to be done is the same as in the four-year high schools, but the time in which the work is to be done may be shortened by ambitious and capable students. This school does not say to every boy and to every girl: "You can not complete your work in less than four years, no matter how hard you try; no matter how great may be your power of accomplishment, and no matter how excellent the results actually attained." This old lock-step system, which reduces the aspiring to the same level as the indifferent, and makes no distinction between those who possess high ideals, energy, and honor and those that



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do not, has been abandoned and a plan which makes all depend upon the efforts and the character of the individual has been adopted.

Pupils who have good records for scholarship, who are mature, and who come to school with a definite purpose of self-improvement, are permitted to take five subjects (five units) per year. But the individual who takes five subjects and fails to do them well is immediately reduced to four subjects (four units). This means that strong students may complete the work in three years, but that those who are not able to save the year of time without sacrificing the quality of their work must take a longer time to complete the course. No stigma whatever attaches to the individual who, because of illness or a desire to do extra work in any given field, limits the number of subjects and consequently increases the time necessary to graduate. On the other hand the school holds out no encouragement to pupils who come to school merely to mark time.

Reduction in Fees

The Board of Trustees of the State Teachers College, at a meeting held April 9, 1916, reduced the fees in the High School Department from thirty dollars a year to twenty-one dollars a year. One-third of this amount is payable each term. The twenty-one dollars includes all laboratory fees and the free use of text-books.

Calendar

FALL TERM

Begins September 19, 1916

Ends December 8, 1916

WINTER TERM

Begins December 11, 1916

Ends March 16, 1917

SPRING TERM

Begins March 26, 1917

Ends June 14, 1917

THE SUMMER TERM

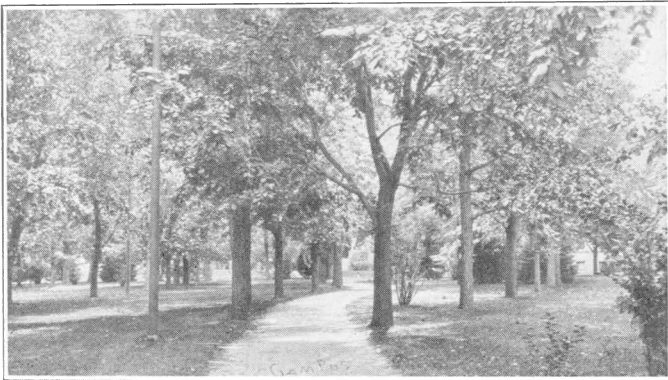
State High School of Industrial Arts
June 12, 1916, to July 21, 1916

Courses will be offered in science, mathematics, English literature, history, modern languages, and those vocational subjects which fit into a well-rounded high school course.

The summer school is one of the newer developments in the educational world, but its success is already assured. It gives the aspiring an opportunity to save time and so shorten the period of preparation for life.

No more beautiful spot is to be found anywhere than the campus of State Teachers College, which is also the home of The State High School of Industrial Arts. Why not begin a high school course this summer, or make progress on the one you have already begun?

No fees will be charged for the summer term. Full credit will be given for work done.



For further information address

THE STATE TEACHERS COLLEGE

Greeley, Colorado

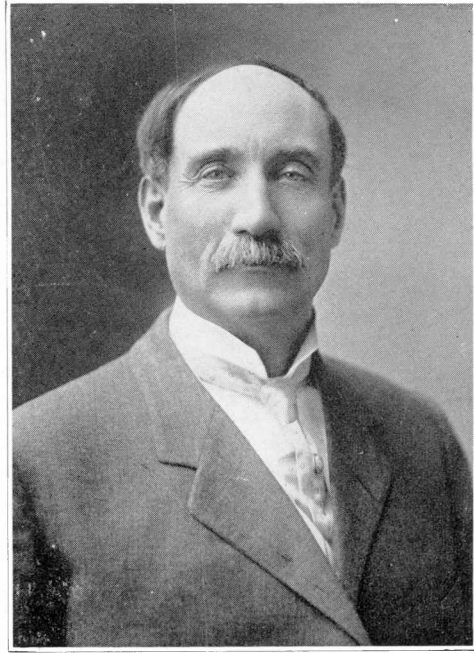
THE STATE TEACHERS COLLEGE

Greeley, Colorado

5

IN MEMORIAM

ZACHARIAH XENOPHON SNYDER



Geo. Snyder.

1850-1915

Foreword

"Oh may I join the choir invisible
Of those immortal dead who live again
In minds made better by their presence: live
In pulses stirred to generosity,
In deeds of daring rectitude, in scorn
For miserable aims that end with self,
In thoughts sublime that pierce the night like stars,
And with their mild persistence urge man's search
To vaster issues."

ZACHARIAH XENOPHON SNYDER—A BIOGRAPHICAL SKETCH AND APPRECIATION.

(By Edgar D. Randolph.)

On Thursday, November 11, 1915, at high noon, Dr. Z. X. Snyder, for twenty-five years thru fair weather and foul alike, the masterful and sagacious President of The Colorado State Teachers College died at the residence on the campus. It is but a tribute to his power that among those close to him few were prepared for the end. He had been stricken with an incurable malady early in the spring and for days was near death. His wonderful strength prevailed, however, and slowly but indomitably he came back to his loved work, with characteristic optimism putting aside the veiled concern of his friends. He had organized the summer session and before its close he was again at his post. In the brief vacation following he was full of plans for the coming year.

On the coast the N. E. A. was meeting. He must needs be there as usual. He had been a member of it almost from the year of its incorporation by Congress and from 1889 was one of its leading figures. Solicitous friends of a life time from far and near came to him there. Their fears, aroused by reports of the early crisis, were allayed by the well-remembered buoyancy of spirit; he was the same man to them—pianful and expectant.

At the College in September he resumed his heavy responsibilities with pleasure. There was so much to be done for the School. "To think and then to act"—this was the business of life. There were changes in him, however. His love of nature, always notable, seemed to have been almost a passion since his early illness. Many of his chapel talks in the last days were aglow with poetic fervor. On the campus which he had created he daily discovered new beauty—and linked it with the nusus of the Universe, the great force that works unceasingly up and out thru things and man—to the Master.

"Whose secret Presence thru Creation's veins
Running Quicksilver-like eludes your pains
Taking all shapes from Mah to Mahi, and
They change and perish all—but He remains."

To those who had known him long there was observable this heightening of old interests—beautiful, but vaguely alarming. In his office, however, they found him, as always, occupied but hospitable. He was at work and happy,—confident and ready for what the hour brought.

Up to the last week it was so. On Monday, November the first, he enjoyed to the utmost Lady Gregory's reading. On Wednesday he introduced with characteristic humor a visiting speaker. This was the week of the meeting of the State Teachers' Association in Denver. Wishing to conserve his strength for this, he decided to rest until Friday, the day of the Alumni Banquet. On Friday he felt—not so well. The expectations of the Alumni were dashed when the President of the Board of Trustees read the telegram announcing Dr. Snyder's regret that he could not attend the banquet. It seemed a portent. Fresh apprehension arose among his friends when he did not appear at the College Monday. These were, in fact, the dreaded days. Valiant and unafraid he gave himself to the great last change.

"Home is the sailor, home from the sea,
And the hunter, home from the hill."

* * * * *

His was a long and adventurous career, which can only inadequately be sketched in. Behind the bare, dated record of his progress from post to post of greater responsibility lie the illuminating details of a rich and ordered life. What belief in the efficacy of intelligent effort, what principled confidence in men, what sacrifice of self, what firm and persistent endeavor are part and parcel of the bricks, and stones, and trees, and flowers in and of the College,—these are the largely inaccessible and interesting records of which we gather fragments in the reverent reminiscences of men far and near who

touched him at this and that point of his life work, felt his power and responded to the charm of his personality.

Zachariah Xenophon Snyder was born in Westmoreland county, Pennsylvania, August 31, 1850. He was of German descent in his father's line, and of Scotch-Irish on his mother's side. The usual experiences and incidental education of country boys were his. He attended the rural school that was built on his father's farm—as did scores of his boyhood friends. He passed from the country school to the Mt. Pleasant Classical Academy for his College preparatory work, as only a few of them did. In 1872 he alone of the early group entered Waynesburg College, Pennsylvania, an institution happy in a few inspired teachers and noted now for the number of college presidents who received their training there.

In 1876 he graduated with the honors of his class. So runs the record, and so, in the main, might run the story of any of his classmates. Behind the announced consummation, however, (and recorded only in such reminiscences as were alluded to above) lie significant details such as at Galton relied on for his famous doctrine of the irrepressibility of genius. While leading his classes in college, Dr. Snyder was also earning his way, doing both with the careless joy of superabundant strength. He was both student and teacher. Five months of each year he taught in the rural schools of Pennsylvania, and stirred the whole countryside from his base of operations in the little school house.

Senator McCreery tells of the debates into which at this time he was drawn with Dr. Snyder, as occasions which brought the people of the county together in the greatest enthusiasm. Thus, as a mere incident to his college work, he left his mark upon the rural schools—in new standards of efficiency. There was apparently no division of his forces. In his college work he was likewise vitally interested and effective—as appears in the story of his thesis, in which by vote of the faculty the culminating sentence must be rephrased more in tune with the prevailing philosophies of life. Yielding to the exigencies of the situation he changed the sentence—but later, in the heat of reading, forgot the emendation, and was forgiven. It was in the midst of this strenuous period of his life that Dr. Snyder was married—in 1874—to Miss Maggie Smith of Scottdale, Pennsylvania, whose gracious presence is inseparable from the memory of him.

Following his graduation, Dr. Snyder became principal of a grammar school in Wiconisco, Pennsylvania, where in the years from 1876 to 1881 he taught, studied and lectured, all with such vigor and originality as to attract anew the attention of the President of Waynesburg. In 1881 he was invited to take the chair of higher mathematics and natural science in the college. The salary was meager—only \$600—but the work was attractive, and it was an opportunity, moreover, for one of his vitality to carry further his studies, which had never been discontinued. He accepted, and for another year did both a professor's and a student's work—and matured his plans for the future.

To realize his soaring schemes he must have funds. He saw beyond the cramped opportunities of his present to days of larger scope. He took stock of himself and of his environment and made a swift decision. An opening occurred in a thriving hardware firm in Scottdale. A man of ideas and initiative was needed to expand the business. He took the place and entered upon his duties with the quick grasp and enthusiasm which had characterized him as a student and a teacher. From the outset he was phenomenally successful. In the following two years (1882-1884) his income leapt to six thousand dollars per year. In the first year he established a home in spacious grounds such as he loved, and found time to indulge his artistic feeling for landscape gardening. "The Snyder place" became the admired spot of the town, the place past which people drove of evenings. He expanded the business on all sides, establishing powerful connections with the great iron and steel men

of the State. The outlook was bright. Apparently he had everything in hand for which people strive, and it had come easily and swiftly. A clear way to wealth lay open before him.

In nothing does his character appear more clearly than in his calm act at this time—in what to his friends seemed his madness. He deliberately abandoned the business to become the Superintendent of the city schools of Greensburg, Pennsylvania, at \$1,000 per year. The business had been only a means to his end. Money was not his value. He was one of the rare few whose occupations are not decided by chance pressures. He knew his life's business from the beginning. He was to be an educator; to this end he bent all circumstances. From 1884 to 1888 he worked with redoubled zeal as a teacher and executive. During this time, as a prominent Boston editor recently remarked, he "became the most prominent young educator in Pennsylvania." It was while he was here that the National Educational Association was incorporated by Congress. He joined it the following year—1887—and his influence spread by many many friendships to all parts of the United States. In the meantime—in 1886—he had won his Ph. D. degree.

By this time he had conquered all obstructive circumstances. Advancement began to search him out. He passed in 1888 to the superintendency of the most praised school system in Pennsylvania, that of Reading, where he succeeded the renowned Dr. Thomas M. Balliett, long thereafter famous as the progressive superintendent of the schools of Springfield, Massachusetts. In Reading, Dr. Snyder's ability came for the first time into full play. He introduced organization and methods of teaching that soon made him prominent throughout the state.

As a result in 1889 he was elected President of the Indiana State Normal School at Indiana, Pennsylvania. He was here two years only, but long enough to stamp his genius upon the school. It became the leading Normal School of Pennsylvania.

In 1891 Governor Pattison sought Dr. Snyder for the office of State Superintendent of Public Instruction, which in the east is a position of permanent tenure of office, and second only to the governorship in esteem. A quibble over the legality of Governor Pattison's action in creating a vacancy made it necessary to wait nine months for the new position.

It was at this time that Dr. Snyder was invited to Greeley to be President of the new Normal School. He had no inclination to come. His outlook was very bright in Pennsylvania. Reputation and power were both his. Offers of \$3,500 and of \$4,000 were in turn refused. Finally when he was offered \$5,000, he and Mrs. Snyder came to Greeley to look the field over. With customary insight he saw what might with courage and hard work be done in Colorado. Stipulating for a free hand, he came, and gave himself unreservedly for the rest of his life to Colorado. For ten years, at a cost of hours per day, he personally answered by hand the growing mail, refusing to let the Board go to the expense of employing a secretary. The originality, courage, and ability which had brought him swiftly and surely to the front in Pennsylvania, found fresh scope in Colorado. Through many national associations his influence extended and the "Greeley Normal School" became the most famous Normal School in America. In this period he was many times approached by eastern boards with responsible positions to fill. Twice he was asked to consider positions carrying a salary of \$10,000 per year; but he had great plans under way and cared more for them than for money.

* * * * *

An account such as we have just given hardly ministers to the vital curiosity which impels us to inquire into the careers of men of achievement. It exhibits the success objectively, by steps or stages; but it too far ignores motives and incentives; and it is almost barren of account of personal qualities. It is to these personal qualities, however, that we have to look for explanation of the sharp ascent of executive careers. The men who knew Dr.

Snyder well, for example, very generally gave less heed of his obvious success than to certain traits of his which on the one hand gave them confidence in his strength and stability, and on the other hand endeared him to them.

He was a leader of men always—never their critic. He had in an eminent degree the most unlearnable of all artistic gifts,—the ability to work patiently and surely with uncertain, diverse human material. This is sheer endowment. All men perhaps have a germ of it and may advance a little way in such artistry. Only a few possess it in an eminent degree. These few contribute nearly all the progress that is due to the organization and direction of human effort, and—it should be remarked—except with the most recalcitrant material, do it in the main so unobtrusively as often to miss their share in the general distribution of praise. Leaders are necessarily self-reliant—and must often seem to despise precedent and tradition. From the beginning Dr. Snyder was at great pains to know what was being done everywhere, and to meet representative men from all parts of the country; this was the meaning and purpose of his membership in so many organizations. But he was often an innovator, and always valiant in standing for his own ideas, whoever the opponent. He had great faith in himself, and did not require the general support of precedents for his actions.

With these qualities, possibly because of them, went a large and generous faith in the essential uprightness of men everywhere. One of his favorite bits of poetry, which he caused to be inscribed in the chapel, suggests this. It is from Lowell:

"Be noble, and the nobleness that lies in other men,
Sleeping, but never dead,
Will rise in majesty to meet thine own."

This faith was made workable by what President Hall was wont to call Dr. Snyder's "sagacity"—which in essence was the product of his view of personality as an evolution. It is almost, but not quite, repetition to speak in this connection of his tolerance. He was a man of the most positive convictions, yet numbered among his close friends powerful men whose views were in many respects largely inharmonious with his. He was a man in whose brain the great ideas of the century were dynamic, yet he entered wholeheartedly into the play of children and the absorptions of rude men. He had enemies who spoke ill of him with venom, and no one ever heard him speak ill of any man—rather, it was characteristic of him to protest against hard judgments of them (as if he were not concerned): "No, he's sincere; he means all right; he just doesn't see." This passes somewhat beyond tolerance; it becomes the charity of I. Corinthians, XIII.

No one could have known Dr. Snyder long without having remarked his abiding optimism. The term is in fact hardly large enough; the quality was rather expectancy, the peculiar and indefectible property of insight. Where it not, there vision is wanting. Dr. Snyder was pre-eminently a man guided by the larger vision of things rather than one interested in the details of a technic.

Another trait which he possessed in an unusual degree—especially for one so devoted to science as he—was his appreciation of art and of the aesthetic aspects of nature. Here again he cared little for technic—and everything for attitudes and ideas. "The direction is right," he would say.

Like nearly all administrators, Dr. Snyder was too busy to write. Like all of them, in the course of his active life he came to hold certain things fundamental. We are fortunate in having his formulation of his educational philosophy—which appeared in outline in a memorable address before the National Education Association in 1904. In the thirteen theses which he there presented, each with brief exposition and suggestive application, there appear the reasons for much that is unique in the school he built. Their condensed form—sometimes cryptic, sometimes poetic, not infrequently aphoristic and epigrammatic—represents not badly his characteristic mode of expression. Together, they exhibit unmistakably his educational insight and

the modernity of his thought. In their emphasis upon the necessity for thoroughgoing application of the doctrine of evolution they are unique. The rare good sense of the practical applications suggested will remind many people of his envied immunity to formality—his unfailing sense of social values. Finally, it is interesting to note in these theses of 1904 several clearly enunciated points of view that are now coming to be generally adopted.

It is impracticable even to quote all the theses. A few of them, together with excerpts from their exposition, will serve to give point to some of the above comments, the obviously such a method could not be thought to present a whole view of his philosophy. Such summarizing statement of this philosophy as can briefly be made may follow the illustrations:

I. "We believe that the application of the doctrine of evolution is fundamental in the interpretation of an individual, and in his education." The application of the doctrine of evolution to physical education (recognizing that "soul helps flesh no more than flesh helps soul") would demand that "Large and small, strong and weak, sound and unsound—all should share in it. This conception of the body in life largely eliminates the false notions that prevail in the present methods of physical training, which have become largely a contest for triumph on the part of the strong, rather than a training in life and for life upon the part of all."

III. "We believe that the education of an individual is the evolution of the possibilities within him—an unfolding of the potential." Accordingly, "To force adult life on the child and call it living or education is absurd; but using the life of the child, in whatever stage he is living to prepare him for the next stage is rational procedure. * * * Our complex civilization can not be thrust into the schools, but the mode of life suitable for children becomes an introduction to our complex social relations."

IV. "We believe that the possibilities in individuals are variable—no two being the same." "There is no movement that is so valuable (as that which seeks) to give an opportunity to individual creative productiveness. It encourages initiative. It is the principle that preserves the individual in the socialization of the schools. Socialization without initiative is deadening; initiative without socialization is narrow. To balance these two is a function of the school."

X. "We believe that the function of the school is to individualize, socialize, and civilize the individual." Hence, "The School should be a community—a society unity—and at the same time unite itself with the larger life of the world. To bring about these results there should be a large degree of flexibility in the school room. Patent methods of discipline prevent the fullest and best expression of children in forming social ideas and in their realization. They tend toward having the child live with himself—toward making him self-centered, selfish, and unfit for social blending. The center of interest in a school is the child. The school is organized for the children. The teacher and all equipment are for their aid. A chance should be given each child to blend with all others; a chance should be given each child to express himself relative to his interests. * * * In other words, the school should be just as democratic as it is possible to have it without having it a place of caprice. * * * Making a child a civic force commences early in life."

XI. "We believe that the public school system should be the most democratic of our institutions and the most efficient for the education of the children, for the elevation of the home, for the solution of municipal, state, and national problems." Accordingly, "Education is constructive from within; it is subjective. Legislation is constructive from without; it is objective. In the solution of the great moral, social, and civic problems, education must precede legislation. That a law may be effective it must grow out of the minds and hearts of the people; it must be a product of the social mind."

Again, "The organization of the modern school is an economic problem in which the capital stock is time. Any school that wastes the time of the

child because of its mechanism is unworthy of public maintenance and is behind the spirit of our civilization. It may have to be endured, but it is not to be desired. A school is for the whole people. The interests of the whole people have become so varied that much latitude should be given for the selection of subjects. A school that is narrow in its opportunity for entrance is not a school for the whole people."

Again, "The overcrowded course of study is a result of making subjects ends in themselves. Forsake this fetich and there is relief. The school needs emancipation from the priestly authority of the teacher * * *"

XIII. "We believe that the school teacher should be trained both academically and professionally." "Nothing can take the place of scholarship. It is the reserve power of every great teacher. * * * Professional training is the adjustment of scholarship to the education of the child, the people, and the state."

In view of the necessarily fragmentary character of the foregoing illustrations of Dr. Snyder's educational philosophy, a brief statement of his organizing ideas may fittingly be given by way of supplementation. These may roughly all be subsumed under two fundamental points of view:

1. His evolutionary view of the method of individual growth.
2. His social view of the relation of education to life.

Each of these he phrased with many variations to fit the moment's need of special emphasis. The first probably received its most philosophic form in the following sentence: "Education is the freeing of the personality of the individual." But students in his classes in Biotics will perhaps be most familiar with the expression, "Education is the unfolding of what is potential." The second of the fundamental points of view perhaps got its widest form in the expression, "Education is the socializing of the individual—fitting him for social service." But students will probably have heard most often the phrasing "Education is for Life."

About these two organizing ideas he gathered a wealth of illustration. Art and literature, history and biography, were tributary to his class in Biotics, where he taught the known facts of man's history on the earth, and the laws of life as they are now conceived. For the students, in the course of the year, the long and adventurous career of man in the world took on the glamor of romance, which deepened into religion in the end—as they worked through Agassiz, Huxley, Darwin, Wallace, coming finally to Spencer's First Principles, Fiske, Maeterlinck, and Bergson. "Window after window was thrown open," says a former student, "and we looked on life with growing reverence for its mystery and beauty."

It is imperative to comment at this point on Dr. Snyder's method of teaching—or rather to emphasize the dynamic quality of his belief in the tenets of his philosophy: "Education is the freeing of the personality of the individual" was one of these, and his practice followed strictly upon it. He was never a driver of students. His belief in the efficacy of interest as the constructive force in students' lives was profound enough to make him stay or fall by it. He depended upon giving a large vision of life and of the forces that are known to operate in it: this was his dynamic, and in his hands effectual. It rested with the students to perfect their technic, to attain to scholarship. "Personality, power, must grow from within by interest in significant things. It can not be laid on from the outside." Young individualists whom life called more insistently by other ways than by books, he would take all day a-fishing; and casually in the day would teach them more of the wild things that call boys from school than they had dreamed might be known. Later, equally casually, he would find for them the books that were relevant to the things they had talked of at the river. "There is no other lever for real growth than interest," he would say. "Education is just the unfolding of personality."

In the application of such ideas to the work of the school which he so largely created, Dr. Snyder was far readier than most of his contemporaries. He was often, indeed, a pioneer,—bearing the consequent criticism without flinching or compromising, and accepting praise very quietly. In the issue of November 25, 1915, the editor of the *New England Journal of Education* says of Dr. Snyder's work in Greeley: "From a wait he saw the school become in several respects, the most famous in the United States. He was the first in America to insist absolutely upon the same entrance requirements as for a university. He had the best normal school library in the world, and it was the first to be put on the basis of the best libraries in America. He led America in nearly all modern professional ideals. He was the first to have a complete extension course; the first to provide correspondence help to teachers in service; the first to magnify ceramics, even leading any university in the country; the first to perfect industrial and domestic art in a normal school; and one of the first to make a genuine teachers' college out of a normal school."

To this may be added that he was also the first to establish courses in sociology in a normal school; the first to abandon in a thoroughgoing way the text-book system of instruction in a normal school—doing this early in the effort to work away from the text-book slavery of teachers to a rational use of books: "The library is your laboratory," he said; "books are only points of view; use them all; balance them up."

Whether he was the first to build up a museum in a normal school we cannot say without research; but there can be no question that he built up the best normal school museum in the United States. It would be interesting to know how many State Universities have as good a one. Nowhere else outside the galleries of great cities are students brought into contact with so much good art as in The Colorado Teachers College. And finally, in no other educational institution in the United States are biology and the doctrine of evolution so much in the foreground as in The Colorado State Teachers College.

We have not rendered either the man or his work. His work was not typical of the work of normal school presidents. He created from nothing an institution with an individuality of its own—and did it in a scant quarter of a century in a state with slender resources many times divided. That is twice a man's normal work. What he would have done had he come to an established school can only be conjectured. No more was the man typical. Scholars are fairly numerous. Successful administrators are plentiful. A whole man and friend is rarer than these. Here is where our sense of loss is irreparable. Where shall we have friendship again like his? Royally our friend stood by his friends as he knew them—whatever the attack. And more than any one I ever knew, he was generous with his enemies. We feel impoverished by his death—because we know ourselves enriched by his life.



THE FUNERAL ADDRESS. (By The Reverend B. T. Vincent)

Having taken part in the services connected with laying the cornerstone of the first, the east wing, of this structure, before the school had fairly begun, I have had the privilege of watching its progress to this day. I recognize as do you, that the growth of the Institution has been due to the strong leadership of Doctor Z. X. Snyder, who has been its efficient President for nearly the quarter of a century of its history.

Intimate personal and pastoral fellowship with this good man through six years of residence in this city in close neighborly relations, followed by a continued growth of friendship until his sad death, makes my grief deep, indeed; and tears are more fitting than words.

In memory, therefore, of these seventeen years of delightfully helpful friendship; in deepest sympathy with these bereaved relatives, who have been alike,—in the union of the two homes,—cherished friends; and in appreciation of the widespread grief this death occasions among the thousands who have been under the wholesome influence of this trustworthy teacher, guide and friend, I answered the call to bear my loving testimony, eager to emphasize in this sympathetic presence, the greatness and goodness of this true man. My only hesitancy lies in my sense of inability to do him justice, and to answer your expectation, in any tribute I may pay to him.

General Hooker is reported to have said on an occasion which called forth the remark: "No one will consider the day as ended until the duties it brings have been discharged." In other words, days are not to be reckoned by the calendar; but by what has been done in them; life is not to be measured by years, but by achievements. Soldiers do not do their greatest work by subduing an enemy, but in acquiring territory; and, not in that, if the citizens be not cultured and loyal; nor even in that, if the culture and loyalty be not devoted to the highest ideals of a country's worth to the world and God.

In the worthwhile life we are considering a good record has been made, and Dr. Snyder in these years has lived a long time. His life began under the healthful influences of the country, resulting in a vigorous body, and an elastic and susceptible mind. By the industrious use of the country school, the high school and the college, in advancement to well-earned degrees, there was thorough preparation for his chosen profession, for which he was well fitted by natural force and acquired attainments.

With the record of a principalship in the Pennsylvania Normal College, following a successful superintendency of the schools in Reading, Pennsylvania, we do not wonder at the offer to him of the State Superintendency of Instruction. It is to the good of our commonwealth, however, that he preferred to give us his strength in taking our State Teachers College into his skillful care; and that for nearly a quarter of a century he has developed it until it has become one of the finest institutions in the land.

In this great work he has not only laid the foundations of a magnificent structure; but gone on advancing its work, until even in these early stages of its history, it has sent out thousands of teachers, well trained and equipped, into all parts of our great state, and many other states, perpetuating the influence, thru these teachers, and their pupils, unto good that will repeat itself thru all succeeding generations.

So projected thru the many ramifications of our national life this great teacher and leader has, with his able associates in their skillful professional work, passed worthy men and women thru these halls of learning, and these schools of training unto richest fitness for noblest service. Well did Lord Brougham contrast the victories of the soldier with the work of the teacher in these words: "Let the soldier be abroad if he will. * * * There is another personage, less imposing in the eyes of some, perhaps insignificant. The schoolmaster is abroad, and I trust to him, armed with his primer, against

the soldier in full military array." Well were it that, with Lord Brougham, now, here and over the sea, this sentiment were more fully appreciated. Our strong educator has been "abroad" amongst us, and in wide spheres of pedagogical activity until mighty influences that his death will not arrest, but in the law of perpetual influence, as indicated by Him who said "If I go not away the Comforter will not come unto you." Dr. Snyder will live on and on. His "day is not ended" according to General Hooker's affirmation.

A vital problem, now in course of solution, is that of the relation of religion to public school education. That the Bible as the highest religious literature extant, should be in some way connected with the all-round training of our youth, seems an indisputable theory. But aside from that line of discussion the teacher, who is an epistle constantly read, both consciously and unconsciously by pupils, is the transforming influence that subtly communicates, thru art, science, literature, history, in a fruitful contagion of character that cannot be equalled by any forms of instruction devised by pedagogy; and is necessary to confirm all formal instruction.

Such an influence this masterful instructor exerted. His fine physical form commanded attention and admiration; his eager, enthusiastic manner was "catching"; his wide knowledge induced reverence, his facile mode of teaching aroused response; his cheery, fascinating approach to both subjects and students, unto the practical application of the one to the other, fixed knowledge; and all his work was pervaded by an evident conscientious desire that all truth should show itself Divine, expressing this Divinity in those who should go forth as living teachers, whose lives were in demonstration of the personality of truth. That they should have trained minds, wide knowledge, pedagogical ability, winsome instructional power, all this was necessary; but that they should go out as all-rounded, effective men and women to bring about an educational uplift in this state, with his ideal, each teacher being himself or herself, a Holy Bible, not of creed, but of character.

Dr. Snyder was not an emotional Christian, in the usual sense of that term. His convictions, however, were deep in the matter of man's relation to God. He was an evolutionist, strong in his belief in that theory of the process and progress of life. But like all great thinkers he did not dissociate God from the process of nature. One of his students here in the early stages of her studies was heard to say, "I am an evolutionist, and so have no further use for the church." The ignorant child, for she was very young, had not yet come under the larger influence of Dr. Snyder's teaching. He had much use for the church. His faith in God was supreme. As a profound student of the mysteries in nature, he saw the dextrous hand of the infinite Artificer in its intricate work. On an occasion when a skeptic in a western Colorado town found fault with him for recognizing Christianity in education his response was emphatically loyal to both religion and culture, and in vehement reaffirmation of his faith in Christ as the founder of the highest type of cultured citizenship, which he, as a teacher, was seeking to advance.

Bishop Lawrence, in a tribute to Phillips Brooks says, "The truth of the Incarnation was the central truth of his life, thought, and preaching. For him it solved the pressing problems of life and nature, and knit the universe, God and creation into living unity." Without loud profession this was Dr. Snyder's conception of Christianity; embodiment rather than formality of confession. And yet he recognized the duty of public confession of the faith. The great Phillips Brooks wrote these lines:

"Truth keeps no secret pensioners; who'er
Eats of her bread must wear her livery, too;
Her temple must be built where men can see,
And when the worshipper comes up to it,
It must be in broad noonlight, singing psalms
And bearing offerings, that the world may know
Whose votaries they are, and whom they praise."

A Christian is not ashamed of Christ; happy the Christians of whom Christ is not ashamed.

Turning from the man we look tearfully at the home to which his strength of care, instruction, example and affection has been given in all these glad years of a rare domestic life. A lonely broken heart is left here severed from the visible communion which has illumined life with the peculiar charm that comes of such similarity of taste, aspiration, pursuit, achievement and hope, as existed between this mutually devoted husband and wife. These children who have known the stalwart manliness of this father; and have looked "as one who looks on glass, not as the medium, but at the vision beyond it," and thereby the larger view of fatherhood, do see thus the supreme Father, to Whom alone the earthly father would direct them. Other bereaved loved and loving ones, mourning alike in bitterness of grief, are comforted alike with Divine consolations. Great and sure is the promise of the immortal fellowship of which, in Christ our memories are prophesies.

You, of this strong Faculty, who have been for a longer or shorter period in fellowship with Dr. Snyder in this great office of instruction and training have known him intimately. That you have both differed and agreed in the practical application of the principles involved in your joint work is certain. But that you have appreciated his leadership is equally certain, and you will miss him grievously. That he has won your admiration and affection is undoubted.

To you, who have been under instruction toward preparation for the great work to which you have given your lives, the loss of this chief instructor will be a great loss. I well know the strength of the ties that bind teachers and pupils, analogous to those which unite pastors and parishioners. The opportunities of interchange of thought, and increase of knowledge and teaching ability, will be deeply and painfully missed. But your memories of his affectionate faithfulness and skill will be delightfully cherished.

To you, the brothers of the Ancient Order comes the consolation of your own great figure of promise drawn from the Divine word, as you realize for him, as well as yourselves, the "grip of the Lion's paw of the Tribe of Judah," thru whose hold upon you, by your hold upon Him, is the assurance of the immortality betokened by the sprig you cast believably into the open grave. And you of other Fraternities to which Dr. Snyder was an honor, have in all your symbolisms ideals of true manhood, and the endlessness of it, and do here mourn sincerely, to imitate eagerly, and follow hopefully.

As I look out of my study window in Denver toward the west I see the Cathedral of St. John, the large windows of which are richly illuminated by the setting sun as its light passes thru them, and is dispersed glowingly as tho the whole edifice was full of light. Do we not see in this radiant phenomenon a type of the relation the teachings of religion bear to the illuminating interpretations of nature? He who is Himself with infinite wisdom, the source of all existence, the self-existing Being from whom we have sprung; the inspirer of all our study; the all-pervading Personal substance with whom and which we are consciously one, can alone interpret to us unto our progressive life in Him.

Into the unhindered expansion in such growth our revered teacher has gone. We will follow him thru the leadership of the Great Teacher, whose teachable and loving students we are.

Rich to these who mourn is the lesson of the light thru the Cathedral in the consolation it brings. The setting sun of this great life vanishes for a time from our limited vision; but the truths of the holy faith assure us of the glory beyond. His faith in them gave him his victory; and the faith of these who sorrow gives them infinite consolation.

HISTORY OF THE STATE TEACHERS COLLEGE OF COLORADO.

(By Geo. A. Barker.)

One of the most remarkable features in American life is the mixture of community idealism and excessive individualism which the Western American exhibits. And nowhere might we see this unique combination better exhibited than in Colorado. The pioneers of the Greeley colony were people of the stamp likely to demand education and to have an educational spirit, for they were, to a remarkable degree for a western community, drawn from the educated people of the Middle West and East. This seed sown in the early colony, this feeling in favor of education, might be said to be the first foundation upon which the later educational movement grew.

More immediately Greeley had in her citizenship, just before the founding of the State Normal School (later to become the Teachers College) a number of men who knew at first hand the workings of the normal schools and colleges of the Middle West and East and the educational, social, and cultural benefits which such institutions exerted on the communities where they were located. Some of these citizens might be mentioned. State Senator McCreery and Mr. George D. Statler, now a member of the Board of Trustees, were both graduates of the Indiana (Pa.) Normal School and were former school teachers in Pennsylvania. The late Judge J. M. Wallace, then President of the First National Bank of Greeley, was a brother of a President of Monmouth College and interested from a family standpoint in higher institutions. Attorney J. M. Look was a former resident of Michigan and knew intimately the normal schools of that state.

In the fall of 1888 the gentlemen mentioned above, together with Governors Eaton and Brush, Mr. J. Max Clark, Mr. B. D. Sanborn, Dr. Hawes, and other citizens, commenced to agitate the location of a normal school at Greeley, and in January of 1889 a meeting was held of the citizens of the town to urge the founding of such a school here.

The result of the citizens' meeting was the introduction of two bills, one in the House by Representative George C. Reed of Washington county, and one in the Senate by Senator J. W. McCreery of Greeley. The bills were drawn up by Senator McCreery and Attorney Look of Greeley and were based on the knowledge their authors had of the laws in Pennsylvania and Michigan, which had created the normal schools of those states.

From the first the bills encountered determined opposition, as might have been expected when one remembers that the other state institutions were already in the field and were naturally suspicious of a newcomer who might restrict their activities. The plea was also advanced that the state was a new and thinly populated one and that the expense of such an institution would be prohibitive. Another opposing sentiment was the desire of other portions of the state to have the normal school. A bill was introduced to locate a normal school at Trinidad. This bill being lost, the original bill came before the Senate a day before it had been expected that it would appear, and its authors were fearful as to results as one ardent supporter of the bill was ill. To save time, a reconsideration until the next day was moved and when the bill came up it was passed by a majority of one vote. In the House, too, the bill had a precarious margin of majority, but it was ardently supported by Speaker Eddy of Routt County. Mr. Eddy called another man to the chair and took the floor in favor of the bill. Mr. Grafton of Colorado Springs, always a devoted friend of education, also spoke strongly in favor of the bill and it passed the House by a majority of one vote.

The bill carried an appropriation of \$10,000 for founding the school and specified that the building site and \$25,000 should be furnished by the people of Greeley. At that time "Normal Hill," the region on which the school stands and extending to the top of the hill south of the school was largely owned by the Colorado Investment Company, Limited, of London. The site for the school was donated to the state by the company and by Mr. J. P.

Cranford. The company also donated \$15,000 toward the \$25,000 fund demanded by the State, and the other \$10,000 was donated by local citizens.

The Colorado State Normal School opened its doors to students October 6, 1890. The first faculty, five in number, was composed of the following instructors: Thomas J. Gray of the Mankato (Minn.) Normal School was president; Paul M. Hanus, (now head of the department of education in Harvard University), was vice-president and professor of pedagogy; Miss Margaret Morris (now Mrs. Jesse Gale of Greeley), was teacher of English and history; Miss Mary D. Reed was teacher of mathematics and geography, while Professor John R. Whiteman of Greeley was teacher of vocal music.

When the first session of the school was opened, the building had not been completed, and so the classes were held in rooms down in the town. There were three places of meeting—the vacant court rooms in the court house, the lecture room of the United Presbyterian church, and the old Unity house church at the northeast corner of Ninth street and Ninth avenue.

On June 1, 1890, the cornerstone of the main building of the State Normal School was laid by Mr. Fred Dick, State Superintendent of Public Instruction. Governor Cooper, the President of the State University, Superintendent of Education of Denver, and many other prominent persons in the state were present. The east wing of the main building was first finished, and then it was two years before the west wing of the main building was added.

One must remember, in attempting to get a proper setting for the institution, that Greeley at that time was a town of 3,500 people, instead of over 10,000, as now. The town limits then extended only to the ditch north of the College on Ninth avenue. The campus then was a waste of sage brush and wild oats, and nothing was done to improve it until Dr. Snyder took charge of the institution. A very hopeful move forward, however, was made the following year when a millage bill was passed by the legislature placing the school on an assured basis.

It was deemed the best thing by the board at the end of the first year to make a change in the head of the institution, and in the meantime, Senator McCreery had been appointed on the board. He knew Doctor Snyder intimately. Both had taught in the schools of their home county in Pennsylvania and had frequently engaged in debates and joint discussions at institutes. It was decided by the board to make Dr. Snyder an offer. Mr. McCreery wrote a letter outlining the opportunity for a builder to create a splendid institution, also emphasizing the fact that Colorado was a wonderland from the botanical, zoological and geological standpoints. Dr. Snyder's interest in nature was as profound at that time as it was later. The first two offers were declined by Doctor Snyder, and in reply to the second offer he suggested Professor Shaefer, later Superintendent of Public Instruction in Pennsylvania, as a man fitted for the conditions demanded by the position. However, a third offer was made, and Doctor Snyder wired that he would come out and look over the ground. The result of this trip, which was not merely to Greeley, but included a survey of the state, was that he saw in his mind's eye a magnificent campus and buildings replacing the sage brush, and so he decided to accept the position. Acting President James H. Hays was at the same time elected Vice-President, and the faculty was increased from five to eleven.

We have passed the critical point in our chronicle. The founding of an institution is, after all, the vital period, for the first few years spell success or failure. The growth since that time has been steadily upward and outward. The course, at first, because there were few high schools of the state, was a four-year one, the first two years being devoted to a review of the common and high school branches, the last two years having the emphasis upon the professional branches. In 1897-98 the standard of admission was raised to high school graduation. There was no decided tendency to allow election of subjects for the first decade of the history of the school. From

that time on the course of study has been a decided amplification and enrichment as well as a chance for election of subjects in wide and varied fields. The change to the three term system was accomplished near the beginning of the second decade of the school's history, and the establishment of a high school department to replace the old four-year course gave an opportunity for the training of high school teachers. By an act of the legislature in 1911, the name of the school was changed to the State Teachers College, and it entered upon newer and broader fields of usefulness. This steadily expanding aim has been reflected in a growth from seventy-eight students of the first year to over seven hundred and fifty in the year 1915-16. The material growth has been as remarkable as the intellectual. The beautiful library building occupying the center of the campus was finished in 1906. The commodious training school building, a splendidly lighted and well equipped structure, was completed in 1910. The Simon Guggenheim Hall of Industrial Arts was a gift from Senator Guggenheim to the cause of education in the state. No pains were spared to make it the last word in buildings of its kind. The cornerstone of the Woman's building was laid in 1912. Surrounding this assemblage of buildings is the campus fairyland which must be seen to be appreciated. This forty acres is a masterpiece not only from the standpoint of the botanist but it is a triumph of the landscape gardener's art. Eighty species of trees and over four hundred different kinds of shrubs are harmoniously grouped on the green sward. When one pauses and contemplates this harmonious monument of accomplishment, when one thinks of the spiritual and intellectual contributions, less tangible than this splendid setting, one pauses in reverence to lay his humble tribute at the foot of the monument of the man who made this possible, our late President, Doctor Z. X. Snyder.



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FOREWORD

This is the first of a series of Research Bulletins, which it is hoped, may be issued from The Colorado State Teachers College with a greater or less degree of regularity. That such bulletins may be of much benefit to the teaching profession there can be no question.

This bulletin is the result of weeks and months of the most careful and painstaking effort upon the part of the writers, and if it arrives at deductions and conclusions, striking and unexpected to teachers, it only proves that they should stop and take their educational bearings once in a while.

For example, it is almost certain that most teachers would say at once that the child knows that $9+1=10$ better than he knows that $9+9=18$; and yet the experiments recorded in this bulletin go to establish the reverse. Also the statement relative to memorizing addition combinations from tables or otherwise, rather than to learn them objectively or by roundabout methods, may appear unusual to many teachers.

This, the first bulletin of this series, is commended to the serious study of teachers as a real contribution to the pedagogy of arithmetic.

JAMES H. HAYS,

Acting President, State Teachers College.

Greeley, Colo., March 24, 1916.

A Study in Addition

The main purpose of making this study was to improve our knowledge of the best methods of teaching addition. The first specific problem which we undertook to investigate was the arrangement of the simple combinations in addition in a series which would represent the order of their difficulty. In connection with this problem there arose several others which are also treated in this article. The one was to determine the different methods of adding employed by children, the other was to study the value of drill.

The experimental part of our investigation was made in November, 1914. For the experiments which were to determine the order of difficulty, twenty pupils whose adding ability ranged from good to poor were selected from each of the fifth and sixth grades, the sexes being equally represented. We felt that the children in the lower grades did not know the combinations well enough for our purpose, and those in the higher grades knew them too well. Even in the fifth and sixth grades there were some children who knew all of the combinations about equally well and some who did not know many of the combinations at all. The records of such children were rejected and others were taken in their place.

The pupils were taken one at a time into a quiet room and each one was tested on the following table of addition combinations. The numbers to be added were presented orally, and the children responded orally with the sum. The experimenter, for example, called out 6, 7 with a short pause between the numbers and the child said 13 as soon as possible after having heard the numbers. The time was taken with a stop watch. The watch was started by the experimenter with the pronunciation of the last number and stopped as soon as the child's response was heard. The results were noted by an assistant. Those combinations which required the longest average response times were assumed to be the most difficult. If the association between two numbers and their sum is very intimate, the time to reproduce the sum in response to the numbers will in many trials be shorter than when the association is not very intimate or well known. Table I shows the combinations used and the order in which they were presented. The second division of the table shows the simple combinations which were not used in the experiment.

TABLE I.
Combinations used in the experiment.

4+9	7+6	7+5	5+5	7+4	9+5	9+1	7+2	2+2	3+4
5+8	8+5	8+4	8+9	8+7	6+5	8+2	8+3	4+3	2+4
7+7	9+4	4+7	4+5	9+6	9+8	9+2	6+1	5+3	3+1
8+6	4+8	5+6	6+9	4+4	6+4	7+3	5+2	6+3	4+1
5+9	5+7	7+8	7+9	9+9	8+8	8+1	7+1	3+3	1+3
6+8	6+6	4+6	5+4	6+7	9+7	9+3	1+1	4+2	

Combinations not used in the experiment.

6+2	3+2	3+6	3+8	2+1	2+5	2+7	2+9	1+4	1+6	1+8
5+1	3+5	3+7	3+9	2+3	2+6	2+8	1+2	1+5	1+7	1+9

To enhance the value of this part of our study, the experimental work on which it was based was repeated with a few modifications in February, 1916. This time all of the simple addition combinations were used and arranged for presentation as shown in Table II. The arrangement was made by chance with a few changes to avoid the immediate repetition of numbers and the direct recurrence of equal and many difficult sums. For half the boys and girls in a grade the numbers were presented in the order in which they appear in the table, but for the other half the order was reversed. The combinations which the children missed and those for which their response times were exceptionally long were presented again after the whole series had been gone through. In this way the errors were reduced to a negligible number, and the abnormally long reactions were eliminated.

TABLE II.
Combinations used in the second experiment.

5+2	3+2	9+5	9+9	3+3	8+1	2+7	8+5	6+9	9+4	9+7	1+7
3+9	4+9	7+8	5+6	4+7	3+5	7+5	9+3	4+4	7+7	2+2	2+5
7+2	6+8	2+6	7+1	2+8	8+4	6+1	1+6	6+7	5+4	6+4	5+7
1+9	2+3	9+2	4+8	4+2	1+1	8+9	5+8	2+4	2+1	4+3	1+8
5+3	7+9	3+1	5+9	3+6	9+6	3+7	1+4	6+3	8+2	1+5	
8+7	4+1	7+4	1+3	9+8	8+3	6+2	4+5	7+6	6+6	3+8	
5+1	8+8	8+6	2+9	6+5	4+6	3+4	9+1	1+2	7+3	5+5	

In Table III the combinations used in the first experiment are given in the order of their difficulty, the most difficult as determined by the response time appearing first. The table is divided into five groups. The first group contains all of the most difficult combinations which do not vary more than one second in their response times. The second group contains all of the next most difficult combinations which do not vary more than one-half second in response time, and the three remaining groups were made upon the same basis. The time which

appears after each combination is expressed in fifths of a second, and represents an average for forty children.

TABLE III.
Showing the average time of forty pupils for each combination.
First Experiment.

Combination	Time	Combination	Time	Combination	Time	Combination	Time	Combination	Time
7+9	21.98	9+5	16.80	9+4	13.90	5+4	10.58	6+1	7.98
8+6	20.78	6+7	16.50	7+5	13.73	4+3	10.50	4+1	7.85
8+7	19.83	9+8	16.00	7+4	13.20	7+2	10.33	7+7	7.83
9+7	19.78	5+6	15.90	6+4	12.78	2+4	10.23	9+9	7.78
5+8	19.50	4+9	15.88	3+4	12.78	4+2	10.05	8+8	7.55
6+9	19.28	4+7	15.60	4+5	12.43	6+3	9.85	4+4	7.43
6+8	19.03	4+6	15.18	8+3	12.28	9+2	9.78	8+1	7.40
7+8	18.88	6+5	15.15	9+3	12.23	8+2	9.78	7+1	7.33
5+7	18.70	4+8	14.98	5+3	11.73	5+2	9.60	6+6	7.33
9+6	17.75	5+9	14.63	8+4	11.63	1+3	9.38	5+5	7.13
8+9	17.48	7+6	14.55	7+3	11.48	9+1	8.88	3+3	6.93
8+5	17.35					3+1	8.55	1+1	6.70
								2+2	6.20

Average time, 12.76

In Table IV the combinations used in the second experiment are given in the order of difficulty, the most difficult appearing first. This table is divided into six groups. In the first group the variation in response time is not more than three-fifths of a second. In the second, third, fourth, fifth, and sixth groups it is two-fifths, three-tenths, three-tenths, one-fifth and one-fifth, respectively. The time is again expressed in fifths of a second and represents an average for forty children.

TABLE IV.

Showing average time and order of difficulty for the forty pupils in the second experiment.

Combination	Time	Combination	Time	Combination	Time	Combination	Time	Combination	Time	Combination	Time
9+7	16.08	4+7	13.00	8+3	10.63	2+9	9.08	3+2	7.33	7+1	6.30
7+9	15.80	8+6	12.93	9+3	10.60	5+3	9.05	4+2	7.33	5+1	6.20
6+9	14.90	4+9	12.80	3+8	10.50	9+2	8.85	2+3	7.10	9+9	5.98
5+7	14.68	6+7	12.70	8+4	10.33	6+4	8.80	1+9	6.85	6+6	5.88
6+8	14.45	7+4	12.13	3+5	10.25	2+6	8.75	1+6	6.83	2+1	5.83
7+5	14.40	3+7	11.58	6+5	10.20	2+5	8.38	1+4	6.70	1+2	5.80
8+5	14.33	9+8	11.50	4+6	10.03	7+2	8.35	1+7	6.68	8+8	5.73
7+8	14.18	7+6	11.48	2+7	9.93	5+4	8.05	9+1	6.60	5+5	5.73
5+8	14.18	9+4	11.48	6+3	9.73	5+2	8.05	4+1	6.60	4+4	5.50
8+7	13.85	3+9	11.28	7+3	9.58	2+4	8.00	6+1	6.58	7+7	5.50
8+9	13.70	5+6	11.15	4+3	9.48	6+2	7.95	3+1	6.48	1+1	5.35
5+9	13.53	4+8	11.00	4+5	9.48	8+2	7.80	1+5	6.45	3+3	5.23
9+5	13.25			3+4	9.30			1+3	6.43	2+2	5.23
9+6	13.13			3+6	9.30			1+8	6.40		
				2+8	9.28			8+1	6.40		
Average of all, 9.48											

In Table V the combinations are once more given in the order of difficult, the order being the result of a combination of Tables III and IV. The response times are given only for the combinations that are common to both. The other combinations have the same position in the series of Table V as in that of Table IV.

TABLE V.

Showing order of difficulty and average time used for combinations in both experiments.

Combination	Time	Combination	Time	Combination	Time	Combination	Time	Combination	Time	Combination	Time
7+9	18.89	4+9	14.39	7+4	12.67	2+9		3+2		9+9	6.88
9+7	17.93	4+7	14.30	4+6	12.61	4+3	9.99	4+2	8.69	5+1	
6+9	17.09	5+9	14.08	3+8		9+2	9.82	2+3		7+1	6.82
8+6	16.86	7+5	14.07	8+3	11.46	6+3	9.79	1+9		8+8	6.64
5+8	16.84	9+8	13.75	3+5		2+6		1+6		2+1	
8+7	16.84	3+7		9+3	11.42	2+5		1+4		1+2	
6+8	16.74	5+6	13.53	3+4	11.04	7+2	9.34	1+7		7+7	6.67
5+7	16.67	7+6	13.02	2+7		5+4	9.32	1+3	7.91	6+6	6.61
7+8	16.48	4+8	13.00	8+4	11.01	2+4	9.12	9+1	7.74	4+4	6.47
8+5	15.84	3+9		4+5	10.96	5+2	8.83	3+1	7.52	5+5	6.43
8+9	15.59	9+4	12.69	6+4	10.79	6+2		6+1	7.28	1+1	6.08
9+6	15.44	6+5	12.68	5+3	10.39	8+2	8.79	1+5		3+3	6.03
9+5	15.03			7+3	10.03			4+1	7.23	2+2	5.72
6+7	14.60			3+6				1+8			
				2+8				8+1	6.90		

Because its accuracy can be augmented by more statistical material, we intend to continue our study of the order of difficulty, the present publication being justified by the fact that the results already obtained have considerable value. To give some idea of the reliability of the results on the order of difficulty, we give in Table VI a comparison of the order found by the first study with that of the second. The order of the second study appears in groups as found in Table IV and that of the first is similarly grouped with blank spaces for the omitted combinations. There are only fifteen combinations which are not found in corresponding groups, and all but one of these are found in the contiguous groups. These fifteen combinations are followed by question marks in the table.

TABLE VI.

Comparing the order of difficulty of the second series of experiments with that of the first.

Second Study	First Study	Second Study	First Study	Second Study	First Study	Second Study	First Study	Second Study	First Study	Second Study	First Study
9+7	7+9	4+7	9+8	8+3	7+5?	2+9		3+2		7+1	9+9
7+9	8+6?	8+6	5+6	9+3	7+4?	5+3	5+4	4+2	5+2?	5+1	
6+9	8+7	4+9	4+9	3+8		9+2	4+3?	2+3		9+9	8+8
5+7	9+7	6+7	4+7	8+4	6+4?	6+4	7+2	1+9		6+6	4+4
6+8	5+8	7+4	4+6?	3+5		2+6		1+6		2+1	
7+5	6+9	3+7		6+5	3+4	2+5		1+4		1+2	
8+5	6+8	9+8	6+5?	4+6	4+5	7+2	2+4	1+7		8+8	8+1?
7+8	7+8	7+6	4+8	2+7		5+4	4+2?	9+1	1+3	5+5	7+1
5+8	5+7	9+4	5+9?	6+3	8+3	5+2	6+3?	4+1	9+1	4+4	6+6
8+7	9+6	3+9		7+3	9+3	2+4	9+2	6+1	3+1	7+7	5+5
8+9	8+9	5+6	7+6	4+3	5+3?	6+2		3+1	6+1	1+1	3+3
5+9	8+5	4+8	9+4	4+5	8+4	8+2	8+2	1+5		3+3	1+1
9+5	9+5			3+4	7+3			1+3	4+1	2+2	2+2
9+6	6+7?			3+6				1+8			
				2+8				8+y	7+7?		

The order of difficulty has considerable economic value. It enables the teacher to select with greater accuracy those combinations which require the most attention. She can more readily and surely avoid the waste which results from too great a neglect of the difficult sums and too frequent a repetition of the easy ones. From Tables IV and V she can get some notion of how much better some combinations are known than others. The most difficult combinations require a response time which is more than three times as long as that of the easiest. In the fifth and sixth grades we might have expected the children to know all of the additions so well as to preclude any large variations in response time. As this is not the case the teachers of these grades must still be concerned with teaching the simple combinations in addition, not to mention column addition. It is likely that the children in the sixth grade do not know the difficult sums any better than the third grade children know the easier ones.

A knowledge of the order of difficulty will also diminish the teacher's task of finding individual weaknesses, for evidently most of these are to be found in the most difficult groups. From our experience in making this study, we believe that an excellent method of finding individual shortcomings would be to take the child's response times for the combinations in two or three of the most difficult groups.

A number of interesting facts may be gathered from the preceding tables. Such combinations as $9+9$, $8+8$ and $7+7$, have a shorter response time than $9+1$, $8+1$ and $7+1$. The addition of 1 to a number is not so easy therefore as adding a number to itself. For this there may be several causes. As adding a number to itself gives the same result as multiplying by two, the children receive double drill on such combinations, once while learning to add and again while learning to multiply. Perhaps it takes a little longer to get $9+1$ in mind clearly than $9+9$ on account of a greater variety of mental imagery. Such combinations as $9+9$ may also attract more attention because they are different from most combinations. Moreover in learning multiplication there is usually enough drill work of a kind that prevents roundabout methods of getting the results, and this is not always the case in learning additions. Where roundabout methods are employed the speed is of course diminished.

Other principles on establishing the order of difficulty of the combinations in addition may be found from a study of the tables. An analysis of Table V shows that out of the thirty-six combinations that were presented twice, once with the smaller number first and then with the larger number first, there are only five exceptions to the rule that it is more difficult to add two numbers when the smaller appears first in the combination. The exceptions are $9+5$, $8+6$, $8+7$, $5+2$ and $2+1$. It may be easier to say 3 in response to $1+2$ than to $2+1$ on account of the habit of counting.

A selection from Table V of the order of difficulty for each digit in combination with every other digit, shows in general the truth of the statement that, in addition, the combinations which appear to be logically the most difficult are also psychologically the most difficult. In Table VII we give an arrangement for each digit with all the other digits, the most difficult combinations appearing first.

TABLE VII.

Arrangement of the order of difficulty of each digit with
with every other digit.

$9+7$	$8+6$	$7+9$	$6+9$	$5+8$	$4+9$	$3+7$	$2+7$	$1+9$
$9+6$	$8+7$	$7+8$	$6+8$	$5+7$	$4+7$	$3+9$	$2+8$	$1+6$
$9+5$	$8+5$	$7+5$	$6+7$	$5+9$	$4+8$	$3+8$	$2+9$	$1+4$
$9+8$	$8+9$	$7+6$	$6+5$	$5+6$	$4+6$	$3+5$	$2+6$	$1+7$
$9+4$	$8+3$	$7+4$	$6+4$	$5+3$	$4+5$	$3+4$	$2+5$	$1+3$
$9+3$	$8+4$	$7+3$	$6+3$	$5+4$	$4+3$	$3+6$	$2+4$	$1+5$
$9+2$	$8+2$	$7+2$	$6+2$	$5+2$	$4+2$	$3+2$	$2+3$	$1+8$
$9+1$	$8+1$	$7+1$	$6+1$	$5+1$	$4+1$	$3+1$	$2+1$	$1+2$
$9+9$	$8+8$	$7+7$	$6+6$	$5+5$	$4+4$	$3+3$	$2+2$	$1+1$

Excepting the combinations with 1, it is possible to offer a plausible explanation for the order of almost all of the other combinations. The combinations with the highest numerical value are the most difficult. In the table there appear a few exceptions to this rule for which logical explanations can be made. Thus $9+8$ is easier than the combinations that appear above it in the table because it is only one less than 2×9 and one more than 2×8 ; $8+7$, $8+9$, $7+6$ and $5+4$ are similar combinations which do not follow the rule of the highest numerical value. Further exceptions to the rule are furnished by the positions of $8+4$, $4+8$, $3+9$ and $3+6$. The addition of each of these pairs of numbers is facilitated because the larger number is an easy multiple of the smaller one. The only combinations whose positions remain unexplained are $8+7$, $5+9$, $3+8$ and $2+9$. More experimental data would undoubtedly show that they are incorrectly placed.

In the foregoing discussion we have endeavored to induct principles which would be of service in establishing a theoretical order of difficulty. These principles follow in the order of their predominance, the most predominant appearing first. Additions of equal numbers such as $6+6$ are the easiest. This principle of course will not apply to the adding ability of children who do not know the simple multiplications by two. Second in point of ease are the combinations which have one very low number such as 1 or 2. Third, the combinations whose sum is low. Fourth, combinations whose sum is only 1 more or 1 less than twice either of the numbers added. Fifth, combinations in which one of the numbers is an easy multiple of the other. Sixth, combinations with the low number last are easier than the same combination with the low number first. The final position of this principle shall not indicate its relative importance in establishing an order of difficulty.

As the predominance of one principle over another is only in general true, their application in particular cases remains somewhat uncertain. While practically all of the equal number combinations are added more readily than combinations with one very small number, there may be exceptions. Perhaps $9+9$ is more difficult than $2+1$ as it appears in Table V because the addition of $2+1$ involves the two principles of one very low number and a low sum. According to the principle of low sums $4+4$ should be easier than $5+5$, but perhaps this is not the case, because the children are in the habit of counting by fives. Moreover, the rule of low sums diminishes in importance among the difficult combinations, so that $9+5$ and $8+6$ appear to be more difficult than $8+9$ even though their sums are smaller than that of $8+9$. It is likely that among the more difficult combinations the third and fourth rules change their relative weight.

On account of these difficulties the accuracy of a theoretical order

will be problematical. However, with the aid of the above rules and our experimental data, we have attempted to arrange a more satisfactory order of difficulty than those of the preceding tables. The order is given in Table VIII.

TABLE VIII.

Theoretical order of difficulty.								
7+9	7+8	9+4	4+6	5+3	9+2	2+3	9+1	2+1
9+7	9+8	7+6	8+3	5+4	2+6	3+2	8+1	1+2
6+9	8+7	4+7	6+4	3+4	8+2	1+9	7+1	7+7
9+6	5+8	3+9	5+6	4+3	7+2	1+8	6+1	6+6
6+8	5+7	7+4	9+3	2+9	2+5	1+7	5+1	4+4
5+9	8+5	4+8	6+5	3+6	2+4	1+6	4+1	5+5
8+6	7+5	3+8	7+3	2+7	6+2	1+5	3+1	3+3
9+5	4+9	3+7	3+5	2+8	5+2	1+4	9+9	1+1
8+9	6+7	8+4	4+5	6+3	4+2	1+3	8+8	2+2

Among other interesting facts yielded by this part of our investigation are sex and grade differences. The combination 7+9 was found to be the most difficult for each of the sexes and for each of the fifth and sixth grades. The sexes differed in the length of their average response times, that of the girls being 2.13 fifths of a second less than that of the boys in the first series of experiments, but in the second series the time of the boys is less than that of the girls by .23 fifths of a second. An average for the two investigations would leave the response time of the girls shorter than that of the boys by .9 fifths of a second. The response time of the fifth grade is 4.30 and 1.32 fifths of a second longer than that of the sixth grade in the first and second experiments respectively. This gives an average excess of 2.81 for both experiments. In Table IX a few details on sex and grade differences are given.

TABLE IX.

(Fifths of second)	Boys	Girls	—Grade—	
			Fifth	Sixth
Average time for first series.	13.82	11.69	14.91	10.61
Average time for second series.	9.37	9.60	10.14	8.82
Average.	11.60	10.65	12.53	9.72

For the second series of experiments the response times are much shorter than those of the first. The difference is primarily due to a change in the method of instruction which will be referred to again. The omission of some of the easier combinations from the first series may be mentioned as a minor cause. In the second series the average response time for all the combinations is 9.48, while that for the combinations used in the first series is 9.99, a difference of .51 fifths of a second.

In taking the children's oral responses we noticed that they were made much more quickly for some of the combinations than for others. We were interested to know whether the methods of adding for the slow responses differed from those for the quick responses; and, assuming that they did, what the nature of the differences was. These problems compose the second part of our study. The experimental work was carried out on two children from each grade from the third to the eighth inclusive. The experimental method was the same as that used to determine the order of difficulty with the exception that each child was asked to tell, immediately after his response, how he got the answer. The twenty combinations used were presented in the following order: (Read $4+3$, $7+2$, etc.)

$4+3$ $7+2$ $2+4$ $4+4$ $8+5$ $7+4$ $6+9$ $3+4$ $5+5$ $6+8$
 $5+3$ $7+8$ $6+6$ $7+9$ $4+8$ $7+5$ $4+7$ $9+9$ $7+6$ $6+5$

Our results showed that many different modes of adding were used by the same child for different combinations and by different children for the same combination. The various modes that were used for $7+8$, $6+9$ and $4+7$, which are representative, are given in Table X.

TABLE X.
Modes of adding.

<u>$7+8$</u>	<u>$6+9$</u>	<u>$4+7$</u>
Known	Known	Known
$8+6+1$	$6+6+3$	$4+4+3$
$7+7+1$	$10+6-1$	$7+3+1$
$2 \times 7+1$	Guessed at	$8+4-1$
$8+8-1$	Counted 9, 10, 11, etc.	Counted 4, 5, 6, etc.
Guessed at	Counted 6, 7, 8, etc.	Counted 7, 8, 9, etc.
Counted 7, 8, 9, etc.		Counted 7, 9, 11, etc.

The word **known** in the above table means that as soon as the child heard the combination, the sum occurred to him immediately without the intervention of any other process. The time for the known combinations was usually much shorter than the time for those whose sum was found by some other method.

In Table XI the tabulated results of our experimental work are shown. The letters A, B, C, D, etc., stand for the names of the pupils. The average time for each child's known combinations is expressed in fifth of a second, and that for the unknown is expressed in the same way. Unknown combinations are those whose sums were found in some roundabout way.

TABLE XI.

Time of known combinations compared with that of unknown.

Name	Grade	Number Known	Average Time	Number Unknown	Average Time
A.....	8	20	5.15	0	....
B.....	8	20	7.15	0	....
C.....	7	7	6.14	13	13.1
D.....	7	4	5.50	16	10.3
E.....	6	14	6.60	6	18.7
F.....	6	20	5.70	0	....
G.....	5	19	7.50	1	22.0
H.....	5	6	7.80	14	17.4
I.....	4	4	7.00	16	30.2
J.....	4	12	9.80	8	22.3
K.....	3	6	6.50	14	37.4
L.....	3	3	11.70	17	51.6

Average, 6.38

Average, 22.3

It appears from the above table that the average time for the known combinations is only about one-third as long as the time for the unknown combinations. We believe therefore that children should be discouraged from using indirect methods of finding the sum of two numbers. Children should be told and required by methods of instruction to associate with two numbers, as $6+7$, their sum 13. Methods of teaching which allow children to learn indirect methods of adding should be condemned. Indirect methods not only retard column addition, but also make the liability to error far greater. Here as in much other teaching we first allow or compel the children to form bad habits, and subsequently spend our time trying to break them of these undesirable habits. Indirect methods may at first give better objective results, but bad habits, loss of time, and final results must not be lost sight of in determining the best methods of instruction.

The third part of our study is a brief discussion of the value of drills. Before our first experiment on the order of difficulty, the children had received little or no drill in adding, but before the second experiment they had received daily three-minute drills for about a year. As the average response time of the fifth and sixth grades in the first experiment is 12.76 fifths of a second and only 9.99 fifths for the same combinations in the second, there occurred a reduction of 2.77 fifths of a second in the average response time. While this reduction is principally due to drill work, some of it must be ascribed to the fact that the second experiment occurred three months later in the school year than the first.

It is easy to calculate the amount of progress due to the drills from a knowledge of the progress in addition made by the fifth and

sixth grades in a year. The progress of the fifth grade would be fairly well represented by the difference in response time of the two grades under consideration. On page 12 this was shown to be 2.81 fifths of a second. Assuming that the progress of the sixth grade would be the same (it would probably be less), a deduction of one-third of 2.81 or .94 would have to be made from 2.77 to find the amount of progress due to drills. As the remainder, 1.83, represents about two-thirds of a year's progress, we may say that the daily drills advanced the adding efficiency of the fifth and sixth grades by two-thirds of a year's progress.

The average yearly progress of the fifth and sixth grades in simple additions may be roughly calculated by using the Courtis standards and the response time of the fifth grade. According to these standards the progress of the sixth grade in the spring of the year will be eight fiftieths and that of the fifth grade eight forty-seconds of the response time of the fifth grade. These fractions should be increased to eight forty-sixths and eight thirty-eighths respectively, because yearly progress is a little more rapid in the lower than in the upper grades, our experiments having been made before and near the middle of the year. The average response time of the fifth grade as given in Table IX is 12.53 fifths of a second. By taking the average of eight forty-sixths and eight thirty-eighths of this time we obtain 2.41 fifths of a second as the average progress of the fifth and sixth grades for the year immediately preceding the time of our experiments. If 2.41 be accepted as a more accurate measure of the children's progress than 2.81, then the gain due to drills would be equivalent to about four-fifths of a year's progress. Even though our calculations are not flawless the fact remains that the children's adding ability was very much improved by the drills.

As a conclusion to the study we offer a few suggestions on the pedagogical side of the question, hoping that teachers who read this article will try them out and report results.

We think that very much more attention should be given to drill for the definite purpose of fixing the simple combinations so well that the reaction time will show little if any variation. It is no doubt the case that the combinations found in our most difficult group do receive more drill than the easy ones, but they should receive still more. The average time for the most difficult is about three times as long as the average time for the easiest. This is true of children who have received special drill on the harder combinations. It seems clear that the harder combinations, therefore, should appear in the drill exercises many times as often as they do now.

Children in the upper grades and many adults become so familiar with the elementary combinations that the reaction times show little

variation. In one case in our last experiment we rejected the record of a sixth grade boy because the variations were so slight as to be almost negligible. His average time was 1.16 seconds; his mean variation was .52 seconds. His greatest variation occurred in $9+7$, $4+9$, $7+9$, $5+8$, $6+9$, $9+4$, $7+2$, $9+3$. If these are omitted the mean variation is .24 seconds. The average time of one of the poorest boys is 3 seconds, and his mean variation is 1.39 seconds.

We believe also that it is highly desirable to memorize the combinations so perfectly that the person on seeing or hearing the combination will instantly recall the sum. Objects or number pictures should be used in the perception of number and in developing addition in case of a few of the easy combinations. If continued too long they become a hindrance, so after presenting a few of the combinations by the use of objects, it is thought better to have the work done by the use of symbols only. If the pupil has forgotten the answer, he should be told, or allowed to look at a table containing the answers. Without such help he will resort to counting or some roundabout method. Roundabout methods are exceedingly wasteful. As shown by Table XI, the average time for the known combinations is about one-fourth of the average time for the unknown. There can be little doubt that hesitation and uncertainty become more pronounced in column addition and are a hindrance to accuracy.

We recommend that frequent tests be given in which the pupil is required to write or say the answers to the combinations so rapidly that he will not have time to use roundabout methods. The time should be recorded and the number of correct answer per minute should be noted. Individual weaknesses should be discovered and each pupil should contest against his own previous record. In many cases the pupils themselves will know their difficulties and will be glad to have the co-operation of the teacher in overcoming them.

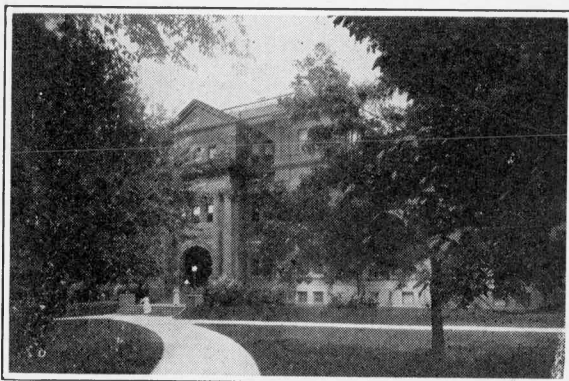
To avoid errors, instruction in addition should begin with the simpler combinations and should introduce only one new combination with its reverse at a time. The new sums should be emphasized until they are well known. Then they may be placed on the review list where they should remain until they are permanently known. Nothing can be gained by introducing the new combinations too soon, or by dropping the old ones from the review list before they have been well fixed.

7

COLORADO
State Teachers College
GREELEY

Preliminary Announcement

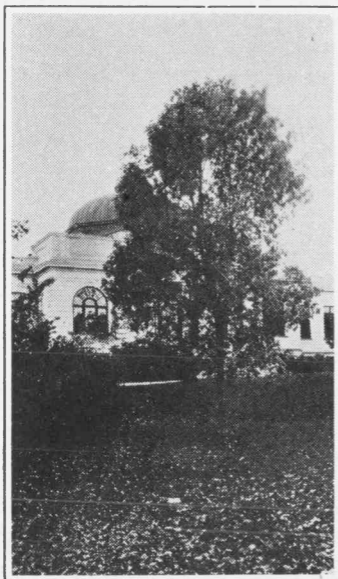
The Summer Term
1917



Administration Building

JUNE 18 -- JULY 27

The Summer Term, 1917



Regular Courses

The Regular faculty of the college will be in residence for the summer term and will give attraction courses in all the departments of its work: Education, Psychology, Physical and Biological Science, History, Sociology, English, French, German, Spanish, Latin, Reading and Dramatics, Geography, Arithmetic Higher Arithmetic, Music, Physical Education, Manual Training, Domestic Science and Art, Business Courses, Nature Study,

Teaching, Supervision, Primary Methods, Grammar Grade Methods, Special Methods, Drawing and Art, Gymnasium, Athletics, Agriculture, Library Methods, Primary Handwork, etc., etc.

SPECIAL FEATURES

A number of features of special interest to summer school students will be instituted for the session of 1917. The Summer Term has grown steadily from the beginning until now it enrolls more than eleven hundred students in the classes of seventy-five instructors. Teachers College recognizes the Summer Term, supplemented by the Individual and Group Extension Work as its large means of serving the teachers of the state who are in active work.

To make itself as useful as possible in this direction the college is attracting all the working teachers it can reach by means of advanced courses in supervision, tests, sub-normal and super-normal children, and by more advanced courses in all departments than it offers in the regular year.

ANNOUNCEMENTS

Special Faculty---General Lecturers

- G. STANLEY HALL, Ph. D., LL. D., President of Clark University
O. T. CORSON, A. M., LL. D., Editor The Ohio Educational Monthly
JOHN F. KEATING, A. M., LL. D., Superintendent of City Schools, Pueblo
M. V. O'SHEA, B. L., Professor of Education, University of Wisconsin
JAMES E. RUSSELL, Ph. D., LL. D. Dean of Teachers College, Columbia University
S. C. SCHMUCKER, Ph. D., State Normal School, West Chester, Pa.
A. E. WINSHIP, LL. D., Editor Journal of Education

Topics announced in final Summer Bulletin

Fees and Expenses

BOARD AND ROOM Table board costs from \$2.50 to \$4.00 per week. Room rent costs \$8.00 to \$10.00 per month. Rooms equipped for light housekeeping from \$6.00 to \$10.00 per month

FEES Each student pays a fee of \$25.00 for the six weeks.

TUITION Non-residents of Colorado pay \$5.00 in addition to fees.

LIBRARY DEPOSIT A deposit of \$2.00 is charged for library privileges. This deposit is returned at the time the student withdraws from school.

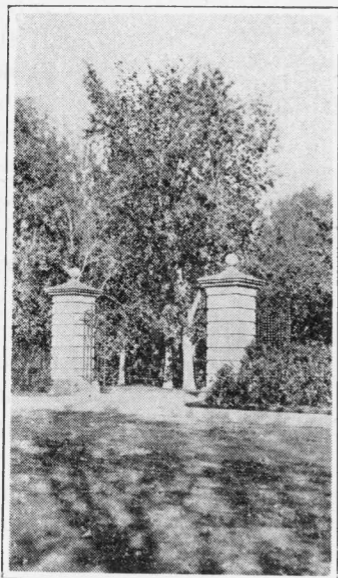
SUMMARY Total Expenses for the six weeks:

Board	-	-	\$21.00	to	\$24.00
Room Rent	-	-	12.00	to	15.00
Fees	-	-	25.00	to	25.00
Total	-	-	\$58.00	to	\$64.00

CAN YOU AFFORD TO STAY AWAY

Credit for Work

Full credit is given for courses satisfactorily completed. Diploma courses, Degree courses, Graduate courses—all life certificate courses—may be completed in summer term.



A wonderful opportunity for the teacher who cannot attend school during the school year. "The Greeley Plan", known throughout the country, gives a teacher a chance to do a part of his work *in absentia*. Ask for our Extension Bulletin.

Diplomas and Degrees

Graduation from the two-year course gives the degree of Bachelor of Pedagogy and the Colorado Life certificate and Diploma.

Graduation from the three-year course gives the degree of Master of Pedagogy and the Life Diploma.

Graduation from the four-year course gives the degree of Bachelor of Arts in Education and the Life Diploma.

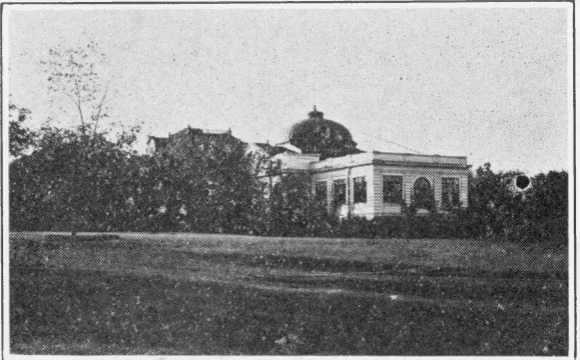
The degree of Master of Arts is granted for a year of specialization beyond the A. B. degree.



Rocky Mountain National Park, Mount Ypsilon

Recreation and Diversion

In addition to the usual recreation and entertainment, musical and dramatic, railway excursions to the mountains, outdoor games, storytelling, etc. the College is making special arrangements this year to make possible week-end visits to Estes Park (The Rocky Mountain National Park) at a very low cost. This will include transportation and accommodations from Friday to Monday at low rates to students.



The Library, State Teachers College

Publications

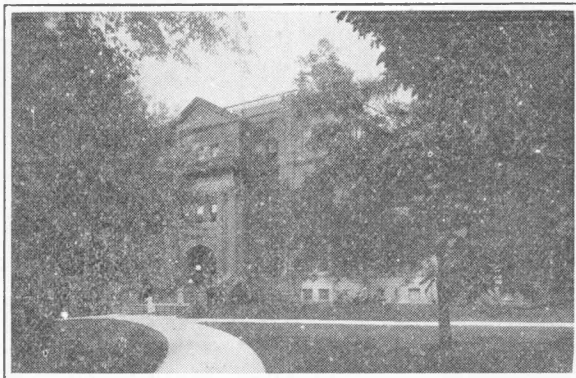
The final Summer Term Bulletin with announcement of courses, detailed program and a beautiful picture supplement will be ready about March 1—Free.

The Annual Catalog for 1917-1918 will be ready about May 15—Free.

J. G. CRABBE, President

A School of Reviews

State Teachers College
GREELEY, COLORADO



Administration Hall

“The Heart of the Public School
System of Colorado”

*Colorado State Teachers
College Bulletin*

February 1, 1917

BULLETIN OF STATE TEACHERS COLLEGE
Series XVI No. 8
Entered at the Postoffice, Greeley, Colo., as Second Class Matter

FOREWORD

Whatever is done should be well done. Surely the great number of teachers, who take examinations in Colorado, can be assisted, by State Teachers College in getting an insight into the Principles of Psychology and the Elements of Pedagogy so essential to success, while they are reviewing the common school branches under the guidance of an expert in each particular subject. This is in brief the hope of the school projected in this folder.

DIRECTORS

John R. Bell and Joseph H. Shriber

TEACHERS AND SUBJECTS

Bell, John R., A. M., D. Litt.

Principal of High School Department
Professor of Secondary Education
State Teachers College,
Instructor in Geography.

Blanchard, Rae, A. B.

English Department
State Teachers College
Instructor in Grammar.

Blout, Chas. J., A.M.

Chemistry Department,
State Teachers College
Instructor in Arithmetic and General Science.

Frank, W. A., A. M.

Superintendent of Schools, Ft. Morgan,
Instructor in History

Momyer, Geo. H., A. M.

Superintendent of Schools, Lamar
Instructor in School Law, Civics, and Physiology

Shriber, Jos. H., A. B.

Director County Schools Department,
Professor of Rural Education
State Teachers College,
Instructor in General Methods

Shultis, Frank A., A. M.

Commercial Department,
State Teachers College,
Instructor in Commercial Arithmetic

QUALIFICATIONS

Each of these men is an expert in the realm of practical education. Each knows the needs of the teacher and each has had an important part in the training of teachers in Colorado. They will give their best talents to the teachers who may constitute this school this summer, and do all in their power to make the work both interesting and profitable.

Scope of the Work

1. Review of Common Branches

A thorough review of the subjects usually taught in the elementary schools.

2. Emphasis upon the Essential Elements of Pedagogy

Those aspects of pedagogy which are involved in the correct teaching of the elementary curriculum, will be stressed. The learning process will be given special attention and the constant aim will be to give practical assistance to the teacher by giving her an intelligent basis for the use of methods.

3. Application of the Principles of Psychology to Instruction

Certain principles of psychology are so closely related to the teaching art that a knowledge of them gives inspiration and power to the teacher. These will be studied in the light of accumulated experience.

4. Development of Personality and Community Leadership

A dynamic knowledge of the work of the school and its environment will be encouraged. The elements of personality as a constructive force will be considered in relation to a teacher's general equipment.

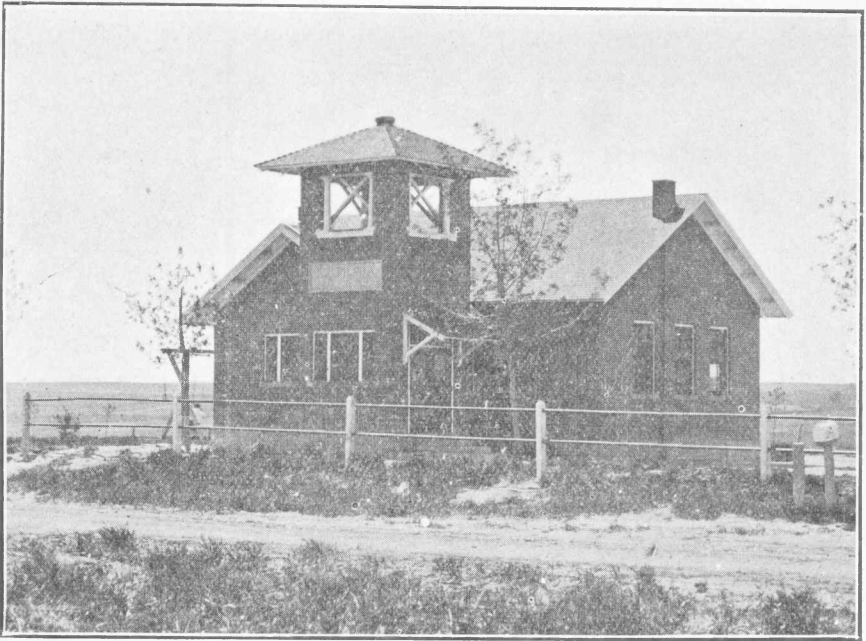
Fees and Credits

A fee of ten dollars will cover any two subjects listed in the School of Reviews. For fifteen dollars the individual may select as many of these courses as desired.

Credit will be given in the High School Department for all courses satisfactorily completed.

CALENDAR

The School of Reviews is a definite department of the Summer School of State Teachers College which begins June 18 and ends July 27, 1917.



Rural Schools for Demonstration Purposes

1. The Hazelton School is one of a group of four Demonstration Schools which are being used for the training of rural teachers. It is located six miles west of Greeley and is supported by a prosperous and progressive farming community.

2. The assessed valuation of the Hazelton school district is more than \$300,000. The school building is a neat, two-room, pressed brick structure erected about six years ago at a cost approximating \$3500. Thirty-two pupils are enrolled this year. Miss Grace Peterson is serving her third year in this school. She now lives in a Teacher's Cottage of two rooms. This adjoins the school building and has the modern conveniences of water, electric lights, and telephone. The student helper shares living expenses for the month with her.

3. A student helper teaches in the Demonstration school one month and receives for this practice, five hours credit. When a student helper is assigned practice teaching in the Demonstration School, she takes 15 hours in the College and five in the Demonstration School, but carries part of the 15 hours work while in the Demonstration School and finishes it after returning to the College to resume her regular studies. At the close of the school year 36 students will have received training in these schools.

Colorado State Teachers College Bulletin

Series XVI

FEBRUARY 24, 1917

Number 9

Hand Book OF THE Extension Department



Published Quarterly by State Teachers College, Greeley, Colorado
Entered as Second Class Matter at the Postoffice at Greeley, Colorado,
under the Act of March 1, 1879

HOW TO GET BOOKS

Books for use in the extension courses can usually be obtained from local public libraries in the principal towns.

The librarian of State Teachers' College will send, prepaid, copies of any of the books necessary for the courses, to any regularly registered extension student. Such books may be retained for a period of four weeks. A fine of five cents per week will be charged for each week or fractional part of a week if held for a longer time. Return postage must be prepaid by the student.

State Reading Circle books are not furnished by the college.

An endeavor will be made to have sufficient books on hand for all taking the courses, but in case a book is out at the time application is made for it, the application will be filed and the book forwarded promptly when received at the library. If there is undue delay the student will be notified of the cause.

The
Extension Department
and Its Work

State Teachers College

Greeley, Colorado

EXTENSION DEPARTMENT

JOHN GRANT CRABBE, A.B., A.M., Pd.M., Pd.D., LL.D., President.
 WILLIAM BARNARD MOONEY, Pd.B., A.B., A.M., Director.

Members of Regular College Faculty Giving Courses in the Extension Department.

JAMES HARVEY HAYS, A.B., A.M., Dean of the College, and Professor of Latin and Mythology.

ELIZABETH HAYS KENDEL, Pd.B., Pd.M., A.B., Training Teacher, Fifth Grade.

SAMUEL MILO HADDEN, Pd.B., A.B., A.M., Dean of Practical Arts. Professor of Industrial Education.

FRANCIS LORENZO ABBOTT, B.S., A.M., Professor of Physical Science.

BELLA BRUCE SIBLEY, Pd.B., Pd.M., A.B., Training Teacher, Second Grade.

GURDON RANSOM MILLER, Ph.B., A.M., Ph.D., Dean of the Senior College, Professor of Sociology and Economics.

FRANCES TOBEY, B.S., A.B., Dean of the Junior College. Professor of Reading and Interpretation.

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

ALBERT FRANK CARTER, A.B., M.S., Librarian. Professor of Library Science.

WILLIAM BARNARD MOONEY, Pd.B., A.B., A.M., Director of Extension Service. Professor of School Administration.

JACOB DANIEL HEILMAN, A.B., Ph.D., Professor of Psychology and Child Study.

FRANK W. SHULTIS, A.B., A.M., Professor of Business Education.

JOHN T. MCCUNNIFF, Pd.M., A.B., Assistant Professor of Industrial Arts, Printing and Mechanical Drawing.

GEORGE WILLIAM FINLEY, B.S., Professor of Mathematics.

MARGARET STATLER, Pd.B., A.B., Training Teacher, Third Grade. Instructor in Story Telling.

GEORGE A. BARKER, M.S., Professor of Geology, Physiography, and Geography.

AMY RACHEL FOOTE, A.B., Training Teacher, Sixth Grade.

CHARLES M. FOULK, Pd.B., Assistant in Manual Training.

GEORGE EARL FREELAND, A.B., A.M., Principal of the Elementary School.

AGNES HOLMES, Pd.M., Assistant in Industrial Arts.

JENNY LIND GREEN, A.B., Training Teacher, Seventh Grade.

WALTER F. ISAACS, B.S., Professor of Fine and Applied Arts.

MILDRED DERING JULIAN, B.S., Training Teacher, Kindergarten.

JOHN CLARK KENDEL, A.B., Director and Professor of Public School Music.

- MARGARET JOY KEYES, A.B., Assistant in Physical Education and Dramatic Interpretation.
- MERLE KISSICK, A.B., Ph.B., Director and Professor of Household Arts.
- THOMAS C. MCCrackEN, A.B., A.M., Dean of the Graduate College. Professor of the Science and Art of Education.
- FRIEDA B. ROHR, Pd.M., A.B., Training Teacher, Fifth Grade.
- EDWIN B. SMITH, B.S., A.M., Professor of History and Political Science.
- LEVERETT ALLEN ADAMS, A.B., A.M., Ph.D., Professor of Biology.
- CHARLES JOSEPH BLOUT, A.B., A.M., Instructor in Physics and Chemistry, High School.
- EDWIN STANTON DUPONCET, A.B., Ph.D., Professor of Modern Foreign Languages.
- JOHN C. JOHNSON, A.B., M.S., Assistant Professor of Biology.
- ADDISON LEROY PHILLIPS, A.B., Professor of English.
- EDGAR DUNNINGTON RANDOLPH, A.B., A.M., Professor of Sociology.
- FLORENCE REDIFER, A.B., Instructor in Household Science.
- GLADYS IRENE SCHARFENSTEIN, Ph.B., Instructor in Household Science and Arts.
- JOSEPH HENRY SHRIBER, A.B., Director of County School Administration.
- JEHU BENTON WHITE, B.S., Professor of Commercial Work.
- GRACE WILSON, Pd.B., A.B., Assistant to the Dean of Women.
- FRANK LEE WRIGHT, A.B., A.M., Professor of Education.
- BERTHA MARKLEY, Pd.B., Pd.M., Training Teacher, Eighth Grade.
- LELA AULTMAN, Pd.B., Pd.M., Training Teacher, First Grade.
- CLARA HARRISON TOWN, B.S., Ph.D., Assistant Professor of Psychology and Child Study.
- SAMUEL E. ABBOTT, M.D., Director of Physical Education.
- RUETTA DAY, B.S., Instructor in Household Science.

INTRODUCTION

The Extension Department of the Colorado Teachers College is organized and exists for the following purposes:

(1) To assist, thru cooperative effort, State, County, and District school officials in their efforts to improve the efficiency of their schools.

(2) To give instruction to teachers in service and to extend the service of the institution to all persons who wish to work under its guidance.

The Department is ready to render service to State, County, and District school officials. A request for assistance in any work connected with education in Colorado will receive prompt attention.

Systematically organized instruction is given to teachers under the following plans:

THE GROUP PLAN

A. A person who possesses at least the degree of A.B., or its substantial equivalent, and has had professional training and experience that would justify his appointment as a regular instructor in the College, may be appointed an Extension Instructor. He gives the Course under the general direction of the College, but his relations to his students is about the same as they would be were he giving instruction to them within the institution. He receives a percentage of the fee paid by his students for his services. Members of the College faculty give instruction to outside groups under this plan.

B. A person who does not possess the above qualifications may be appointed a Class Leader. The Class Leader keeps the required records of the members of his group, leads in the work of the Class and otherwise acts as the director of the work his group is studying under the direction of the College. The Class Leader is allowed the same credit as other members of his group. He does not pay a fee for his course.

THE INDIVIDUAL PLAN

Under this plan any person who desires to study alone or who cannot join a study group may do work under the direction of the College. All of this work is done by Syllabus. Fifteen syllabi or study units constitute a five-hour course, twelve study units a four-hour course, nine study units a three-hour course, six study units a two-hour course, and three study units a one-hour course. Thus one of these study units equals four recitation lessons in residence.

By the Group and Individual Plans of Study a student may take practically any course offered in residence by the College.

HOW THE INDIVIDUAL WORK IS CONDUCTED

On receipt of the required fee and postage we shall send you the first three study units of your course and the required books for these units. You should do the work in the first study unit and return it to the Extension Department. It will be given to the instructor offering the course. He makes his notations and grade on the paper and returns it to the Extension Department. We shall then send it to you. When we return the first study unit to you, we shall enclose the fourth study unit and when we return to you the second study unit, which your teacher has corrected, we shall enclose the fifth study unit and so on until the course is completed. In this manner you will always have two study units, upon which you may be working, while the one you have mailed us is being corrected and returned to you. At the close of the Course you will have in your possession a series of valuable papers on the Course you have taken.

How the Group Work Is Conducted

Under the general supervision of the Extension Department of the College extension instructors are allowed to conduct their classes as they think best. If Courses are selected that are printed in this bulletin the syllabi of these Courses will be furnished extension instructors if they wish them. The same rules and regulations that govern regular instruction in the college will govern these instructors and the reports they make to the College will be the same, as far as possible, as those made by regular members of the faculty.

Class leaders will use the syllabi of the Courses selected and will make such reports as may be required.

INSTITUTE WORK

A person employed in a Colorado teachers' institute, who can qualify as an extension instructor, may have courses of a professional character, which he plans to give in the institute, approved by the Extension Department of the College. Such courses will be recognized for credit in the College, and a limited number of these courses may be taken for credit in the College by a student in the institute. A charge of one dollar is made for the registration of these credits regardless of the number of credit hours the student takes or is allowed to take. At present not more than four hours credit may be so earned in any given institute.

State Reading Circle Course

Groups may be organized for the purpose of studying the books selected by the State Reading Circle Board. These groups may work under the direction of an Extension Instructor or a Class Leader in the same way and under the same conditions as regular Group work described on page 4.

This Reading Circle work may be taken also on the Individual Plan described on page 4.

At present three hours credit is given for this work to persons in the Junior College only. The fee is one dollar per credit hour or three dollars for the course whether taken under the Group or Individual Plan.

WHO MAY TAKE EXTENSION COURSES

Any teacher in active service may take Courses offered in this bulletin. Any other person desiring to study under supervision may enroll as a regular or special student. If a student wishes to become a candidate for graduation, however, he must fulfill the entrance requirements. To aid students who lack entrance requirements we offer High School Courses on the Extension plan. Any person interested in such courses should write for our High School Extension Bulletin.

HOW TO BEGIN WORK

We have regularly organized study groups in most of the larger centers of the State and in many of the towns and villages. Your County or City Superintendent of Schools can give information about these. Join one of these groups if possible. If there are no organized groups you can join, write the College indicating the course you wish to take. State briefly what your previous training and experience have been and indicate the work you are now doing. If you have decided upon the course you wish to take, enclose in your letter the required fee and postage and address to Colorado State Teachers College, Extension Department, Greeley, Colorado. You may begin individual study at any time.

THE TERM OR CREDIT-HOUR

The unit of work in residence in the College is one recitation a week for a term of twelve weeks. This is called a term hour, or credit-hour. Three of the study units in this bulletin are equal to one term hour or one credit-hour.

To complete a five hour course in group work, classes must meet 12 times for 2½ hours each meeting, 15 times for 2 hours each meeting or 18 times for 1½ hours each meeting. Each student in the group must read and give adequate reaction to approximately 1,200 pages of reading matter pertaining to the course. To earn less than five hours a proportionate number of meetings and reading work on the above bases must be arranged.

Courses requiring no preparation outside the recitation hour are credited on the basis of laboratory work—two periods of recitation or laboratory work being credited as one term-hour.

EXTENSION COURSES OF THE REGULAR FACULTY

Regular members of the faculty of the college may give non-resident courses where arrangements can be made such as will not interfere with their regular work in the college. Courses given by regular members of the faculty under the group plan are counted as resident courses, provided that not more than 20 hours of credit may be so earned in the Junior College and 20 hours in the Senior College by any student.

STUDENT TEACHING REQUIREMENTS

JUNIOR COLLEGE

Two terms of teaching are required in the Elementary School.

SENIOR COLLEGE

Two terms are required for the third-year certificate, and two terms in addition are required for the A.B. degree. Senior college teaching is done in the high school and elementary school. Those who are majoring or specializing in any phase of elementary education may do all of their teaching in the elementary school.

In either college no one is to be excused from all the teaching requirements, but teachers of long experience and high standing may be excused from a part of the requirements. Those who take non-resident teaching will be given more consideration from this standpoint than those who have done no teaching in connection with the college.

THE GRADING SYSTEM

Students who do work of high quality are marked "A," and receive credit for the number of hours scheduled for the course. Those who do work of unusually high quality are marked "AA," and receive credit for 20 per cent more than the normal hours allowed for the course. Work of only fair quality is marked "B," and 20 per cent is deducted from the normal allowance. Work of poor quality is marked "C," and 40 per cent is deducted from the normal allowance.

5AA indicates 6 hours credit.

5A indicates 5 hours credit.

5B indicates 4 hours credit.

5C indicates 3 hours credit.

F indicates a failure in the course.

These marks go on the permanent records and stand as an indication of the quality of the work done by the student, and are useful for instructors when they recommend graduates for positions.

FEES

With the exception of the courses in Modern Languages, when taken by the dictaphone method as indicated on page 43 and the fee required for the registration of institute credits, the fee for Extension work is one dollar per credit hour whether the Course is taken on the Group or Individual Plan. Therefore a five-hour course will cost five dollars, a four-hour course four dollars, a three-hour course three dollars, a two-hour course two dollars, and a one-hour course one dollar. The full amount of the fee for any course must be sent at one time together with

the required postage for books. The postage for a five-hour course is fifty cents, for a four-hour course forty cents, for a three-hour course thirty cents, for a two-hour course twenty cents, and for a one-hour course ten cents. If the student wishes to furnish his own books, the postage need not be sent. Hence if the student wants us to furnish the books a five-hour course will cost five dollars and fifty cents, a four-hour course four dollars and forty cents, a three-hour course three dollars and thirty cents, a two-hour course two dollars and twenty cents, and a one-hour course one dollar and ten cents. *All fees, including postage, are payable in advance.*

General Regulations Governing Extension Study

1. Students in residence are not allowed to study under the Extension Plan of Study.
2. A student may earn not more than 15 hours of credit in any one school year. This applies to both group and individual students.
3. Courses outlined in this bulletin must be approved in advance by the Dean of the Graduate College before they can be applied toward A.M. credit.

Directions to Extension Students

1. Each manuscript submitted must have indicated on the first page the following items:
 - a. Student's Name and address.
 - b. The name and number of the Course.
 - c. The school where the teacher is now teaching, and the grade of work.
2. As soon as you complete a study unit send it to the Colorado Teachers College, Extension Department, Greeley, Colorado. *Do not send manuscripts to your instructor.*
3. Use paper of fair to good quality, size 8½x11. Use typewriter or pen. Leave a liberal margin for instructors to use in correcting your paper. Use both sides of the paper if you wish. Papers are more easily handled when but one side is used. See that your paper is correctly paged and the sheets properly attached before mailing. Papers sent by mail require letter rates.
4. Fees with the required postage are payable in advance. No exception is made to this rule for either individual or group students.

Opportunity to Establish Standing

It is the intention of the College to give every teacher in Colorado an opportunity to establish his standing in the college, and then give him an opportunity to file a permanent record of his progress in the profession. This record becomes a professional asset which, in this day of specialties, no teacher can afford to be without. On request the college

will furnish a "standing sheet" upon which the applicant may give a record of his work under the following general headings:

1. Scholastic Work.
2. Higher Education.
3. Teaching Experience.
4. Life Experience.

ORGANIZATION OF THE COLLEGE

Information for Students

The College is organized into five distinct divisions:

1. The Graduate College;
2. The Senior College;
3. The Junior College;
4. The High School;
5. The Elementary School, including the Kindergarten.

The Graduate College is organized for work leading to the degree of Master of Arts in Education.

The Senior College embraces the work usually done as third and fourth year college work, and leads to the degree of Bachelor of Arts in Education and the life certificate to teach in Colorado.

The Junior College embraces all the work done in the first two years of the college proper. This work leads to the Junior College diploma and the life state teachers' certificate.

The High School and Elementary School divisions make up the Training Department of the Teachers' College, and need no fuller explanation.

(For the conditions of entrance, required work and other details concerning the above colleges and departments of the institution consult the latest annual catalog.)

THE DEPARTMENTS

OUTLINES OF COURSES OF STUDY

PSYCHOLOGY AND CHILD STUDY

JACOB DANIEL HEILMAN, Ph.D.

CLARA HARRISON TOWNE, Ph.D.

The main purpose of the courses in Psychology and Child Study is to improve the student's ability to care for, train and educate the child by means of studying the child's nature, normal development and natural modes of learning.

1. Child Hygiene. (Required in the first year.)

The preservation of the child's health is believed to be of fundamental importance in the work of the school. The following topics will be treated in the course: The significance, prevention and detection of sensory defects; malnutrition; faulty postures and deformities; hygiene of the mouth; the air required by the child. 5 hours—Dr. Heilman and Dr. Towne.

8. General Psychology. (Elective Junior, and Senior College.)

The materials, methods, purposes and main conclusions of psychology will be treated in this course. 5 hours—Dr. Heilman and Dr. Towne.

EDUCATION

THOMAS C. MCCrackEN, A.M.

FRANK L. WRIGHT, A.M.

WILLIAM BARNARD MOONEY, A.M.

SAMUEL MILO HADDEN, A.M.

JOSEPH H. SHRIBER, A.B.

GRACE H. WILSON, A.B.

The work of this department, although having to do primarily with fundamental theory underlying the educative process, shows also how such theory is of practical value to the teacher. The teacher needs a theoretical background for her work and a broad acquaintance with all fields of educational activity. The purpose of the courses offered is to meet these needs.

Courses Primarily Junior College

8. Educational Values. The purpose of this course is to give the student a critical attitude in regard to the educational value of the various subjects of the curriculum.

The first part of the course will be an enumeration of the aims of education, and the subjects in the curriculum by the study of which these aims or ends are realized. In the next few lessons the student will be expected to study the theory of educational value as set forth by Bagley in his "Educational Values."

The last part of the course will be given to a practical consideration of educational values. The student will make a detailed study of textbooks in at least two fields, one of which may be a high school subject. If the student prefers to make both studies of high schools texts, he should communicate with the instructor in charge. These texts are to be studied from the standpoint of the relative value of (a) method of presentation of material, (b) order and sequence of the various topics, and (c) topics or parts of the text which should be eliminated entirely because of lack of evidence of their being of educational value.

A thesis on the relative value of the method of presentation of some subject as it was presented to the student, and as it is being presented in up-to-date schools at present, will also be expected.

This is a practical course for any teacher, as he will be made to criticize the material he presents and will perhaps be led to eliminate certain topics he now teaches. 3 hours—Mr. Wright.

10 and 32. The History of Education in Ancient, Mediaeval and Renaissance Times. A general survey of the history of education up to and including the Renaissance will be made in this course, with special emphasis upon the Greek, the Roman, and the Renaissance periods. An effort will be made to show the influence of the various movements in these periods, upon the education of our own times.

The course is especially beneficial to one majoring or especially interested in history. 3 hours—Mr. Wright.

11. Principles of Education. Required second year. This course is designed to set forth the theory of aims, values, and meaning of education; the place of a scientific basis in education; the relation of schools to other educational institutions; the social limitations upon the work of the schools; the types of schools necessary to meet the needs of society; and the processes of learning and teaching. 5 hours—Mr. McCracken and Mr. Wright.

12a. Current Movements in Social Education. This course will include such subjects as the following: The school as a social center; school credit for home industrial work; open air schools; organizations cooperating with the public schools; the six-three-three-plan; consolidation of schools; the school survey; medical inspection in schools. 3 hours—Mr. McCracken.

12b. Current Movements in Social Education. This course will deal with the subjects of vocational education and vocational guidance. 3 hours—Mr. McCracken.

24. School Administration. This course deals more particularly with school and class management as it relates to the teacher and the school principal. A part of the course is given to the study of cooperation between teacher and principal in instruction, discipline, etc. There will be some time given also to a study of the recent school legislation in Colorado.

Other topics arising in the course are:

- (a) Some errors the new teacher often makes and some things she ought to know.
- (b) Nature, kinds, and development of conduct.
- (c) Teaching children to think.
- (d) Teaching children to execute.
- (e) School room government; fair play in the school room.

This is a good course for any teacher in the field who has not had courses in education. It is particularly good for the teacher of little or no experience. 3 hours—Mr. Wright.

25. Administration of Rural and Village Schools. This course is a study of the history of rural school organization and administration in our country from primitive local needs to the present time. It aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education, and a discussion of forward movements in legislation as they affect the education of rural children. 3 hours—Mr. Shriber.

33. History of Modern Elementary Education. Students who have not had Education 10 or its equivalent, will be expected, in the first few lessons, to review the features of the Renaissance which influence materially the men and movements of modern education. While the entire field of modern education will be covered to a certain extent, the main part of the course will be devoted to the study of modern elementary education. Such subjects as the development of the vernacular schools, the early religious basis of elementary schools, and the transition to a secular basis, together with the work of such men as Cominius, Locke, Rousseau, Pestalozzi, Herbart and Froebel, will be emphasized. 3 hours—Mr. Wright.

38. Vocations for Women. A course designed for the study of vocations open to women, with the idea of preparing the teacher to guide her students in the choice of their life work. The course consists of a study of women in industry, agriculture, commercial work, the professions, such as nursing, library work, and medicine. 2 hours—Miss Wilson.

Courses Primarily Senior College

20. **High School Administration.** This course will deal with the organization, management and administration of the high school, a critical examination of one or more typical high schools, emphasizing courses, programs of study, daily schedule of classes, records and reports, equipment, training, qualification and work of the teachers and other similar matters of high school administration. The student will be allowed to select topics in which he is especially interested, for study and research, under the direction of the instructor.

This is a valuable course for any high school teacher or principal. 3 hours—Mr. Wright.

28. **Comparative School Systems.** In this course one makes a rather comprehensive study of the school systems of England, France, and Germany, comparing each with the other and finally emphasizing the points to be found in each system which seem especially applicable to our own American system. Other countries which excel in any particular line are studied from that particular standpoint. For instance, Denmark is studied because of its recognized standing in rural education.

Early in the course, a number of thesis topics like the following will be presented, from which the student may select for the purpose of making comparisons of the various countries.

1. Compare the curricula for the secondary schools of the various countries.

2. Compare the countries as to teachers' preparation, term of office, salary, interest in their work, etc.

3. Compare the countries as to emphasis placed upon physical education.

In the last part of the course, a study of modern movements in Education in the various countries will be made.

This course is more easily taken by students who have access to some library facilities. 5 hours—Mr. Wright.

30. **Rural Education.** A course intended, primarily, to give a comprehensive grasp of American rural history, and a brief study of the rural educational systems of this and other countries. After the problem is considered in its historical and sociological aspects resulting from a long national evolution, the present as well as the best type of rural school will be studied as a factor in preparing for an efficient citizenship. The fundamental needs in rural education, the recent rural life movement, the redirection of the school, its legitimate functions and revitalizing agencies will be correlated with existing conditions in Colorado and the West and with the social and historical development of the country. 3 hours—Mr. Shriber.

34. **American Education.** A brief survey of conditions existing in Europe at the time of the settlement of the American Colonies will be considered with a view to explaining the various types of education found

in Colonial times. A study will also be made of the growth of the public school idea, the spread of education from the East to the West, and the development of state control of education.

Other topics of American education emphasized in the course are:

- (1) National land and money grants to education.
- (2) Higher and professional education.
- (3) Higher education of women.
- (4) Normal schools and the training of teachers.
- (5) Education of Defectives.
- (6) The growth of the kindergarten idea.
- (7) Modern movements in American Education.

These topics will be considered briefly historically, but more emphasis will be placed upon present-day tendencies in each of these lines.

The student will also select a topic from a list of some twenty subjects, on which he will write a thesis of from two to five thousand words. Among the topics are the following: (1) "Indian Education," (2) "Negro Education," (3) "Education of the Foreigner," (4) "The General Education Board," (5) "The Smithsonian Institution," (6) "The Carnegie Foundation for the Advancement of Teachers," (7) "Work of the Bureau of Education," and (8) "Modern Movements in Education."

This course is appropriate for principals and superintendents who are anxious to learn of progressive features in American Education. 5 hours—Mr. Wright.

35. Educational Classics. The purpose of this course is to study the various educational classics (a) as interpretations and criticisms of the educational practices of the various periods of history represented by them; (b) as to their influence upon the period and writers directly following; and (c) as presentations of theories and practices of present-day education.

Some of the classics to be studied are:

Plato's "Republic."

Quintillian's "Institutes of Oratory."

Cominius' "The Great Didactic."

Rousseau's "Emile."

Locke's "Thoughts Concerning Education."

Pestalozzi's "Leonard and Gertrude."

Spencer's "Education."

The latter part of the course will be given to a careful study of (a) what constitutes an educational classic, and (b) what twentieth century treatises on education are probably destined to become classics.

The course would probably appeal most to mature students in the Senior College or to mature second year people. 5 hours—Mr. Wright.

42. Educational Administration. In the first part of this course, the student will be given a general idea of the field of school administration by the study of Cubberley's "Public School Administration." Then he

may, if he desires, select certain lines of school administration in which he is interested, for study and research. He may make a critical examination of his own city or village system; make a survey of conditions as they exist in his own state, or county in organization, powers and duties of the Board of Education; also the qualifications, powers, duties, and opportunities of the superintendent and the principal.

Superintendents and principals will find this course helpful in the administration and critical examination of their own schools. 3 hours—Mr. Wright.

45. Measurements of Results in Education. There are some standardized tests which measure certain kinds of results in education. These may be used by the teacher to check up his work and the standing of each of his pupils in reading, writing, arithmetic, language, drawing, spelling, and some other subjects. Superintendents of the elementary and high school curricula may wish to give these tests and compare the standing of their schools with other schools in which the tests have been given and the results published. The purpose of this course is to give the teacher and supervisor a working knowledge of educational tests, their use and their abuse. 5 hours—Mr. Mooney.

47. Educational Surveys, a Preliminary Study. Open to students of Junior College upon permission of the instructor. There are conditions, both good and bad, in every school system which can and should be revealed by a survey, conducted by the administrative authorities in charge of each school system, aided by expert advice from outside the system. The Teachers College is under obligation to furnish this expert assistance. To this end a Survey Committee has been appointed and is ready to render service to any school community in Colorado. The Survey Committee is of the opinion that wherever the Administrative Authorities in any school community wish to undertake a cooperative survey of their schools a preliminary study of the underlying principles of educational and mental measurements together with a study of social problems, especially as these are related to educational problems, should be made by the teachers and those responsible for the work of the Public Schools in that community. This course is intended to give opportunity for such study. It may be given on the individual plan or by a member of the faculty of the College, or by the superintendent of schools in cooperation with the College. The results of the course should be that all who take it will have a fair grasp of the underlying principles of the subjects treated and some should become fairly proficient in giving the tests and making the observations and calculations involved in educational surveys. 5 hours—Mr. Mooney.

COURSES PRIMARILY GRADUATE COLLEGE.

17. Vocational Education. This course has for its purpose the interpretation of the subject from the artistic, industrial, and commercial standpoints.—Mr. Hadden.

23. Research in Education. This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of greatest interest to him, provided sufficient opportunity is at hand for original investigation. The results of such research are to be embodied in a thesis. Credit hours will be given in accordance to the amount of work done. A suggestive list of subjects follows: Federal aid to education; state aid to special types of education; vocational guidance; the continuation of the education of the adult; methods of school support; student government; vocational education for women; distribution of school funds; social needs of the child and the adolescent in education; differentiated programs of study for older children in elementary schools; certification of teachers; the Junior High School; the after-training of teachers; measurements of results in education.—Mr. McCracken.

ELEMENTARY EDUCATION AND TEACHING

GEORGE E. FREELAND, A.M.
 MILDRED DEERING JULIAN, A.B.
 MRS. LELA ALTMAN, Pd.M.
 MRS. BELLA B. SIBLEY, A.B.
 NELLIE MARGARET STATLER, A.B.
 FRIEDA B. ROHR, A.B.
 ELIZABETH HAYS KENDEL, A.B.
 AMY RACHEL FOOTE, A.B.
 JENNY LIND GREEN, A.B.
 BERTHA MARKLEY, Pd.M.

This department aims to give practical courses to teachers in the field, in order to increase their efficiency in teaching. We connect theory with practice. Too often the theory does not seem to be practical because the teacher does not understand how to put her theory into practice. In the following non-resident courses we aim to bring the teacher in contact with our own elementary training and demonstration school as well as with the best elementary school practice in the United States and Europe.

Courses Primarily Junior College

1. Methods of Teaching. (Required of all Junior College Students.) This course takes up scientific methods of teaching the common school branches, the values of and methods for making plans, motivation of school work, assignments that get results as compared with those which do not, developing habits and good methods of study on the part of the children, methods of teaching both slow and quick children in the same class, the function of school subjects in life, etc. 4 hours—Mr. Freeland.

2. Elementary School Teaching. (Required of all Junior College Students.) The non-resident work in this course will be made up of reports, under the direction of the department, of different phases of

elementary school teaching. If a teacher in the field cares to work out a portion of the required practice teaching, he should write to the college, stating the problem or subject he cares to teach under supervision of the college, and directions for the work will be forwarded to him. This work may be done in any grade of the public school including the Kindergarten.

SPECIAL NOTICE—Hereafter, the college requirements for practice teaching are to be strictly enforced, and everyone must do some work in teaching in this department before the certificate of graduation will be granted.

4. The Elementary School Curriculum. The curriculum is the center of the school and every teacher in the elementary schools should have definite reasons for the subjects she teaches as well as a knowledge of their relative values. It is possible to teach too much of one subject to the detriment of others. Curricula of the most progressive schools in America should be common knowledge among elementary school teachers.

This course will consider the above problems in careful detail. 5 hours—Mr. Freeland.

5. Primary Methods. This course will be valuable to both beginning and experienced teachers of primary grades. It will include a resume of methods and material for all subjects, giving the view-point of some of the best authorities. The value of the Montessori system in primary grades will be discussed. The play life of the child, story telling, the study of poems and nature study will receive special consideration. If the student is teaching we shall expect her to try some of these methods and report the result. A daily program and a brief course of study for any one of the primary grades, with reasons for the selection of subjects and arrangement of material, will be required. This should be based on information acquired in this course. 5 hours—Mrs. Altman.

6. Primary Methods. This course is based on the needs of the child between the ages of 7 and 8 years. This course leads up to the selection of subject-matter which functions in the child's life. To this end a brief comparison of courses of study in some of our larger city schools is made. The latest and most scientific articles on primary methods are read and discussed. Many devices for teaching beginning reading, phonics, rhythm, spelling, songs, as well as methods for dramatization of stories, multiplication table, and practice in blackboard illustrating are given. 5 hours—Mrs. Sibley.

7. Third and Fourth Grade Methods. Junior College Elective. The course is based on the needs of the child between the ages of 8 and 10. It will consist of (1) a review of the most significant things in child study common to children of this period; (2) a comparison of courses of study for these grades; (3) the building of a course of study; (4) methods of presenting the material of the curriculum of the third and fourth grades. 3 hours—Miss Rohr.

8. **Fifth and Sixth Grade Methods.** This course will consider the fundamental needs and characteristics of children in the pre-adolescent period with the purpose of applying such psychological principles as govern method and selection of subject-matter in these grades. Chief emphasis will be placed upon the practical side of the work with a view of arriving at the best means of securing initiative accuracy (good habits of study) and retention. Teachers will be expected to show by reports of actual class work in their own schools how they have been able to apply these principles in order that their conclusions in theory may be tested in practice. 5 hours—Miss Foote.

9. **Grammar Grade Methods.** The pre-adolescent stage is the most critical of all stages of development. Most difficulties of high school pupils have their beginnings in the grammar grades. Grammar grade teachers should know how to avert them. The greater per cent. of boys and girls leaving the eighth grade assume the responsibilities of citizenship without further formal instruction. Grammar grade teachers should therefore know how to make what they teach worth while to their pupils for these essential reasons: 1st, that those who must leave school will be better fitted for living. 2nd, that a greater number will feel that it is good for them to remain longer in school.

This course consists of practical problems which confront every teacher of grammar grade pupils and aims to aid the teacher in overcoming to some extent the difficulties suggested above in the grades in which she may teach.

Some of its specific aims are as follows:

1. To give a knowledge of grammar grade pupils, physically and in terms of their interests; and its application to certain problems of discipline and method.
2. To give understanding of the aims of the various school subjects in upper grades and methods of teaching.
3. To give a working knowledge of what constitutes a good curriculum for grammar grades in certain fundamental subjects, through study of model curricula.
4. To give the ability to adapt specific subject-matter to pupils of these grades. 5 hours—Miss Green.

10. **School Hygiene.** Includes hygienic methods of teaching and hygienic school conditions. Hygienic methods of teaching each elementary subject as well as the demands of the different grades in rooms, light relations, length of periods, etc., are considered. 4 hours—Mr. Freeland.

11. **The Use of Interest in Teaching.** The different phylogenetic, special hereditary, and acquired interests of elementary school children are considered. The growth and changes of interest are noted. Special attention is given to the use of these interests in teaching as well as the dangers of misuse and too much use of them. 4 hours—Mr. Freeland.

12. Methods of Measuring Progress in the Elementary School. This course will take up the practicability of the different standards and tests now in use, the grades in which they may be used, and their limits as exact measures of progress. Methods of measuring progress without tests and the formation of new tests will take up a considerable part of the course. The function of this department in the measurement field is to acquaint the teachers with the practical application of measurements and to formulate new measures. 5 hours—Mr. Freeland.

13. Story Telling in the Grades. The following subjects will be considered in this course: 1. Why we tell stories. 2. The technique of story telling. 3. Adaptation of stories. 4. Fairy tales and folk tales. 5. Animal stories. 6. Nature stories. 7. Mother stories. 8. Stories of legendary heroes. 9. Stories of historical heroes. 10. Stories adopted from standard literature. 11. Holiday stories. 12. Humorous stories. 13. Ethical stories. 14. Biblical stories. 5 hours—Miss Statler.

16. Plays and Games for Kindergarten and Primary Children. A study of the different theories of play, and the psychology of children's play, the development of games, different types of games, the value of play, characteristics of games for children of different ages, original games based upon rhymes and activities, simple rhythms and methods of presentation. 3 hours—Miss Julian.

22. Play Life of Children as a Basis for Education in the Kindergarten. The meaning of educational play and its significance in the mental and moral development of the children of the kindergarten and primary grades, the growth of the new conception of play and its influence upon the work in the kindergarten and primary grades. The difference between illustrative and purposive work for children. Means of establishing a closer relation between kindergarten and primary. 3 hours—Miss Julian.

24. Kindergarten Conference. A study by each student of some one subject taught in the kindergarten, e. g., stories, games, music or construction. Experimental work with the children. Collection of observations by other teachers. Selection of materials for the children upon the basis of the child's own instincts and interests. The bearing of modern educational theories upon the kindergarten curriculum. 5 hours—Miss Julian.

Courses Primarily Senior College

3. Elementary School Supervision. This is a course for principals and supervisors. It will be based upon four large factors. (1) Measuring the worth of teachers. (2) The values and relations of elementary school subjects. (3) The use and misuse by teachers of devices, interests, etc. (4) Some results to be expected of teachers in the elementary school. 4 hours—Mr. Freeland.

COUNTY SCHOOLS

J. H. SHRIEBER, Director

This department recognizes that the rural problem is essentially the problem of the rural school. The object of the course offered here is to prepare rural and village teachers for community leadership and to assist in the proper organization and management of the type of school found in the open country.

Courses Primarily Junior College

6. **County School Methods.** Most of the methods found in books on teaching have been worked out for graded schools, but it is also true that most teachers are destined to begin their professional careers in country schools where conditions are different. The application of methods to a rural school, the organization of material, class room management, and effective presentation will receive special emphasis. This course will aim to discover points of difference between the graded and ungraded school in respect to the utility of pertinent methods used in teaching the various branches of study in a rural and village school. 3 hours.

25. **Administration of Rural and Village Schools.** This course is a study of the history of rural school organization and administration in our country from primitive local needs to the present time. It aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education, and a discussion of forward movements in legislation as they affect the education of rural children. 3 hours.

Primarily Senior College

30. **Rural Education.** A course intended, primarily, to give a comprehensive grasp of American rural history, and a brief study of the rural educational systems of this and other countries. After the problem is considered in its historical and sociological aspects resulting from a long national evolution, the present as well as the best type of rural school will be studied as a factor in preparing for an efficient citizenship. The fundamental needs in rural education, the recent rural life movement, the redirection of the school, its legitimate functions and revitalizing agencies will be correlated with existing conditions in Colorado and the West and with the social and historical development of the country. 3 hours.

BIOLOGICAL SCIENCES

LEVERETT ALLEN ADAMS, A.B., A.M., Ph.D.

JOHN C. JOHNSON, A.B., M.S.

Biology 2. (Bionomics. Required in the Junior College.) This is required in the first year. It is a study of some of the fundamental facts

and laws of Biology that may be valuable in teaching. It forms a basis for the intelligent study of other educational subjects. It considers the Evolution doctrine, cell life, problems of fertilization, maturation, and embryology, Mendel's Law, formation and organization of tissues. 5 hours—Mr. Johnson.

Bacteriology 2. Bacteria, Hygiene, Prophylaxis. A study of (1) bacteria—where found, what they are, how they live and grow; classification of bacteria of economic importance; useful bacteria; special emphasis on parasitic and disease producing bacteria. (2) Hygiene—of person, home and school room. (3) Prophylaxis—how disease is spread; methods of prevention and control; immunity, disinfection, inspection. 5 hours—Mr. Johnson.

PHYSICAL SCIENCES

FRANCIS LORENZO ABBOTT, B.S., A.M.

CHARLES J. BLOUT, A.B., A.M.

5. Historical Physics. (Junior or Senior College.) Probably the historical aspects of the school subjects offer the easiest insight into their relations to human life and problems. Physics, from the modern point of view and practice, is more than a set of laboratory experiences to be memorized. It is a history of *men facing baffling problems* and step by step finding a way to solve them. It is possible that this may be the best point of view from which to teach Physics to any group of students.

This course, however, is planned primarily for those teachers of physics who have a scholarly interest in the evolution of various aspects of their subject. Probably its chief service lies in its bringing together many classical experiments and indicating their influence on the development of physics, which is a matter of considerable difficulty, since there is no book written from this standpoint.

Beyond this, for the sake of humanizing physics, the course exhibits the circumstances and conditions under which various men first performed the classic experiments.

It is our belief that the teaching of high school physics may profit considerably from such a background study. 5 hours—Mr. Abbott.

7. General Science. (Junior or Senior College.) One of the main functions of any branch of science is to rationalize life—to free the mind from superstitions of whatever sort, thereby reducing human error and suffering, much of which traces to false beliefs about things and phenomena. Science seeks to accomplish this end by various means—chiefly, however, by teaching a fruitful method of working on problems, or seeking to answer questions. The final result of science for those upon whom it produces the proper effect is a just sense of the KIND and AMOUNT of evidence that should precede the belief in anything.

This is an elementary study planned with the view of giving, as far as possible in such a brief course, an orderly, scientific understanding of

the phenomena of every day environment, thereby increasing mastery of it.

Beyond this, the course should be of immediate use to teachers who must take the county examinations for a certificate to teach. 5 hours—Mr. Abbott.

8. Radio-Graphic Physics. (Junior or Senior College.) As man's applications of physics to his problems are continually changing his environment, the teacher of physics finds himself continually under necessity of adding to the traditional matter of the school subject in order to keep relations between school and outside conditions close. The title of this course suggests an extension, the need of which is now widely felt by the progressive element among teachers of physics. (See Abraham Flexner's article in the *Atlantic Monthly* for July, 1916, page 33.

This course is intended to give such practical and detailed instruction to those who wish to attempt "WIRELESS WORK" that they may be able to construct, set up, and operate a wireless outfit. The course discusses the function and physics of each piece of apparatus that enters into the outfit, thereby taking the operation of wireless out of the uncertain realm of "cut and try." The valuable practical experience gained by the student while making his outfit (practically all of which he can do) is thus put on a scientific basis, so that he is later saved many blunders as an operator, and knows his material and what it must do well enough to select supplies from a catalog economically and intelligently. The course should be very useful to high school teachers and supervisors of physics. 5 hours—Mr. Abbott.

10. Household Physics. (Junior or Senior College.) This is a first, or elementary, course in physics planned wholly from the point of view of the practical BEARINGS of physics. It is not restricted to the household, but uses freely the materials of the immediate surroundings of the home and school. It has been planned to meet the needs of several groups of people: (1) Students and teachers of Domestic Science and Household Economy; (2) Teachers of physics in small high schools; (3) Rural school and grade teachers.

The course deals with matters so fundamental that it should be of large use to the elementary school teacher in explaining many aspects of geography, agriculture, physiology and hygiene.

Beyond this it should be valuable to the house builder. Through those sections that explain the physics of ventilation, heating (water, hot air, steam), vacuum cleaning, etc. It is possible that teachers of physics in the larger high schools might find in this elementary course much practical material useful in stimulating pupils' interest in the subject. 5 hours—Mr. Abbott.

11. Household Physics. (Junior or Senior College.) For a general statement giving the purpose of this course read the general statement of course 10.

The subjects treated in this course are electricity, light and sound. 5 hours—Mr. Abbott.

12. Theory of the Electron. (Junior or Senior College.) It is impossible to read or study modern physics without understanding the Electron Theory. The course is a very lucid explanation, in non-technical terms, of the Electron Theory of Matter. 3 hours—Mr. Abbott.

13. Alternating Currents Simplified. (Junior or Senior College.) Practically all of the commercial electrical current is an alternating current and our high school text-books give practically nothing of the subject of alternating currents. The aim of this course is to give a student or a teacher of physics such a clear understanding of the action of an ALTERNATING CURRENT as to form a safe and sure foundation for his work. The course is not a mere description of alternating machinery, but an explanation of PRINCIPLES in language so simple and clear that anyone with a very elementary knowledge of physics will have no difficulty in comprehending the course. 5 hours—Mr. Abbott.

CHEMISTRY

11. The History of Chemistry. (Junior or Senior College.) Chemistry as a science is essentially a thing of the present, or rather of the present and the future. As a true science the subject is less than two hundred years old; its real origin is to be sought in the art of alchemy. It was the early alchemist who, by groping in the dark, making many mistakes, following many blind alleys, hindered by the quackery and mysticism of the time, and thwarted by the ignorance and superstition of an untutored populace, handed down to modern chemists the principles and processes of modern chemistry.

It is the purpose of this course to trace the growth of chemistry from its early foundations to the present time, and to review the work and patient research of those who gave the real impulse to chemical study, which led to the discovery of a fascinating and instructive modern science.

At least one year's work in general chemistry is a prerequisite for this course. 5 hours—Mr. Blout.

12. New Theories of Chemistry. (Junior or Senior College.) The development of chemistry has taken place by leaps and bounds. There is a marked difference between the chemistry of a quarter of a century ago and that of today. The earlier chemistry was at first purely empirical, then it became more and more systematic and out of this condition has come a most fascinating modern science. The condition which has brought about this change has been the introduction of physical and mathematical methods into this science, and particularly is this true in the application of physical methods in the solution of the real fundamental problems of chemistry.

It is the purpose of this course in chemistry to review the chief new theories of this subject and to show how through the collecting and

coordinating of materials which form the foundation of a science, new substances have been discovered and a knowledge of their composition and properties has been derived. Special attention will be given to the works of Van't Hoff, Arrhenius, and Ostwald, who were the prime leaders in bringing about the transition from a mere system into a real science and who by discovering generalizations and making fertile suggestions and testing their accuracy have directed the trend of chemical work and chemical thought in its development up to the present day.

At least one year's work in general chemistry is a prerequisite for this course. 3 hours—Mr. Blout.

13. Chemistry as Applied to Problems of Civilization. (Junior or Senior.) Chemistry is not a subject to be appreciated only by those who have access to some sequestered laboratory, the doors of which are closed to the uninitiated, but is a great modern science which, in countless wonderful ways, is supplying the ordinary needs and contributing to the conveniences of modern life. There are many unexpected and marvelous ways in which chemical forces have been applied to solve the problems of civilization. Today there is more activity in chemical research than at any previous time, and out of what has seemed to be a hopeless confusion of chemical phenomena has come a veritable storehouse of simple and useful discoveries designed for the ultimate service of man.

It is the purpose of this course to see how the chemical forces which are at work all around us have been revealed for the use of man and how, thru trustworthy and painstaking observation even of trifling occurrences, the scientist has contributed to the great romance of modern chemistry.

This course is a popular treatment of the subject, and requires no special knowledge of chemistry. 3 hours—Mr. Blout.

GEOLOGY AND GEOGRAPHY

GEORGE A. BARKER, M.S.

The courses offered in non-resident work are in phases of the subject where laboratory and field work are not stressed. It is very difficult to do satisfactory work in a subject like mineralogy by non-resident work.

2. Physical Geography. A course taking up the land form and climatic sides of the subject. Suggestions as to field and map work are included in this course. A course for students that have not had it in high school. 3 hours.

3. Climatology. A course taking up the principal factors controlling the atmosphere, as well as the effect of these in marking out on the earth's surface definite climatic provinces. An elementary course for those who have had little climatic work. 3 hours.

4. **Geography of North America.** A study of the physical geography of North America and the effect of these physiographic conditions upon the commercial and social geography. A course for teachers in service. Presupposes some knowledge of physical geography. 4 hours.

5. **Geography of Europe.** The interaction of environment and race upon the development of the present European Nations. A course for teachers in service. Presupposes a knowledge of North American geography. 5 hours.

7. **Commercial Geography.** A study of products and commercial routes with the relationship to the underlying physiographic controls stressed. An elementary course in commercial geography. 5 hours.

22. **Life Geography.** The distribution of plants and animals emphasizing the main climatic and geologic controls of such distribution. An advanced course based on some knowledge of climatology. 5 hours.

MATHEMATICS

GEORGE WILLIAM FINLEY, B.S.

Courses in mathematics are especially well suited to non-resident work by reason of their definiteness. The texts used in this work have been selected with special reference to their clearness of statement and logical arrangement of material. Anyone who has had the preparatory work may take up the courses outlined here with ease and profit.

4. **Analytic Geometry.** Practically all of the ordinary notions of Analytic Geometry are covered in this course. The student gains a good working knowledge of the elements of this powerful science, and is, at the same time, prepared to go on into Calculus. 5 hours—Mr. Finley.

5. **Differential Calculus.** This course, and the one that follows are designed for those who feel the need of a broader outlook upon the mathematical field. Needless to say every teacher of high school mathematics needs this work to enable him to understand to some extent the possibilities of the subject he is teaching. In this course the fundamental notion of the Differential Calculus is carefully developed and many practical applications are introduced. 5 hours—Mr. Finley.

6. **Integral Calculus.** The work in this course follows that of the preceding in logical order. It deals with the ordinary notions and applications of the subject. 5 hours—Mr. Finley.

8. **Methods in Arithmetic.** This course takes up the practical, every-day problems of the teaching of arithmetic rather than a more generalized study. It deals with the methods of presenting the various parts of the subject from primary arithmetic to eighth grade work. It is especially helpful to those actually engaged in teaching in the grades, as they are

able to try out the methods suggested and thus make them a part of their permanent capital. 5 hours—Mr. Finley.

This course may also be taken as a group course.

9. Methods in Secondary Mathematics. This work is planned for active or prospective teachers of high school mathematics. It takes up a careful study of the purpose and value of secondary mathematics and of the most recent movements in that field. It also includes a study of the fundamental principles of elementary algebra with a view to giving the teacher a clear understanding of the reasons involved in the various processes. 5 hours—Mr. Finley.

11. Descriptive Geometry. This course takes up the ordinary problems in points, lines, planes, and solids. It is designed especially for those interested in manual training. 3 hours—Mr. Finley.

1a. Solid Geometry. This course is designed to meet the needs of that large group of students who completed their plane geometry in high school but did not take up solid geometry. A careful study of the main propositions and the solution of many of the originals is required. 5 hours—Mr. Finley.

1. College Algebra. Anyone who has had at least one year of elementary algebra should be able to carry this work with ease. It takes up first a rapid review, with special attention given to the principles involved and continues with a study of functions and their graphs, quadratic equations, inequalities, and complex numbers. 5 hours—Mr. Finley.

2. College Algebra. A continuation of course 1. Deals with theory of equations, permutations, combinations, probabilities, determinants, partial fractions, logarithms, and infinite series. 5 hours—Mr. Finley.

3. Trigonometry. Anyone who has had at least one year of elementary algebra and a course in plane geometry is prepared to take up trigonometry. The course covers the solution of the right triangle, the development of general formulas, and the solution of the oblique triangle. Many problems of a practical nature are included in the work. 5 hours—Mr. Finley.

SOCIAL SCIENCE

GURDON RANSOM MILLER, PH.D.

EDGAR DUNNINGTON RANDOLPH, A.M.

This department offers a series of courses which it desires shall appeal to both the needs and ambitions of many students. The courses are liberal and varied in scope. Many of them will meet the immediate practical needs of teachers. Some of them are technical, and are intended for teachers and students of special subjects. Still others are advanced courses in social theory, or are practical studies in applied sociology. Superintendents and

principals will find many courses in this list well adapted for group study and teachers' clubs.

The department of Social Science invites correspondence regarding these courses. We will formulate new courses, or change present courses when such action seems desirable. Let us know what you want.

1. The Beginnings of Human Society. (Junior and Senior College.)

An interesting study of early human society. Valuable for teachers in descriptions of physical, mental, and social changes in primitive men and women. A story of development through race experience; the evolution of language, industry, art, the family, law, and other social institutes; correlates well with courses in genetic psychology, human biology, human geography; and is also commended to students of history as a basal study. 4 hours—Dr. Miller.

2. Social Evolution. (Junior and Senior College.)

A more advanced course in human evolution. The first volume is Eliot's intensely interesting account of the origins of human beings, and the original peopling of the continent of Europe. The second volume is Lord Avebury's standard work on "Primitive Times;" and the final volume, by Dr. Boaz of Columbia, takes as its thesis the idea that all races are approximately equal in potentiality.

This course correlates well with studies in the psychology of primitive people, race studies, and with many phases of the physical geography of Europe. 5 hours—Dr. Miller.

3. Modern Social Problems in Relation to Education (Junior

College). This is a first course in sociology. It is planned to meet practical needs of a somewhat varied group of people. It should be distinctly useful to the teacher who wishes to vivify her teaching of history by a clearer point of view and a more incisive method of work. It should be valuable to the supervisor of elementary school subjects who wishes a livelier sense of the relationship of school to life—as shown in a social interpretation of the course of study. To the student of affairs it offers help in forming judicious attitudes toward various problematic situations, such as the dynamic modern citizen is required to pass judgment on. To some extent the course will be varied to meet these different needs—where they cannot better be met by other courses described in this bulletin. Primarily, however, this is a course for elementary school teachers in the relations of school work to the varied problems of the world outside school. It is largely concrete. Of the five books studied, only one deals with social theory. This, the first one, is accompanied by very full directions for study—which will be extended as far as the needs of the student require and the ability of the instructor admits. 4 hours—Mr. Randolph.

4. Elementary Sociology. (Primarily Senior College, but open

to qualified Juniors.) This is a course planned to give a clear working notion of the *field of thought* more or less vaguely called *sociology*. It presents the accepted results of study in the field and offers a perspective

of the whole field with the various subdivisions displayed in proper relations. In other words, the relationships of the somewhat tangled mass of "modern social problems" is made clear and the most judicial opinions in regard to them are exhibited. This course should be of considerable value to teachers of history and civics. And the general reader who is interested in the complex inter-relations of modern life may find this course offering somewhat nearly the orientation he wants. 5 hours—Mr. Randolph.

5. **Elementary Sociology.** (Primarily Senior College.) This course is less concrete than the preceding one. It does not attempt to give an outline of the whole field of Sociology, but is concerned rather with the study of social theory in an elementary way. The foundations that have been most influential in America will be considered carefully. This course should follow Sociology 4. 4 hours—Mr. Randolph.

6. **Social Theory.** (Senior and Graduate Colleges.) An advanced course in the principles of sociology, based on the works of Ward and Giddings, both of whom are recognized great creative leaders in Sociologic thought. This course is virtually a study in social philosophy, and is commended to mature advanced students only. 5 hours—Dr. Miller.

7. **Social Theory.** (Senior and Graduate Colleges.) More varied in material than course six. All books in this course are scholarly and scientific products of two of the greatest living American Sociologists, and one English author of world fame. This will form a productive study of large value for advanced students. 4 hours—Dr. Miller.

8. **Social Direction.** (Senior College and Graduate.) A course in applied sociology, social control, and the scientific direction of comprehensive social reform efforts. This study presupposes knowledge on the student's part, of social theory, social institutions, and modern political attempts to direct social change without revolution.

A vigorous, vital course for experienced students. 5 hours—Dr. Miller.

9. **Comparative Sociology.** (Senior College and Graduate.) For students who have had Sociology 4 or Sociology 6, this course offers an opportunity to consider somewhat deliberately the factors in the rise of Sociology, the nature of the theoretic and practical problems confronted by the sociologist, the various points of divergence of theory among the more significant contributors to the science, and the like. It offers in the end the best attempts at a synthesis of the whole field of social thought. 5 hours—Mr. Randolph.

10. **Social Psychology.** (Senior College.) This course might better be called a course in *psychological sociology*, if the older name had not become fixed. It deals with those parts of psychology upon which *social* theory immediately rests. It uses psychology for the purposes of social analysis. In other words it is a basic course in social theory. It considers, for example, the part played by instinct, feeling, intellect,

imitation, sympathy, and the like in the characterization of society. The course should be useful to students of education and to administrators who are not satisfied with their merely empirical control of social groups. 5 hours—Mr. Randolph.

11. **The Evolution of Morals.** (Senior College and Graduate.) A scientific study of the development of morals through anthropologic and historic times. Of interest, not only to teachers, but to all students of ethical and religious development. This course might wisely be preceded by courses one or two; and will be permitted to Junior College students who have taken either of these courses, or similar ones, or who have taken two courses in elementary sociology or social theory, or who have earned not less than seven hours in such courses. 5 hours—Dr. Miller.

12. **Social Readjustment.** (Junior College.) This course offers an elementary study of how the processes of reconstruction may be applied to a considerable number of practical social problems. It is a much *simpler* course than Sociology 4, as well as much less *extensive* study. It isolates certain situations from the larger field and by a brief analysis of the factors in these attempts to stimulate the habit of thinking in terms of social cause and effect. Its main concern is with the possible lines of improvement to be realized through supplementing and redirecting the development of such fundamental institutions and relationships as Family, Church, School, Property and the like. This course should be useful to the elementary school teacher of history and civics. 4 hours—Mr. Randolph.

13. **Scientific Management and Labor.** (Senior College and Graduate.) A somewhat technical course, dealing with detailed study of mechanical operations, and the efficiency of labor. It includes consideration of the relation of psychology and industry; factory management; fatigue surveys; the bonus system, and its effects on production, and also on workmen. The authorities studied are Taylor, Hoxie, Gantt, Münsterburg, and others.

Intended for teachers of industrial classes, commercial and business classes; but is also of large interest to all students of efficiency in industry. It is a superior practical course. 5 hours—Dr. Miller.

14. **Privilege and Society.** (Junior and Senior College.) This study is closely allied with course twelve, and may profitably either precede or follow it. It deals with the social problems arising from special privileges; social abuses and their political aspects; and with tendencies toward reform in the social order.

An interesting course. 4 hours—Dr. Miller.

15. **Social Insurance.** (Junior and Senior College.) Studies the operation of social insurance in European countries, Australia, and New Zealand, and the growth of the idea in America since 1912. It comprises a study of social compensation for accidents, sickness, invalidity, unem-

ployment, and old age. A comprehensive and instructive course. 5 hours—Dr. Miller.

16. **Society and The Church.** (Junior and Senior College.) A live stimulating course of large interest to students of Church, Sunday School, and religious social improvement; of special value to classes in religious education. The authors in this course are Rauschenbusch, King, Wormer, and Cutting, all well known writers in this department of social thought. 5 hours—Dr. Miller.

17. **Society and Religion.** (Junior and Senior College.) Similar to course sixteen, but dealing more directly with growth and changes within the church. It comprises discussions of the social basis of religion, the relation of the Church to democracy, religion in social action, God in evolution, and the religion of the future. 5 hours—Dr. Miller.

18. **Rural Sociology.** (Junior and Senior College.) A constructive study of country life, economic activities, social organizations, schools, clubs, churches, social centers, and modern efforts and successes in rural progress; intended primarily for rural teachers, but is of value to all students of rural social conditions and needs. 5 hours—Dr. Miller.

19. **Property and Society.** (Junior and Senior College.) An attractive study of property rights, wealth holding, standards of living, social problems resulting from poverty, and theories of the leisure classes. 4 hours—Dr. Miller.

20. **Distribution of Wealth.** (Senior College.) A companion study to course 19, but more extensive, and more scientifically worked out. It contains Hobson's well known contrast between production of wealth and its consumption, in which he treats consumption as the neglected element in economics and urges its just scientific treatment. It also contains Dr. Ely's latest discussion of property and contract. 5 hours—Dr. Miller.

21. **Problems and Methods of Modern Philanthropy.** (Senior College and Graduate College.) This is a course planned to reveal to students of affairs, teachers of history and civics, and those who, from the cultural point of view, are interested in the dramatic under-currents of human life and progress, the least known aspects of our civilization—those aspects which perhaps are to have most credit in the end if we succeed in passing from civilization to humanization. The course will deal with (1) the nature and extent of social failure; (2) the slow and bungling evolution of ways of relieving distress or of putting down the symptoms of misery; (3) the gradual achieving of a conscious technic and curative methods of relief; (4) and the general principles which experience has slowly contributed to present methods of working in social amelioration. Happily, there is a considerable number of books available for such a course, which possess merits of form and graces of expression entitling them to be called

literary at the same time that they exemplify all the conditions and courageous virtues of a thoro-going scientific method. 5 hours—Mr. Randolph.

22. Women and Social Evolution. (Junior and Senior College.) A reliable, attractive, sociological study of the modern feminist movement. The contributions are from German, Swedish, and American writers, and include the biologic and psychological aspects of the problem, as well as its historical and sociological features.

Worthy the attention of any student. It is closely related to courses 31 and 32. 4 hours—Dr. Miller.

23. Immigration and American Problems. (Primarily Senior College and Graduate, but open to qualified Juniors.) This course is intended to be of practical benefit to two groups of people: (1) To teachers—especially teachers of history and civics—it offers the sociologists' and the economists' interpretative principles in the treatment of a social phenomenon which, tho it has been the life of America, is hardly considered in the usual school history. (2) To those interested in forming judicious views upon current problems of our life it offers as far as possible in the limits of such a course an impartial account of the great *change in the character for population* in the 19th century, whereby from a people comparatively homogeneous we have come to exhibit in our composition the greatest mechanical mixture of racial stocks the world has ever known, and have suffered consequent weaknesses in our institutions. It is felt that the course is timely now in view of the recent recognition by the government of the peril implicit in our unassimilated aliens. 5 hours—Mr. Randolph.

24. Problems and Methods of Child Welfare. (Senior College and Graduate, but open to qualified Juniors.) This is a course in the growth and tendencies of the modern movement for the conservation of children. It begins by giving a view of the status of children in the past; passes to a consideration of the evolution of the child protection agencies in the United States; and deals finally with the present problems and tendencies in child welfare programs. This is a course which should be especially useful to parents who are desirous of raising the type of family relations in their community either thru organizations intended to affect the community by public effort or thru less direct agencies. Beyond this, parents who are especially zealous to give the most humane nurture to their children will find in this course much to recommend it to them. It should be useful to teachers of Household Arts as an extension of the dynamics of home making. It is, however, hoped that this course will appeal largely to the elementary school teacher, who, next to the parents, best loves the child and most needs to know of the significance of changing attitudes to the child. 5 hours—Mr. Randolph.

25-26. Socialism. (Senior and Graduate College.) The first of these courses is an introductory study of the scope and meanings of this modern reaction to modern conditions of life. It will probably meet the needs of

most students. It gives a complete but elementary survey of the whole field, and thru some of the simpler treatises presents the pros and cons concretely enough to make the course enjoyable to the novice. In the second course more is done to show the variations of socialism under varied national conditions. 5 hours each—Mr. Randolph.

27. Social Legislation. (Senior and Graduate College.) The term social legislation is intended to suggest a very recent development of purpose in legislative remedies. If it be true that in the past legislation has not only not anticipated bad conditions but has, rather, characteristically waited until evils reached dramatic proportions before being applied, the meaning of the course title will be perfectly clear. The course is to deal with the more purposive application of legislative remedies to existing social maladjustments—such as, for example, labor difficulties, housing and health problems, the liquor traffic, prostitution, city planning, and the like. 5 hours—Mr. Randolph.

28. Boys and Modern Social Problems. (Junior and Senior College.) This course is in sequence with Sociology 24 and offers those who have been especially interested in the field of child conservation an opportunity to give special attention to the problems of rearing, managing, and directing the more restless sex. 4 hours—Mr. Randolph.

29. Crime and Society. (Junior and Senior College.) This course is a study of the relationship of the criminal to society—to social institutions and social organizations. Incidentally it will show the changing attitude of society toward the criminal, and the more important factors behind the change. The course is, however, mainly concerned with the present relations of the criminal in society and his treatment at the hands of society. The course intends to present the best modern thought in the various aspects of this field. 4 hours—Mr. Randolph.

30. The Single Tax. (Junior and Senior College.) A discreet, careful discussion of the Single Tax, in pleasing form, and all material up to date. No old books in the course. Taxation reform is one of our most comprehensive social changes, and is probably the gateway to accomplishment of most of the general program for social improvement, thru a more equitable distribution of wealth. This course discusses the Single Tax as a possible solution of the general problem. 4 hours—Dr. Miller.

31. The Modern City. (Junior and Senior College.) A live topic, discussed by the most virile and attractive writer on this subject in America. The three volumes in this course are all by the same writer, an American scholar, of wide and varied experience, occupying high government position. The series is in sequential order, and uses the comparative method in discussing British, German, and American cities. It is a rich fund of information. 3 hours—Dr. Miller.

32. The Family. (Junior and Senior College.) A very profitable study of the family from the standpoint of education, industry, ethics, and

as a social unit. Desirable for teachers, but of great value to all students of either theoretical or practical Sociology. Closely related to courses 22 and 24. 5 hours—Dr. Miller.

33. **Social Hygiene.** (Junior and Senior College.) A special study of marriage and sex, not highly technical, by writers of national and international reputation; a thoroly reliable, scientific study. 4 hours—Dr. Miller.

34. **Heredity and Progress.** (Junior and Senior College.) Presenting two books each, on the biologic and sociologic aspects of the problem of social progress. Can be profitably used in connection with courses 8, 11, 36, or 39. 4 hours—Dr. Miller.

35. **The Evolution of Culture.** (Senior College and Graduate.) A standard scientific study of the development of human knowledge, and the bases of civilizations. The material is largely anthropological, and forms an excellent sequence for courses 1, 2, or 11. Commended to historical students. 5 hours—Dr. Miller.

36. **Social Progress.** (Senior College and Graduate.) Deals with modern social evolution and theories of progress; historical and philosophical in method of treatment; covers a wide range of thought, and might properly be termed a philosophy of history. 4 hours—Dr. Miller.

37. **Labor and Society.** (Junior and Senior College.) A study of the laboring classes, development, place, privileges, and rights in society; and relation of workers to systems of industrial administration. Specially commended to teachers of industrial education, and students of economics. It correlates well with courses 12, 13, 14, 15, 19, and 27. 4 hours—Dr. Miller.

38. **German Social Organization.** (Junior and Senior College.) Four recent books of superior quality on the modern German method and system of organization in industry, business, commerce, education, and governmental activities. A rich fund of information, well told. 4 hours—Dr. Miller.

39. **Social Philosophy.** (Senior College and Graduate.) An advanced course in fundamental social theory, closely related to courses 6, 7, 8, 9, 10 and 36. Commended to mature, experienced undergraduates, and to graduate students. 5 hours—Dr. Miller.

HISTORY AND POLITICAL SCIENCE

EDWIN B. SMITH, A.M.

The work offered in this department includes some of the regular resident courses and some special courses which may be done to better advantage. Other work beside that listed may be arranged to meet the needs of students.

The department is prepared to organize group courses to be in charge of an instructor from the College. Some of this work is indicated in the courses listed; other work may be arranged on application.

Special lectures, a single lecture, or courses of lectures may be arranged on subjects of present interest, such as The Background of the European War, The Diplomacy Leading to the War, International Relations, The United States in Relation to the War, Our Commercial Policies, and Relations with Spanish America.

1. American History (1492-1829). European conditions leading to the discovery of America; the colonies established by Europeans; colonial institutions; the struggle for supremacy in North America; the American Revolution; the Confederation and the Constitution; organization of the national government; the Federalist party; Democratic opposition; Jefferson's policies; difficulties of neutrality; War of 1812; reorganization after the war; westward expansion; the Monroe Doctrine. 5 hours.

2. American History (1830-1917). A continuation of course 1. Jacksonian democracy; sectional strife; the issue of slavery; Texas and the Mexican War; the Republican party; secession of the southern states; the Civil War and reconstruction; political and financial readjustment; civil service and economic reform; industrial combinations; the silver movement; the new American diplomacy; war with Spain; imperialism; Roosevelt policies; the Wilson administration. 5 hours.

5. European History. The countries of Europe at the beginning of the sixteenth century; the commercial revolution; the Protestant Revolt and the Catholic Reformation; the culture of the sixteenth century; absolutism in France; parliamentary government in England; the world conflict of France and Great Britain; the revolution within the British Empire; eighteenth century Germany; the rise of Russia; "Liberty, Equality, Fraternity;" European society in the eighteenth century; the era of Napoleon. 5 hours.

6. European History. A continuation of course 5. The era of Metternich; the Industrial Revolution; reform and revolution; the growth of nationalism; the problem of the Irish; the German Empire; the new Russia; dismemberment of Turkish Empire; the spread of European civilization in Asia and Africa; international relations and the outbreak of war, 1914. 5 hours.

7. English History. The foundations of England; consolidation of England under Norman supremacy; parliamentary development; medieval institutions; civil wars and the decline of feudalism; the Tudor period; divine rights; monarchy and Puritanism; contest for constitutional government; Whig supremacy; the age of Walpole; development of Greater Britain; transition to modern England; democracy and reform; the Eastern Question; present movements. 5 hours.

9. **National Government.** The relations between the government of the United States and the people; the new conception of the presidency; the growing powers of Congress; the Federal Judiciary; constitutional protection of business; the police powers of the national government; civil service; direct legislation; corrupt practices act; legislation of the last administrations. 5 hours.

10. **Industrial History of the United States.** Industrial conditions of Europe affecting the early history of the United States; industrial England; colonial industry; economic and industrial aspects of the Revolution; the industrial revolution in the United States; the westward movement; slavery; recent industrial conditions; the development of agriculture, manufactures, and the growth of trusts and trade unions. 5 hours.

11. **Commercial History of the United States.** A survey of commerce from early times; colonial commerce and its consequences to European nations; commerce in the several periods of American development, domestic and foreign; the coastwise trade; government aid; the consular service; improvement of rivers, harbors and waterways; tariff provisions affecting shipping; commercial treaties; commercial changes of the twentieth century; international complications. 5 hours.

13. **The Teaching of History and Civics.** The development of history instruction in schools; history and civics as taught in schools today; methods of study, presentation, and material, considered in connection with present conditions; general purposes and aims; place of history and civics in the curriculum; use of the text book; assigning the lessons; use of source material; collateral reading; map work; the recitation; devices for arousing interest. 5 hours.

19. **Constitutional History of the United States.** Origin of the constitution; relation to the state constitutions; the Articles of Confederation as a precedent; the constitution in the process of making; the interpretation placed on the principles by the makers; the period of misunderstanding; the Civil War; the new interpretation of the principles of government; the service of the law courts. Throughout the course the great cases that have grown out of the interpretations of the document will receive consideration. 3 hours.

21. **Political Parties and Party Government.** The rise and growth of political parties in the United States; the first political cleavage; the Jacksonian democracy; the Whig party; the conflict over slavery and the Republican party; Republican supremacy; the reorganization of the Democratic party; place of third parties in American politics; party machinery in the United States; the national convention; the national campaign; state and local party machinery; popular control of political parties. 3 hours.

22. **Municipal Government.** The growth of cities; their relation to trade and industry; state control over cities; the development of the

American city; services to the people; city planning; the commission form of government; the city manager; other recent movements. 3 hours.

23. International Relations. A study of the rules of civilized nations in their relations with each other; the history and development of international law; its divisions of peace, war, and neutrality; "intervention;" rights and duties in connection with property; the jurisdiction of a nation over its territory, subjects, and public and private vessels; the rights and duties of diplomacy; modes of warfare; belligerency; treaties; rights and duties of neutrals; blockade; contraband of war, etc. 3 hours.

24. Modern European Governments. A course presenting conditions of European governments; the foundations of their governments; the positions of the heads of governments; democracy under the present governments; most recent movements. 5 hours.

LATIN AND MYTHOLOGY

JAMES H. HAYS, A.B., A.M.

This department offers five courses adapted to students of either Junior or Senior College. These courses are as follows:

LATIN

1. Beginning Latin. (Junior and Senior College.) Text D'Ooge's Latin for Beginners. 5 hours.

2. Intermediate Latin. (Junior and Senior College.) This course can be taken by those having had from one to two years' work of the subject. Texts: Sallust's Catiline and any good grammar. 5 hours.

3. Pedagogy of Latin. (Junior and Senior College.)

a. How to Read Latin.

Text: The Art of Reading Latin.—William Gardner Hale.

b. Teaching Latin Prose.

c. Exercises in Translation and Prose Composition, assigned to each student. 5 hours.

MYTHOLOGY

1. Mythology of Greece and Rome. (Junior and Senior College.) Text: Myths of Greece and Rome. Gayley. 5 hours.

2. Mythology of Norse and Germanic Peoples. (Junior and Senior College.) Text: Myths of North Lands. Guerber. 5 hours.

LITERATURE AND ENGLISH

ALLEN CROSS, A.B., Ph.M.

ADDISON LEROY PHILLIPS, A.B.

The department of literature and English selects from all the courses which it offers in residence, a group that may profitably be conducted by individual correspondence.

Survey Courses in Literature. The three following courses correspond to English 8, 9, and 10 of resident work. The readings from selected authors cover a period approximating twelve centuries. The student reads the masterpieces for a period, or, in some instances it may be only a portion of the masterpiece that can be regarded as a unit; along with the study of the author, he reads as much of the criticism and literary history of the period as his time and inclination permit. Then he writes a report of his readings, following the directions and suggestions on the lesson sheets. The lessons provide questions, topics for investigation, bibliographies and brief outlines for themes. Emphasis is placed upon first-hand knowledge of the author's work, rather than on history and biography.

8. English Literature (670-1660). Open to students of either junior or senior college. The course will consist of a study of the following pieces and authors:

1. Beowulf and Anglo-Saxon literature. 2. Chaucer. 3. Everyman. 4. Book I of The Faerie Queene. 5. The English Sonnet. 6. Sidney's Arcadia (extract) and other attempts at fiction. 7. Marlowe's Dr. Faustus. 8. Macbeth. 9. Every Man in His Humour or Epicene (choice). 10. Bacon (12 essays). 11. Early Translations of the Bible (extracts). 12-14. Burton, Walton, and Sir Thomas Browne. 15. Pilgrim's Progress, Book I Paradise Lost and Lycidas. 5 hours—Mr. Phillips.

9. English Literature from 1660-1900. Open to students of either junior or senior college. This course includes studies in (a) the poetry of Dryden, Pope, Thomson, Gray, Goldsmith, Cowper, Burns, Wordsworth, Coleridge, Scott, Byron, and Tennyson; and (b) the prose of Dryden, Pepys, Addison, Steele, Johnson, De Foe, Swift, Goldsmith, Lamb, De Quincey, Macaulay, and Ruskin; and (c) plays by Goldsmith and Sheridan. 5 hours—Mr. Phillips.

10. American Literature (1700-1900). Open to students of either junior or senior college. This course embraces (a) a survey of the history of colonial literature, and (b) a careful study of the following authors: Emerson, Whittier, Longfellow, Holmes, Lowell, Hawthorne, Poe, and Whitman, with a few others of lesser note.

2. Advanced Composition. This is a practice course in writing designed for those who are already familiar with the elements of correct expression in writing. It consists of fifteen themes of 6 to 10 pages each,

on paper approximately 8 by 11 inches. Detailed directions for each of the fifteen papers are given in the syllabus, which will be sent, one section for each theme, after the student has enrolled for the course. The papers are read, criticised, and returned by the instructor. 5 hours—Mr. Phillips.

15. Modern Dramatists. In addition to making a careful study of standard treatises on modern drama, the student will be expected to read and analyze for form and meaning twenty representative plays, Continental, English, and American, since Ibsen. Details furnished in a syllabus. 5 hours—Mr. Cross.

16. The English Novel. In the main this is a reading course following the development of the English novel from 1740 to 1900. The two text books which will be indicated are assigned for reading to guide the student through the course in an ordered way. Ten novels are read entire, and parts of two others. The details of the work are furnished in a syllabus of fifteen parts. 5 hours—Mr. Cross.

16a. The Recent Novel. Many students who do not care to follow the development of the novel as a literary form wish to study the novel of the present. An opportunity for such study is given in this course. It may be taken following course 16 or independently. In the main, it consists of a careful study of ten or twelve novels of the present, with written work to accompany each study. Some of the most significant pieces of writing on social and educational problems of the day is being published in the form of novels. This course gives literary students an opportunity to study these problems. 5 hours—Mr. Cross.

17. The Short Story. The study of the forms and themes used by modern short story writers. To-day the short story is a literary form quite distinct from any other, and capable of carrying a significant theme within its limited space. This course attempts first to study the forms and then to show how the story is being used to entertain and to teach truth to the millions who read magazine fiction. The student is expected to study the structure and meaning of fifty typical stories. 5 hours—Mr. Cross.

19. Selected Plays of Shakespeare. A careful study of the ten plays of Shakespeare, chronicle, comedy, and tragedy, which seem best suited to high school courses in English Literature. 5 hours—Mr. Cross.

Group Courses

The head of the department of literature and English is prepared to conduct group courses, in centers which can be conveniently reached, in the following subjects:

15. The Modern Drama.

16. The Development of the English Novel.

16a. The Recent Novel.

17. The Short Story.**19. Selected Plays of Shakespeare.****1a. The Functional Teaching of English Grammar.**

In each case fifteen lectures are given, and assignments made for work between lectures. Each course carries five hours college credit.

READING AND LITERARY INTERPRETATION

FRANCES TOBEY, A.B.

The following courses, offered by correspondence, may be supplemented by individual courses involving research and original work suited to the needs of the individual student. Correspondence concerning the definition of such problems is invited.

COURSES PRIMARILY JUNIOR COLLEGE

2. Reading in the Grades. Aims of the course: To stimulate insight and encourage system in the organization of material; to direct the study of method; to develop initiative and resource in the conduct of the reading class; to quicken the teacher's perception of the values of literature of varied types, for pupils of various grades. 5 hours.

PRIMARILY SENIOR COLLEGE

15. The Festival. Aims and Scope of the course: A study of the values, the varied forms, and the practical development and direction of school pageants and festivals; the preparation of full outlines of school or community festivals which are detailed and practicable for actual use in schools. 5 hours.

ROMANCE LANGUAGES AND GERMAN

EDWIN STANTON DU PONCET, Ph.D.

By a recent arrangement, the department of modern foreign languages is able to offer correspondence courses by the phonograph method. Four different methods may be had, as follows:

First: A year's course using the ordinary course of instruction with the aid of a standard phonograph, grammar, and letter writer included in the course. The price for the course complete, including 30 phonograph records and complete text-books, is \$50.00. Second: Without the phonograph, the same course with all complete, for \$35.00. Third: A similar course with the Vanophone and 30 records, for \$30.00. Fourth: The same course with the dictaphone, the machine and records to be returned at the end of the year, for \$32.00. All express charges on the above material will be paid by the College.

The following are the non-resident courses offered without any reference to the above aids in pronunciation. The tuition fee for each term's work is \$5.00.

FRENCH

First Year Courses

1. **Elementary French.** The definite and indefinite articles; use of the articles; the partitive article; remarks on the articles. The two auxiliaries; uses of same. Number and gender. The adjectives; irregularities of the same; comparison of adjectives. The present tense; the imperfect tense; the future and future perfect, the pronouns *qui*, *que* and *quoi*. Relative and interrogative pronouns. The reading of fifty pages of selected easy texts. The review of all work up to this point. 5 hours.

NOTE.—Unless special reasons are given, no credit will be given for less than 15 hours in the first year of any language studied in this manner.

2. **Elementary French.** Possessive adjectives and pronouns. The demonstrative and conjunctive pronouns. Use of the pronoun *ce*. Disjunctive personal pronouns. Conjunctive pronouns; position of same; use of disjunctive instead of conjunctive. Negation. Indefinite adjective and pronouns. Use of *tout* and *même*. Positions of adverbs. Peculiarities of spelling. Idiomatic use of *avoir* and certain nouns. The reading of one hundred pages of graded French texts. 5 hours.

3. **Elementary French.** The use of the imperfect tense; past definite and past indefinite tenses; the pluperfect and past anterior; use of the future and conditional tenses. Rules of the past participles. Use of the auxiliary *avoir*. The rule for *être*. Use of reflexive pronouns. Use of the imperative. Use of the present participle. The impersonal verbs. The verbs *must*, *should*, and *ought*. The verb *pouvoir*. The use of the subjunctive after verbal expressions; use of the subjunctive after certain conjunctions; remarks on *que* and the subjunctive; distinction between the subjunctive and other moods; uses of the tenses in the subjunctive. General rules of negation; use of *ne*. Inversions. Gender of nouns and rules for same. Uses of prepositions before certain infinitives. A comprehensive study of irregular verbs. The reading of 150 pages of easy French plays. A colloquial study of every day idioms. 5 hours.

Second Year Courses

4. **Intermediate French.** Reading and study of *George Sand's Mare au Diable* and *Dumas' Monte Cristo*. French composition. 5 hours.

5. **Intermediate French.** Intermediate Course. Reading and study of *Verne's Michael Strogoff* and *Le Tour du Monde en 80 Jours*. Review of grammar and composition. 5 hours.

6. **Intermediate French.** Intermediate Course. The study of selected works by *Erckmann-Chatrion: Le Juif Polonais, Waterloo, and Madame Therèse*. Advanced press composition. 5 hours.

15, 16, 17. **Advanced French.** Advanced Courses. See the general catalog for these courses. Offered only to students who have previously done work in residence. 5 hours for each course.

GERMAN

First Year Courses

1. **Elementary German.** Introduction and pronunciation. Cases, nominative and accusative. The indefinite article. Present indicative. Definite article. The imperative mood. Genitive case. The present tenses. The dative. Word order. Personal pronouns. Reflexive pronouns. Future indicative. Personal pronouns reviewed. Non-personal use of personal pronouns. Strong nouns, first class. The present tense of the modal auxiliaries. Strong nouns of the second class. Strong nouns of the third class. The present tense of *wissen*. Weak nouns. Past tenses of weak verbs. Past tenses of the modals and of strong verbs. The reading of 50 pages of easy German stories. 5 hours.

2. **Elementary German.** Possessive pronouns and the past tenses of strong verbs. Prepositions with the dative and accusative. Weak declension of adjectives. Adjectives used as substantives. The past tense of semi-irregular verbs. Relative pronouns. Perfect tense of weak verbs. Declension of adjectives after *ein* words and after *der* words. Pluperfect and future of weak verbs. Strong declension of adjectives and a review of the mixed and the weak declension of adjectives. Reading of 50 pages of graded texts. 5 hours.

3. **Elementary German.** Perfect and pluperfect of modal auxiliaries. Demonstratives. Cardinal numbers. Ordinal numbers. Interrogatives. Comparison of adjectives and adverbs. Inseparable and separable prefixes. Separable and inseparable verbs. *Sein, haben, and werden* used as auxiliaries. Passive voice. Subjunctive. Indirect statement. Conditional mood. Conjunctions. Study of strong verbs. The indirect discourse. Rule of gender for nouns. Reading of 100 pages of intermediate German. 5 hours.

Second Year Courses

4. **Intermediate German.** Reading of *Gerstücker's Irrfahrten; Heyse's Anfang und Ende; Wildenbruch's Das Edle Blut; Wichert's Die Verlorene Tochter*. 5 hours.

5. **Intermediate German.** Study of *Storm's Immensee, Karsten Kurator* and *Polepoppenspüler; Harris' Prose Composition*. 5 hours.

6. **Intermediate German.** *Schiller's Wilhelm Tell, Maria Stuart, and Jungfrau von Orleans*. The life and works of Schiller. 5 hours.

4b, 5b, and 6b. **Commercial German.** A course of one year's work in the writing and reading of commercial German. This course presupposes at least one year of German. The writing of advertisements;

the study of phrases used in business houses; the language of the court room; technical terms. 5 hours for each course.

Advanced German

(For students who have done resident work at this institution.)

12. **Advanced German.** *Schiller's Trilogy, Wallenstein's Tod, Die Lager, und Die Piccolomini.* Advanced composition. 5 hours.

13. **Advanced German.** *Lessing's Minna von Barnhelm, Emelia Galotti, and Nathan der Weise.* Study of Lessing's life and works. Some attention paid to the *Hamburg Dramaturgy.* 5 hours.

15. **Advanced German.** Devoted to Goethe, *Hermann und Dorothea. Der Vicar von Sesenheim,* and one other selected work. 5 hours.

18, 19, 20, **Advanced German.** The following courses are open to all who may be able to take the work. *The Present German Drama.* Reading the selected plays of *Fulda, Sudermann, and Hauptmann.* Three plays of each will be read. 5 hours for each course.

SPANISH

First Year Courses

1. **Elementary Spanish.** The articles. Gender of nouns; possession; plural of nouns. Regular verbs, present of the indicative. Interrogative sentences. Personal *a. Usted: ustedes.* Forms of address. Qualifying adjectives. Apocoptation. Comparison of adjectives; of adverbs. Participles. Uses of *haber* and *tener.* Present and perfect tenses. Uses of *ser* and *estar.* Reading of 75 pages of easy texts. 5 hours.

2. **Elementary Spanish.** Radical change of verbs of the first class. Cardinal numbers. Ordinal numbers. Time of day. Augumentatives and diminutives. The past participle and the past absolute. Personal object with *a.* Possessive adjectives. Future and conditional. Demonstrative, pronouns and adjectives. Object personal pronouns. Reflexive and reciprocal verbs. Passive voice. Two object personal pronouns. Compound tenses of the indicative and their uses. Relative pronouns. The reading of 100 pages of easy stories and plays. 5 hours.

3. **Elementary Spanish.** Interrogative adjectives and pronouns. The imperative mood; the subjunctive mood. Past, future, and compound tenses of the subjunctive. Sequence of tenses. Conditions contrary to fact. Orthographic changes. Verbs with inceptive endings. Radical changes of verbs of the second and third class. The infinitive. Prepositions before an infinitive. Irregular verbs. Letter writing. Business letters. Introduction to commercial forms. Spanish life. Reading of 150 pages of easy texts. 5 hours.

Second Year Courses

4. **Intermediate Spanish.** The reading of *Valera's El Pajaro Verde*; *Larra's Partir a Tiempo*; *Alarcon's Short Stories*. 5 hours.
5. **Intermediate Spanish.** *Alarcon's El Sombrero de tres Picos* and *El Final de Norma*; *Waxman's A Trip to South America*. 5 hours.
6. **Intermediate Spanish.** The reading of *Guitierrez's El Trovador*; *Valera's Pepita Jiminez*; *Valde's José*. 5 hours.

ADVANCED SPANISH

10. **Advanced Spanish.** Three plays of *Echegaray* and *Alarcon's Las Paredes Oyen*. Original themes in Spanish. 5 hours.
11. **Advanced Spanish.** The reading of *Ayala's Consuelo*; *Caballero's La Familia de Alvareda*; *Ibanez's La Baraca*, *Lope de Vega*, and *La Moza de Cantaro*. 5 hours.
12. **Advanced Spanish.** A study of *Cervantes' Don Quijote* and *Valde's La Hermana San Sulpicio*. Original themes on Spanish life. 5 hours.

4b, 5b, 6b. **Commercial Spanish.** Presupposes one year of Spanish. A complete course dealing with all possible forms used in every day commerce and much original composition. The writing of reports on subjects dealing with Latin-America. 5 hours for each course.

MUSIC

JOHN CLARK KENDEL, A.B., Director

7. **History of Music.** The study of the History of Music from Primitive to Modern Times. The musical theories and instruments of Ancient Peoples. The music of the Greeks and Romans. The early Christian era. The evolution of Notation. A complete study of the development and growth of Music into a great Art.

This is a literary course which does not require technical skill. Open to all students who wish to study Music from a cultural standpoint. 3 hours—Mr. Kendel.

8a. **Harmony.** Beginning harmony. The work consists of building scales and chords in all keys and the harmonization of melodies and bases. Emphasis is laid upon original melody writing followed by the harmonization of the original melody. All thru the course the harmonization of melodies made predominant rather than of bases. Work completed to the harmonization of dominant discords and their inversions 5 hours—Mr. Kendel.

8b. **Harmony.** A continuation of 8a. Open to students that have had 8a or its equivalent. The Harmonization of the Dominant Discords, Sevenths, Ninths, and their inversions. Work done through the Diminished Seventh Chords, up to the Second Class Discords. Emphasis laid

upon harmonizing melodies and original melody writing. 5 hours—Mr. Kendel.

8c. Harmony. A continuation of 8b. Open to students having taken courses 8a and 8b, or their equivalent. The harmonization of Second, Third, and Fourth class discords and their inversions. Modulation to next related keys, altered and mixed chords, extraneous modulation. 5 hours—Mr. Kendel.

9a. Harmony. A continuation of courses 8a, 8b, 8c. Open to students having taken these courses or their equivalent. Modulation completed, enharmonic exchange, the Organ Point, Suspension, Anticipation, The Neighboring-Note, The Passing-Note, Appoggiatura. 5 hours—Mr. Kendel.

PHYSICAL EDUCATION

SAMUEL E. ABBOTT, M.D., Director

MARGARET JOY KEYES

Courses in Play, Playground Organization and Conduct.

The aim of the modern playground is to guide the child's play impulses so as to eliminate the undesirable features, and to make it a wholesome expression of child nature and life. The recreative needs of older boys and girls and adults, add other features, which are of value in the life of a community.

The playground teacher must be able to lead and guide these activities, according to the best methods of the day. This important work demands trained teachers and leaders. The Department of Physical Education aims to prepare teachers and directors to meet this growing demand in playground work.

26. Physical Education

- (a) Child nature.
- (b) The nature and function of play.

This course is designed to give the student some knowledge of child nature, and the impulses and activities of child life. Child nature should be interpreted with special reference to play and other forms of activity natural to children.

The primary requirement for the playground director is knowledge of the nature and function of play; its value in the life and education of the child; and the forces in the child and his surroundings which control the development of play habits. 5 hours—Dr. Abbott.

27. Physical Education

- (a) Hygiene and First Aid.
- (b) Social conditions of the community.

This course is designed to give a working knowledge of the fundamentals of personal and public hygiene, and the essential elements of

First Aid. It deals with the elements of personal hygiene; the hygienic and sanitary conditions of playgrounds and buildings, and the significance of various signs that indicate poor physical condition in children. 5 hours—Dr. Abbott.

28. Physical Education

The Play movement.

This course deals with the growth and development of the playground movement, and the varied activities which are carried on in them, with the manner of supervision and management. 5 hours—Miss Keyes.

29. Physical Education

The practical conduct of Play and Playgrounds.

A knowledge of and skill in the practical conduct of playgrounds is the essential requirement for all playground directions. This course deals with the organization, equipment and activities of the playground. Athletics, games and plays which have proven to be the most useful and attractive in playground work. 5 hours—Dr. Abbott and Miss Keyes.

PRACTICAL ARTS

SAMUEL MILO HADDEN, A.M., Dean

The Practical Arts Group comprises Woodwork, Metal Work, Book-binding, Printing, Drafting, Fine Art, Accounting, Commercial Arts, Domestic Science, Household Arts. This group occupies the entire three floors of the Guggenheim building, the first floor of the Training School, the Library basement, and the greater part of the basement floor of the Administration building. There has also just been completed a cottage which is for the exclusive use of the home economics department.

Courses are varied in nature in every special department. These are arranged along both the lines of theory and practice, neither of which is sacrificed for the good of the other. Methods in teaching the subjects in the public schools are emphasized, and when a person has done his major work in his chosen division, he is fitted to do the work, with an added advantage that he is also trained to teach these subjects in the schools.

INDUSTRIAL ART

SAMUEL MILO HADDEN, A.M.

JOHN T. McCUNNIFF, A.B.

CHARLES M. FOULK, Pd.B.

Courses Primarily Junior College

5. **Methods in Practical Art Subjects.** The work of this course is divided into the following groups. First: Historical development of industrial education and its progress in the public schools of the United

States. Second: The influence of scientific development upon industrial conditions; its place in the public schools of the country together with its interpretation and relation to other subjects in the curriculum; the selection of materials fundamental in the organization of industrial courses in public schools and the method of attack and relation of the teacher and student in the class room. 4 hours—Mr. Hadden.

10. **Elementary Mechanical Drawing.** This course is designed to give a knowledge of the use of drawing instruments and the material customarily used in a draftsman's office. The technical phases of the work include lettering, geometrical drawing, orthographic projections, oblique projections, isometric drawings, working drawings, developments and applications. 5 hours—Mr. Hadden.

12. **Elementary Architectural Drawing.** This course includes designs, plans, elevations, and longitudinal sections of framing, doors, windows, sills, rafters, etc., in building construction in its application to work for barns, outbuildings and residences. It also includes the making of tracings, blueprints, and specifications. 5 hours—Mr. McCunniff.

17. **Elementary Machine Design.** Here is treated the development of the helix and its application to V and square threads; conventions of material, screw threads, bolts and nuts, rivets, keys, etc. Sketches, drawings, and tracings are made from simple machine parts, such as collars, face plate, screw center, clamps, brackets, couplings, simple bearings and pulleys. Standardized proportions are used in all drawings. 5 hours—Mr. McCunniff.

2. **Intermediate Woodwork.** This course is designed for those who wish to become proficient in the use of wood working tools and where the student has at his disposal sufficient tools to carry on the work. The course includes the making of drawings from which cabinet work can be executed. The building of furniture and useful household articles such as tabourettes, library tables, writing desks, piano benches, music cabinets, medicine cabinets, etc. The student must have had sufficient practice with wood working tools to be able to select and put to use the ordinary tools used in cabinet making.

The student will be allowed to select the projects on which he is to work from a list that will be submitted by the instructor or he may choose some other, but must submit drawings or cut of same for approval. The list of articles that can be submitted by the instructor includes something like one hundred different designs.

No set text is used in this course. The student executes the work as definitely outlined by the instructor. A very thoro bibliography is furnished from which the student can select books that will fit his particular wants. 5 hours—Mr. Foulk.

Courses Primarily Senior College

11. **Advanced Mechanical Drawing.** This course presupposes some training in drawing and also some fundamental notions in mathematics. The material of the course is as follows: the theory of orthographic projections, or the art of representing a definite body in a space upon two coordinate planes at right angles with each other. The work consists of projections of lines, surfaces and solids, also the shadows of lines, surfaces, and solids upon planes of projection shading and applications. Prerequisite course 10 or its equivalent. 5 hours—Mr. Hadden.

13. **Advanced Architectural Drawing.** This course is a continuation of Course 12, and deals with the drawing of plans for cement, brick, and stone structures, culminating in a complete set of plans and specifications for a residence or a public building of moderate cost. 5 hours—Mr. McCunniff.

18. **Advanced Machine Design.** A study is made of the transmission of motion by belt and pulley, and gears and cams. Such curves as the involute, cycloid, and epicycloid are applied in the designing of gears. Sketches, detail, and assembly drawings are made of intricate pieces of machinery, such as the globe valve, vise, head stock lathe, and such shop machinery as lathes, band saws, motors, and gas and steam engines. 5 hours—Mr. McCunniff.

4. **Pre-Vocational Education.** This course is divided into two definite sections. First: Material of pre-vocational education or attempts that have been made to solve the problem in rural schools, city school systems, state schools and special government and private schools. Second: The basis for the collection of data fundamental in the selection of material that will give a basis for the interpretation and application of pre-vocational to the needs of the child in the public school.

This course is especially organized so that the work can be done in non-residence. 5 hours—Mr. Hadden.

FINE AND APPLIED ARTS

WALTER F. ISAACS, B.S.

AGNES HOLMES, Pd.M.

Courses Primarily Junior College

1. **Elementary Drawing and Design.** In this course a wide range of problems in public school drawing is taken up in a brief manner to give the student a general knowledge of the subject. Those students who are taking their majors in the department lay a foundation for their future work, and others who elect the course find it an aid in their teaching. The course includes the following subjects: (a) Freehand drawing of objects in accented outline; linear perspective; nature drawing; lectures on methods of teaching are given. 2 hours.

(b) The study of elementary design principles. Exercises involving line, space, and color. Simple problems in construction. 3 hours—Mr. Isaacs.

2. **Applied Design.** The construction and decoration of notebook covers, desk pads, and similar articles; theory of design in its relation to useful objects; the application of original designs by block printing on curtains, table runners, or pillow covers. 5 hours—Miss Holmes.

4. **Design and Composition.** The work begins with the theory of space filling and color harmony; abstract exercises in filling the square and circle, using geometric units, giving attention to line, value, and color. This is followed by a few practical problems carefully executed. Prerequisite: Courses 1 and 2. 5 hours—Mr. Isaacs.

9. **History of Painting.** The evolution of painting from the beginning of history; the growth of the great schools and their influences; the study of the important masters, discussing their personalities as related to their painting, and their work as an index to the time in which they lived; illustrated by a large collection of photographs and lantern slides. Lectures with related reading. 2 hours—Mr. Isaacs.

HOME ECONOMICS

MERLE KISSICK, Ph.B., A.B.
FLORENCE REDIFER, A.B.

HOUSEHOLD ARTS

Courses Primarily Junior College

5. **Millinery.** The purpose of the course is to train the student in discriminating power from the consumer's point of view; to give a working basis of design applied to hats and to the general lines of the figure; to develop technique in handling millinery fabrics. To this end the lessons consist in very simple problems in hat design requiring no ability to sketch, draw, or any previous training in design; book reviews contributing to an intelligent understanding of the problems in hat construction; and directions in shop methods of remodelling and building hats with actual practice in the processes. 5 hours—Miss Kissick.

Courses Primarily Senior College

6. **Textiles.** This course deals with the physical, microscopical and chemical analysis of fibers and fabrics. There is laboratory work with hand microscopes, compound microscopes and chemicals.

Supplementary experimental study are papers in review of chapters from textile books and on general topics dealing with the factors related to the textile field. The course cannot be taken unless the student has access to a limited amount of Biological and Chemical Laboratory equipment. 5 hours—Miss Kissick.

21. Interior Decoration. The work in this course is designed to help the student to a clear appreciation of the fundamental principles underlying designs in their relation and application to the interior of a house. To this end an intelligent and analytical study is made of the factors which make these basic principles. Attention is given to a washable color theory; to the study of line and form as problems in composition generally; to an analysis of the structural elements comprising the room as a whole—walls, floor, openings; to the materials into which the room is completed in unity with the structural elements—draperies, floor coverings, foreground materials (for example, pictures, brass, furniture, lighting, et cetera). The course will be accomplished by chapter and book reviews, magazine references when the magazines are available—exercises in illustrative material requiring no training in drawing or interior decoration. 5 hours—Miss Kissick.

HOUSEHOLD SCIENCE

Courses Primarily Junior College

5. Housewifery and Sanitation

I. Treats of the site, surroundings and construction of the house; heating, lighting, ventilation, water supply, drainage and disposal of garbage.

II. Treats of service in all parts of house, the importance of daily routine and systematic housekeeping; of house furnishings and all cleaning processes; of division of income and organization and management of the household. 5 hours—Miss Redifer.

Courses Primarily Senior College

9. **Food Production.** A study of food materials, their growth, production and manufacture, conditions of marketing, transportation and storage; adulterations and Pure Food Laws. 5 hours—Miss Redifer.

COMMERCIAL ARTS

JEHU BENTON WHITE, B.S.

FRANK W. SHULTIS, A.M.

STENOGRAPHY

No regular text book will be needed for this course. The regular Gregg Shorthand text book will be forwarded to you from the Extension Department in pamphlet form. The pamphlets the student may keep, thus giving him a complete text book in pamphlet form. A charge of \$2 is made for these pamphlets, which will include test exercises for each lesson and may be used for Stenography one, two, and three.

Courses Primarily Junior College

1. **Stenography.** (Junior and Senior College.) This course includes six lessons on the principles of Gregg Shorthand: one to six inclusive. 5 hours—Mr. White.

2. **Stenography.** (Junior and Senior College.) Prerequisite: Stenography one. This course covers six lessons in Gregg Shorthand: seventh to thirteenth inclusive. 5 hours—Mr. White.

TYPEWRITING

For all courses given in Typewriting, you will need the Rational Typewriting Manual published by the Gregg Publishing Co., Chicago, Ill.; price, one dollar.

Any standard make of typewriter may be used.

11. **Typewriting.** (Junior and Senior College.) Beginning work in touch typewriting, covering position at the machine, memorizing of keyboard, proper touch, and correct fingering, with instruction in the care of the machines.

This course covers the first ten lessons of the Rational Typewriting Manual together with other material which will be forwarded from the Extension Department from time to time. 5 hours—Mr. White.

12. **Typewriting.** Prerequisite typewriting 11 or its equivalent. In this course we will study the approved forms of business letters, proper spacing and placing on a page.

Use the same text as Typewriting 11. 5 hours—Mr. White.

21. **Elementary Accounting.** Fundamental principles of double entry. Use of the journal and ledger. Making of the trial balance and statements. Cash book, purchase, and sales book introduced. 5 hours—Mr. Shultis.

22. **Intermediate Accounting.** Commercial paper, bill-book, invoice book, bills of lading, special column books. A set of books on wholesale accounts. Prerequisite course 21. 5 hours—Mr. Shultis.

23. **Advanced Accounting.** Corporation Accounting. This deals with the organization of corporations under the laws of Colorado. Books are kept illustrating the commission business. Prerequisite course 21. 5 hours—Mr. Shultis.

30. **Household Accounting.** This is an elementary course. It will be open to all who wish to take it, but it is intended for those teaching domestic science. 5 hours—Mr. Shultis.

25. **Commercial Arithmetic.** This course is intended primarily for commercial students, but is well adapted to those who want a good stiff arithmetic review. There will be a rapid review of the four fundamental operations and fractions. A thorough treatment of percentage and its applications will be given. Only the most modern methods will be used. 5 hours—Mr. Shultis.

29. **Farm Accounting.** This work will be made simple enough for those to take who have not had any previous work in bookkeeping. It is

especially recommended to those who teach agriculture. 5 hours—Mr. Shultis.

26a. Penmanship. Drills in free-arm movement writing. Mastery of position and movement expected. Study of the forms of the letters and figures. 5 hours—Mr. Shultis.

26b. Penmanship. Drill work to develop better form. Much attention given to the spacing and height of letters. Methods of teaching. Exercises in the use of Freeman Scale. 5 hours—Mr. Shultis.

26c. Penmanship. Drill exercises continued. Sentence and paragraph writing. Readings on how to teach and supervise. 5 hours—Mr. Shultis.

Courses Primarily Senior College

3. Stenography. (Junior and Senior College.) Prerequisite: Stenography one and two. This course finishes the study of the principles of Gregg Shorthand. Stenography 3 also includes a study of the Principles and Methods of Commercial Education by Kahn & Klein. This book may be reported on at any time. 5 hours—Mr. White.

Principles and Methods of Commercial Education by Kahn & Klein. \$1.25. 1914, MacMillan.

13. Typewriting. (Junior and Senior College.) Prerequisite typewriting 11 and 12 or their equivalent. This course will deal with typing, arranging, etc., legal documents of all kinds: deeds, mortgages, leases, contracts, power of attorney, statements, tabulating, etc.

Same text as is used in Typewriting 11 and 12. 5 hours—Mr. White.

24. Bank Accounting. This includes a study of the state and national banking laws; loans and discounts; commercial paper; methods and principles of banking; savings accounts. A set of books illustrating several days of business will be given. Prerequisite course 21. 5 hours—Mr. Shultis.

32. Cost Accounting. Importance of cost accounting in a business. Material cost; labor cost, overhead expense, distribution of expense. A set of books will be prepared on manufacturing costs. Prerequisite course 21. 5 hours—Mr. Shultis.

33. Theory of Accounts. A study of the principles of accounting with some accounting problems. Prerequisite fifteen hours of bookkeeping. 5 hours—Mr. Shultis.

AGRICULTURE

HORACE J. KRAFT, A.M.

While no courses in Agriculture are listed in this Bulletin, the courses in Agriculture and Nature Study may be arranged for by correspondence with the Director of Extension Service.

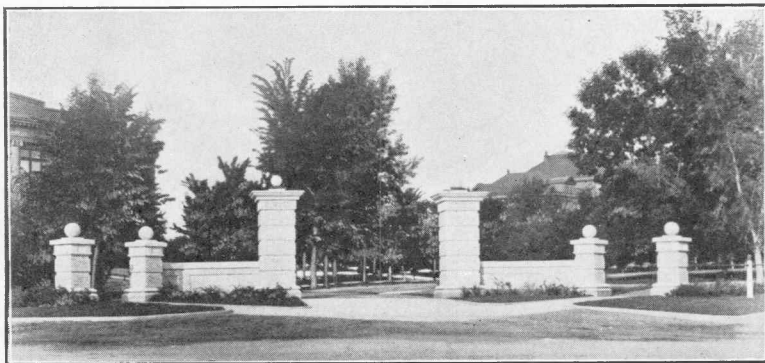
Colorado State Teachers College Bulletin

Series XVI

MARCH 1, 1917

Number 10

SUMMER TERM



ONE ENTRANCE TO THE BEAUTIFUL SHADED CAMPUS
A GATEWAY TO A PROFESSION

♦ ♦

Six Weeks:
June 18-July 27, 1917

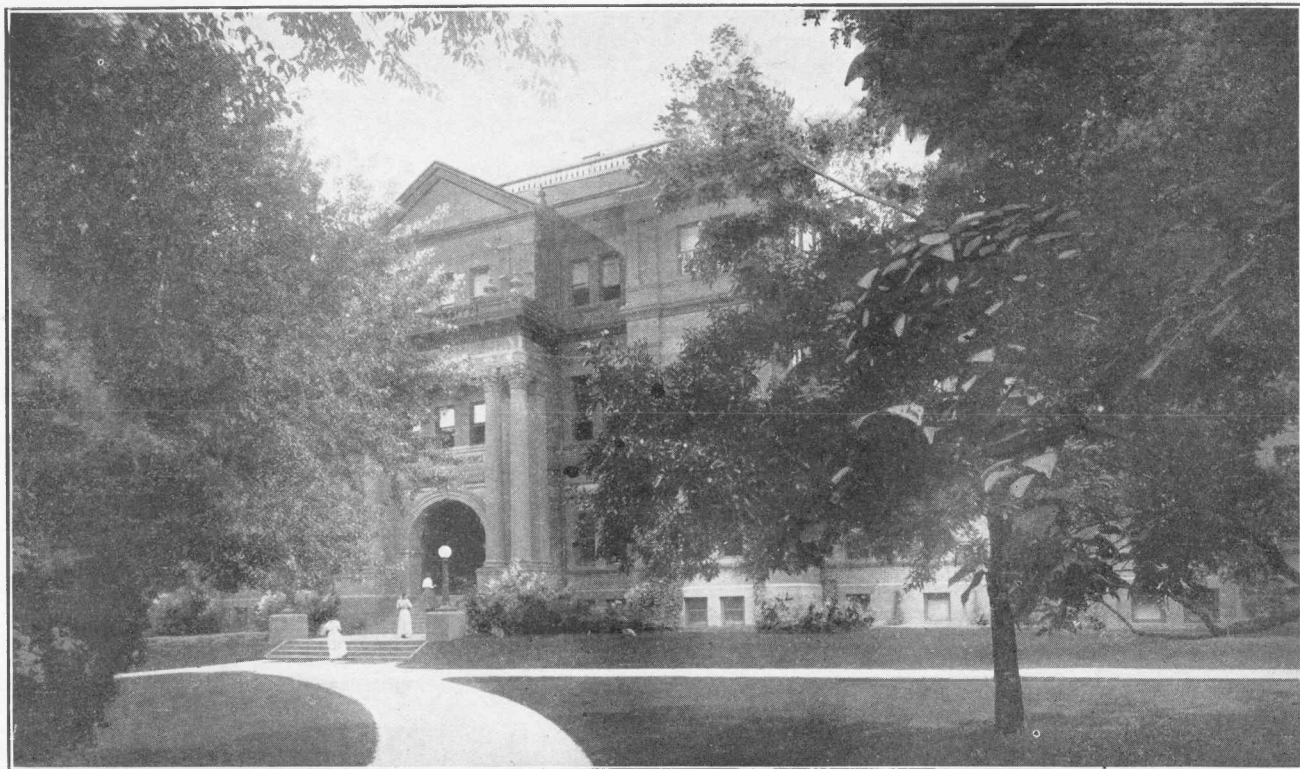
♦ ♦

Published quarterly by State Teachers College, Greeley, Colorado. Entered as second class matter at the postoffice at Greeley, Colorado, under the act of March 1, 1879

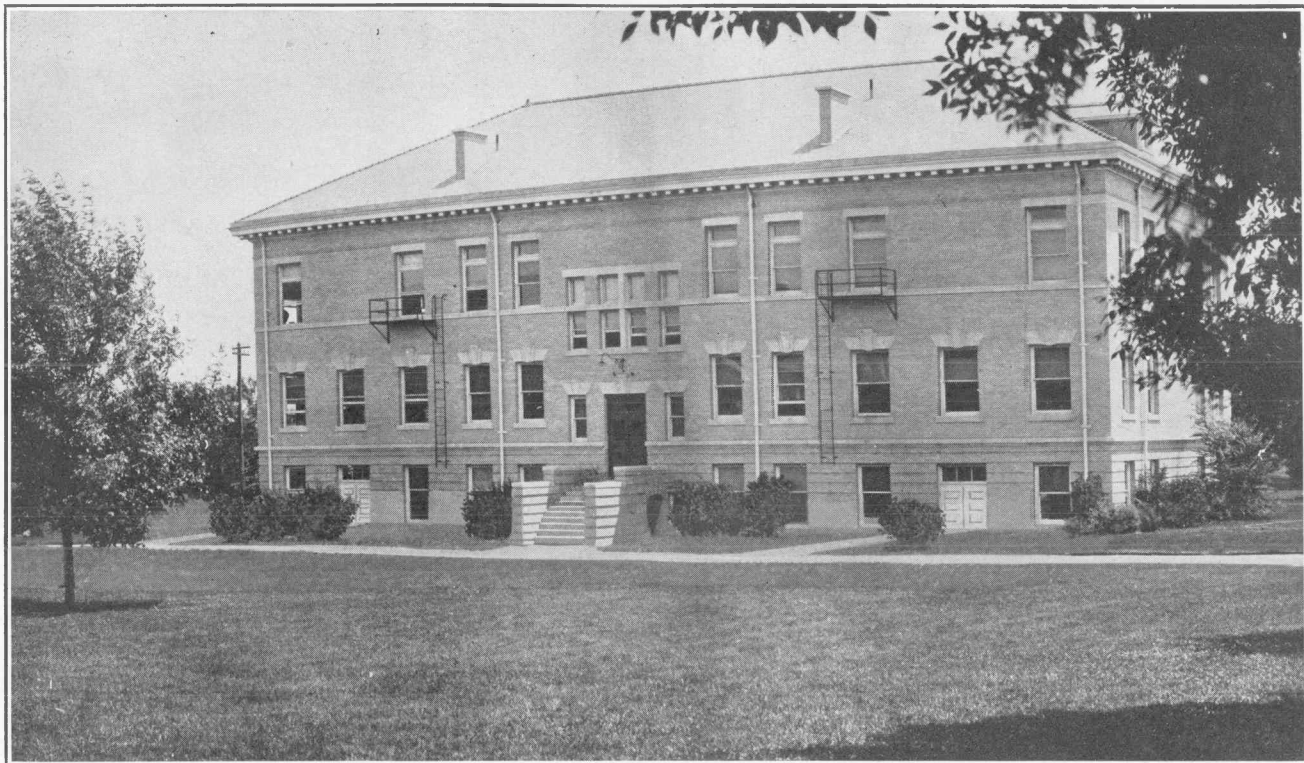


THE COLLEGE LIBRARY

Commodious, Comfortable, Well Lighted—The Study Center of the Summer School



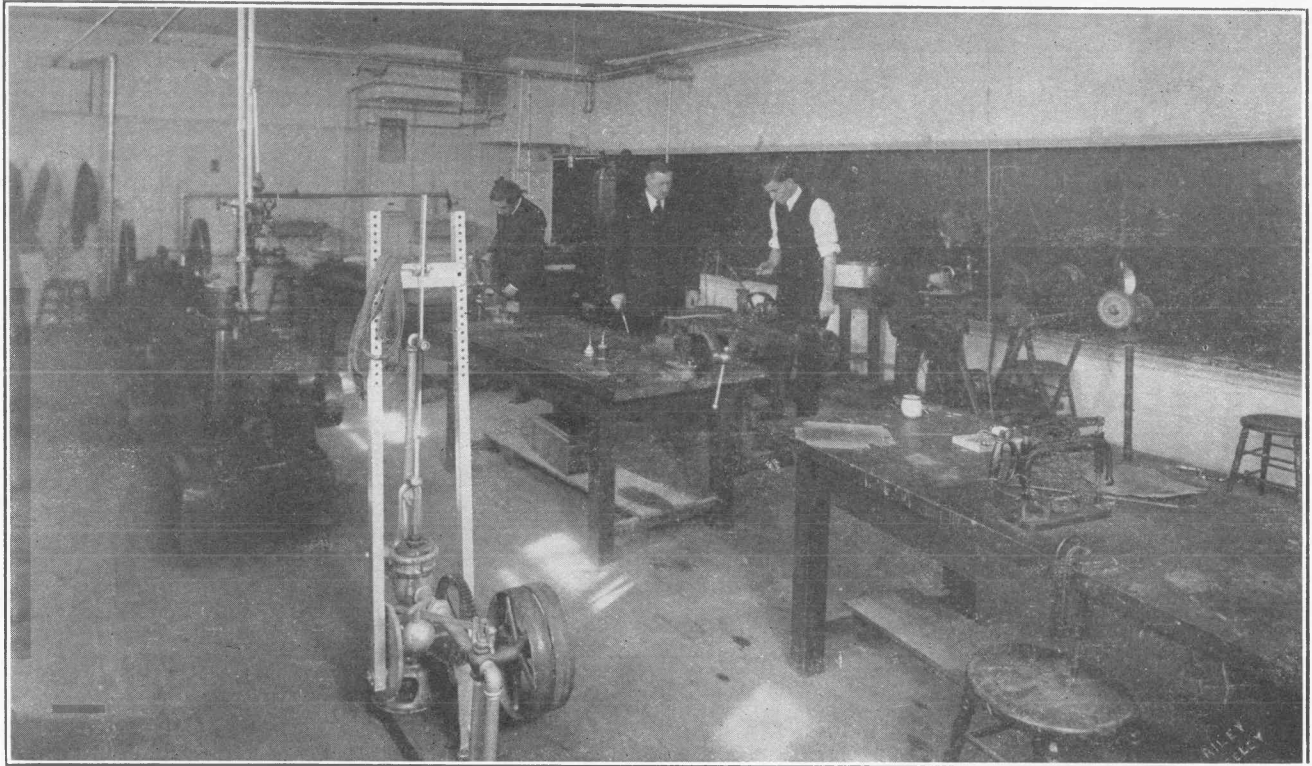
THE ADMINISTRATION BUILDING
A Laboratory for the Making of Teachers



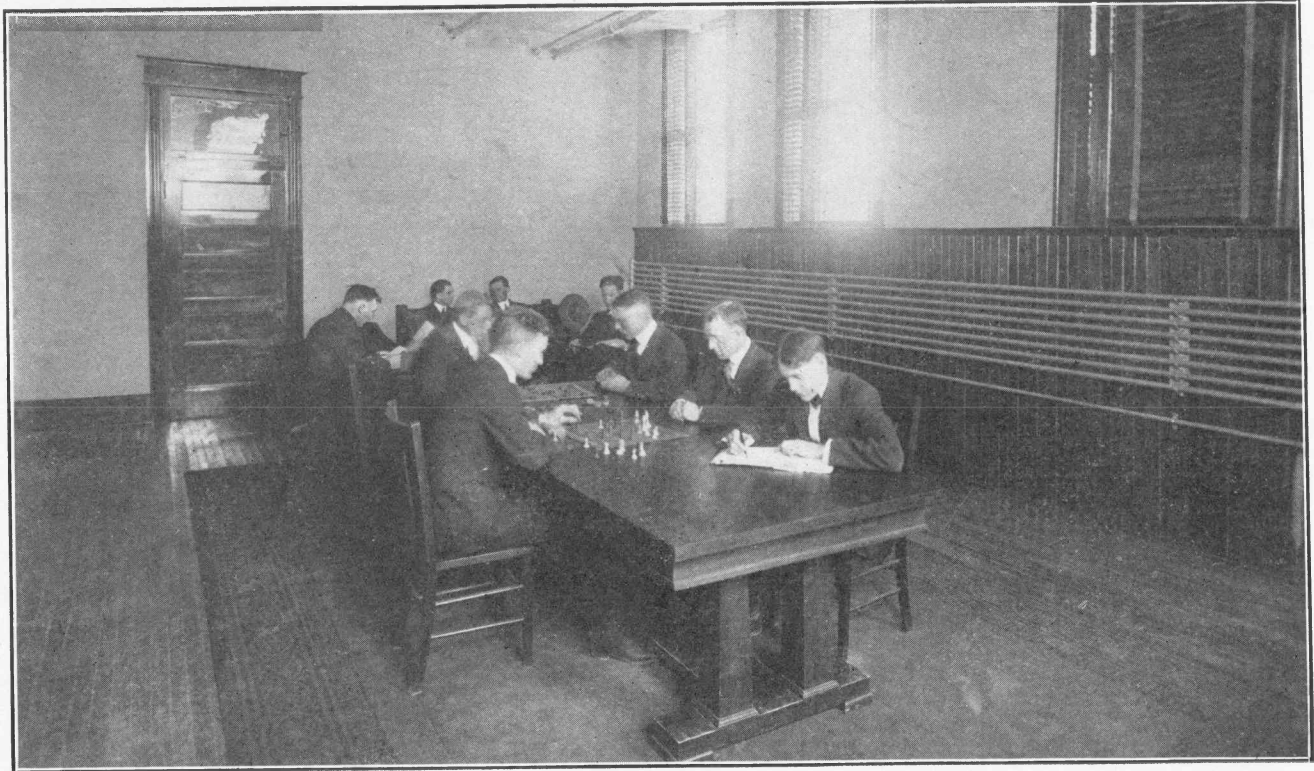
THE SIMON GUGGENHEIM HALL OF INDUSTRIAL ARTS
Wood and Metal Work, Fine Arts, Printing, Book Binding, Mechanical Drawing, Etc.



SUMMER THEATRICALS—THE MERCHANT OF VENICE
DRAMATIC AND ENGLISH CLUBS—GARDEN THEATER



PRACTICAL MACHINE SHOPS—DEPARTMENT OF PHYSICS



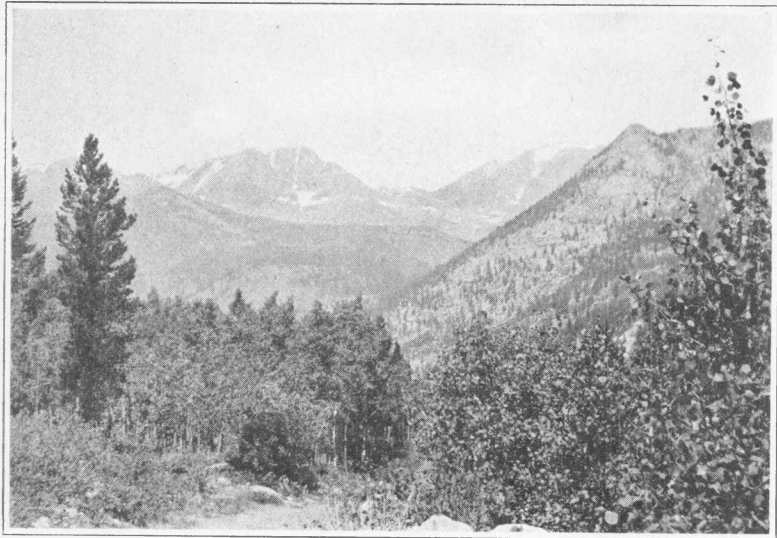
MEN'S CLUB ROOM
Indoor Recreation



ARAPAHOE PEAKS AND ARAPAHOE
ONE EXCURSION

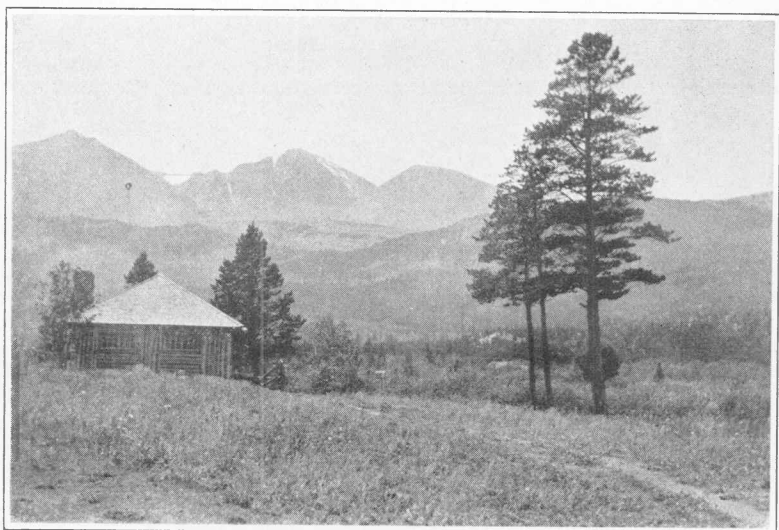


E ON THE "SWITZERLAND TRAIL"
FROM GREELEY

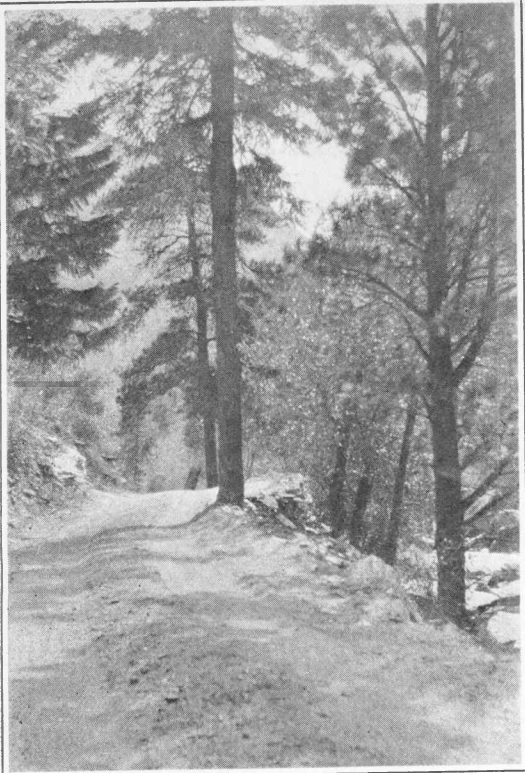


MOUNT YPSILON—ESTES PARK

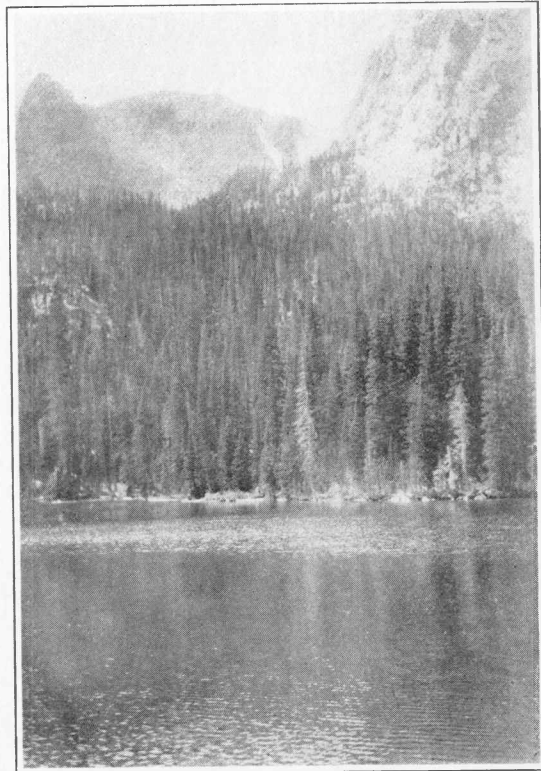
Views in the New
Rocky Mountain National
Park



MEEKER AND LONG'S PEAK
The Rustic Cabin of Enos Mills in the Foreground



THE AUTOMOBILE
ROAD INTO ESTES
PARK—America's most
wonderful mountain play-
ground and recreation area.
The college will co-operate
with students in arranging
inexpensive auto and camp-
ing trips into these moun-
tains.



FERN LAKE, at the base
of the Main Range of
the Rocky Mountains
above Estes Park. Week-
end excursions at very re-
asonable rates may be ar-
ranged by Summer Students
of State Teachers College.

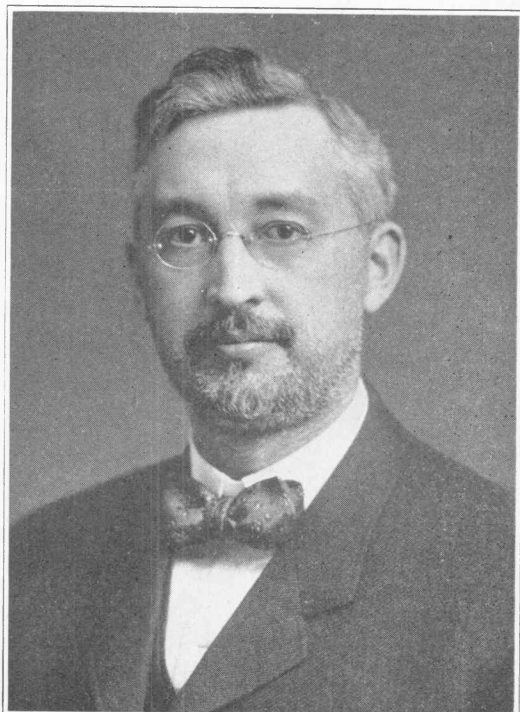


.....
M. V. O'SHEA, B. L.

June 18-22

LIST OF LECTURES

- a. Everyday Traits of Human Nature
 - b. The Trend of the Teens
 - c. The Child as Heir of the Past
 - d. How Words Get Meaning
 - e. Seeing and Believing
 - f. Dynamic Leading
 - g. Nervous Friction in Modern Life:
Causes and Remedies
 - h. What Development Means
 - i. Measurement of Intelligence
 - j. Modern Mysteries
-



.....
JAMES E. RUSSELL

PH. D., LL. D.

June 25-29

LIST OF LECTURES

- a. Relation of Individual to the State
 - b. The German Method of Training for
Citizenship
 - c. The English Ideal of Citizenship
 - d. The American Situation
 - e. What Shall We Do About It?
-

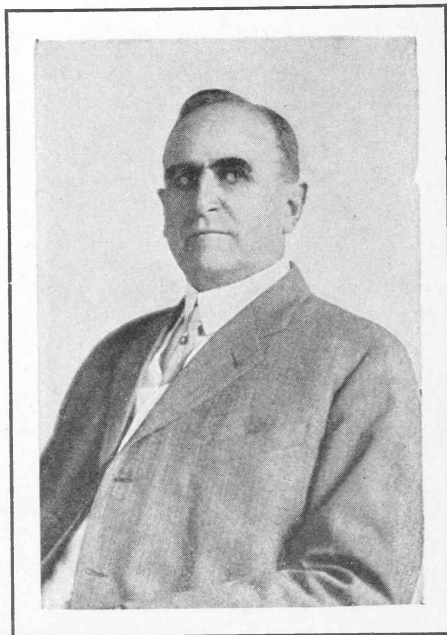


S. C. SCHMUCKER, PH. D.

June 18-July 6

LIST OF LECTURES

- a. The Nature Lovers Spirit
 - b. Needless Fears
 - c. The Real Purpose of Nature Study
 - d. The Place of Nature Study in the Course
 - e. What Next?
-

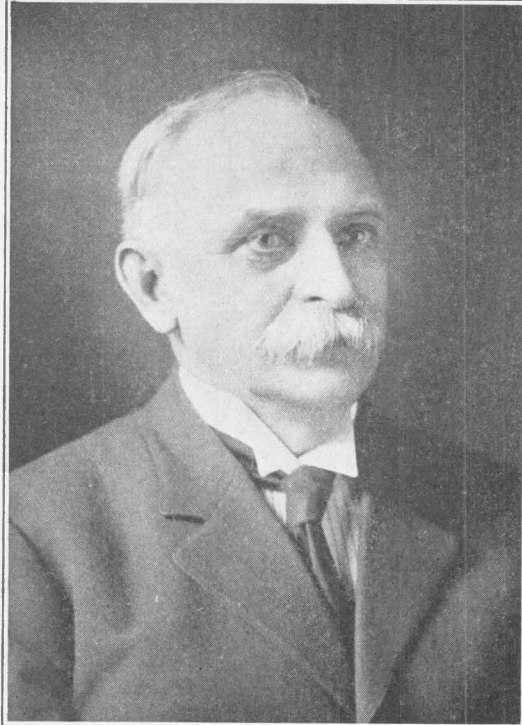


O. T. CORSON, A. M., LL. D.

July 16-20

LIST OF LECTURES

- a. The Largest Factor in the Improvement of Schools
 - b. Cultivation of Personality
 - c. Co-operation—Teachers with Pupils
 - d. Co-operation—Teachers with One Another
 - e. Originality in the Teacher
-

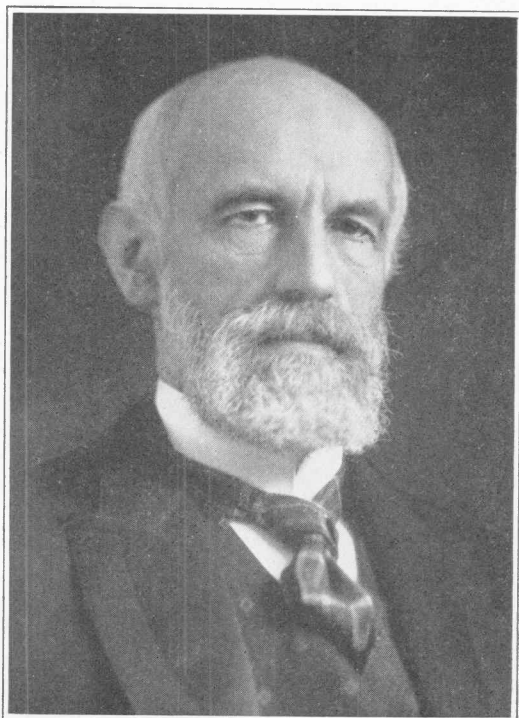


A. E. WINSHIP, LL. D.

July 9-16

LIST OF LECTURES

- a. The Teachers' Budget
- b. Educational Investment and Dividends
- c. Soloists and Socialists
- d. Nature vs. Human Nature
- e. Culture vs. Agriculture



G. STANLEY HALL

PH. D., LL. D.

July 23-27

LIST OF LECTURES

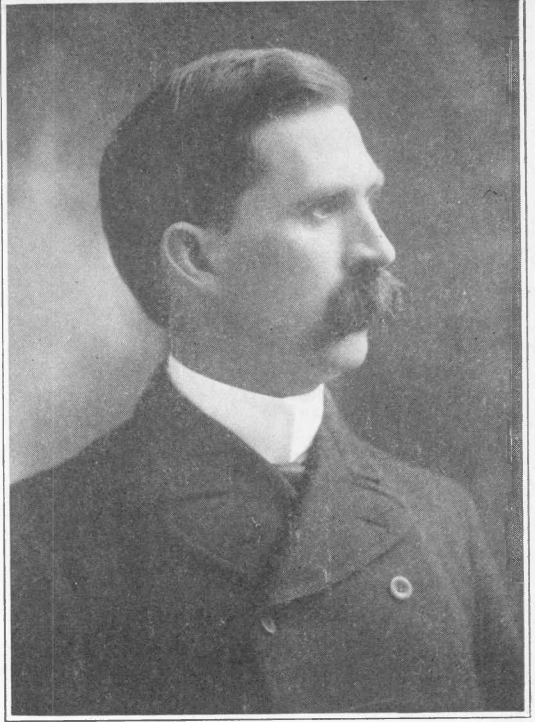
- a. Some Educational Results of this War
- b. Tests, Standards, Scales and New Studies of Character and Human Nature
- c. The Pawlow School and the New Psychology of Goods and Eating
- d. Psychoanalysis and the Unconscious
- e. New Light Shed Upon the Feelings, Emotions and Sentiments

J. F. KEATING
A. M., LL. D.

July 9-16

LIST OF LECTURES

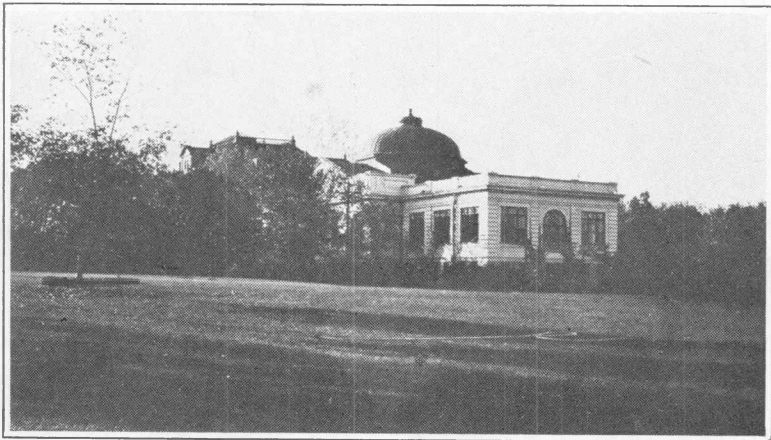
- a. The School and the Community
- b. Sanity in Education
- c. The Public School and Pupil Morality
- d. The Modern School Superintendent
- e. The Teacher and Growth



A TOUCH OF SUMMER ON THE CAMPUS

COLORADO
STATE TEACHERS COLLEGE
GREELEY

*The Great Summer School
of the West*



What Teachers College, Columbia,
is to the East, Colorado Teachers
College is to the West

☞ For full information concerning courses, faculty, lectures, diplomas, graduation, degrees, life certificates, board, fees, recreation, etc., see the regular Summer Term Bulletin—FREE

J. G. CRABBE, President

11

Colorado State Teachers College Bulletin

Series XVI

MARCH 15, 1917

Number 11

Community Cooperation Plan



Published quarterly by State Teachers College, Greeley, Colorado
Entered as second class matter at the postoffice at Greeley, Colo-
rado, under the Act of March 1, 1897

Colorado State Teachers College Bulletin

Series XIV

MARCH 15, 1917

Number 11

COMMUNITY COOPERATION PLAN



Published quarterly by State Teachers College, Greeley, Colorado

Entered as second class matter at the postoffice at Greeley, Colorado, under the Act of March 1, 1897

To look up and not down,
To look forward and not back,
To look out and not in, and
To lend a hand. EDWARD EVERETT HALE



A Campfire Group on a Hike

The Community Cooperation Plan of Colorado State Teachers College

SOCIETY needs leaders. This has been recognized for many centuries. "Who's who in America" indicates that the majority of leaders in American life are college bred men and women. Among these we find a fair proportion of members of the teaching profession. Colorado State Teachers College believes that even a larger proportion of leaders would be found among professional teachers and others if institutions of higher learning gave specific attention to training for service to society.

No doubt many educational institutions already give courses that enable those trained in them to be leaders in their special fields of study and research; e.g., the specialist in business administration, in medicine or in art. The teacher, altho a specialist to as great a degree and in the same sense as a physician or other individual with intensified training, is very frequently discountenanced as a leader in the business and civic life of the community. Those engaged in teaching are considered more clannish than workers in other occupations and are said to be less practical and less interested in citizenship duties than those in other walks of life. It is no doubt true that the teacher is on the average as intelligent in the performance of his duty to society as is the average person engaged in any other vocation.

In order, however, to encourage those who go into the profession of teaching to take greater interest in the life of the community and to give them experience in dealing in a leadership way with groups of children or adults in various situations in life, Colorado State Teachers College has inaugurated a plan whereby students are allowed to do leadership work for organizations in the community for regular college credit.

In March 1915 Dean Thomas C. McCracken submitted to the Council of Deans a plan in which provision was made for allowing students to go out to organizations to assist them in their undertakings. It was proposed to allow students credit for acting as leaders, teachers, or directors of such groups as Boy Scouts, Girls Camp Fire, Boys' Clubs, Girls' Clubs, Sunday School Classes, Junior christian Endeavor Societies, Junior Epworth Leagues, Sodalities, Children's Choirs or Orchestras, and similar organizations. Two credit hours a term were to be given for this work provided it required preparation and at least one meeting a week. No credit was to be granted for less than two consecutive terms. This work, when approved by the Dean of the Training School was to be substituted for a part of the required practice teaching.

The above plan was adopted by the Council of Deans and later very heartily approved by President Snyder. Dean McCracken was appointed Director of Community Cooperation and for the year 1915-16 Miss Helen Ringle was made Fellow in Education with her main work that of helping to supervise the work carried on under the Community Cooperation Plan.

The College was willing to inaugurate the Plan because of its promise of usefulness both to the community and to the prospective teacher. The Plan should benefit the community by bringing to organizations the assistance of well trained College students who are willing to work along lines in which the organization is interested. The Plan should be of vital aid to the student who is preparing to be a teacher. It will give him an opportunity to study children at close range outside of the school room. He will have a richer understanding of school problems and be better able to take a



Public School Group in Story Telling

place of leadership in his community. All this will make a greater success possible for him and will extend his influence for good wherever he enters upon the work of teaching.

The College believes that the Plan is well worth while and hopes for its extension until all students may have had such training before going into actual work in the teaching profession.

STUDENT INTEREST and ACTIVITIES

THE plan seemed to meet a felt need of the students of the college, for when it was outlined to them many at once expressed their desire for training in a community work. Various organizations in the community also expressed their desire for help. During the year 1915-16 seventy one students worked under the Community Cooperation Plan.

They were engaged as follows:

- 43 Sunday school teachers
- 1 Sunday school superintendent
- 1 leader of a boys club
- 8 story tellers in the Greeley Public Schools
- 2 directors of a gymnasium class for the Business Women's League
- 2 Junior Christian Endeavor Leaders
- 4 Camp Fire guardians
- 2 B. Y. P. U. Leaders
- 1 engaged in general Parish service
- 1 director of a children's choir
- 2 directors of children's gymnasium classes
- 2 Junior Epworth League leaders
- 1 director of a brass band
- 1 Assistant Director of a Sunday school Home Department



A Sunday School Class

GROWTH OF THE PLAN

THE success of the Plan is also shown by its growth both in scope and number of workers during this first half of the present school year, 1916-17. It is again under the direction of Dean McCracken with Miss Celia M. Lawler as his assistant. The Plan is the same as that of last year with the exception that all who teach Sunday school classes are required to have had at least one year under the Greeley Plan of Bible study or its equivalent and that all are required to take Education 44, a one hour course designed to give methods of handling groups of children, instruction in the pedagogy of Sunday School teaching, and the principles of community service. Ninety-nine students are now (March 1917) engaged in Community Cooperation work. The activities and number of those engaged are as follows:

- 68 Sunday school teachers
- 1 choir leader
- 8 Story tellers in the Public schools
- 1 teacher of a Mothers Bible class
- 1 teacher of a class in Spanish for the Business Women's League
- 1 director of a Sunday School Orchestra
- 1 teacher of a High School Bible Class
- 1 Boy Scout Master
- 2 teachers of Sunday School construction work
- 4 Camp Fire Guardians
- 1 teacher of a class in German for the Business Women's League
- 3 teachers of classes in Folk Dancing in the Public Schools
- 1 secretary of Sunday School
- 2 teachers of classes in Commercial German and Spanish given for business and professional men
- 1 story teller for sick children
- 2 story tellers for church work
- 1 teacher who visits children's homes and makes suggestions to the cooperation group for further extension of the work.

Various Departments of the College Interested

There has been a definite drawing upon various departments in the College for skilled workers to meet requests from the community for help. With growth in this direction and the cooperation of departments of the College in furnishing specialists for various kinds of leadership the expansion of the Plan is unlimited.

Extension Kindergarten Established

Through the efforts of the Community Cooperation supervisors and Miss Mildred Julian of the Kindergarten Department of the College, a kindergarten for children of the East Side, Greeley, has been established. The people of the German Congregational Church have given the use of a

APPROVAL OF THE COMMUNITY

THE success of the Plan during its first year is shown by the expression of heads of organizations with whom students worked. Rev. John W.

Findley, pastor of the First Presbyterian Church, in a letter to the Department said: "I wish to express to you my appreciation of the assistance given in various departments of the work of the First Presbyterian Church by students working under the Community Cooperation Plan of the College.

"I have noted with especial interest and appreciation the organization and direction of a group of Camp Fire Girls. The guardians have given such direction as none but experienced leaders could have given to this work. Their interest has been constant and the results excellent.

"We have also had valued assistance in various departments of our church Bible School and skilled direction to a group of children in the Junior Christian Endeavor.

"The students engaged in this work have been punctual and in every respect faithful to the responsibilities involved and have adapted themselves admirably to the program of the church."

Other letters in reference to the Plan read as follows:

"In the Sunday School of the First Methodist Episcopal Church the Community Cooperation work has been very successful. At present eleven of our fourteen teachers in the Junior Department are College students. I appreciate these teachers; they are regular in their attendance, both at the Sunday School hour and at teachers council meetings; they are systematic in their work; they learn to know their classes; they may be depended upon.
Signed, BERTHA H. WHITMAN"

"This fall the Business Women's League organized two classes for the study of German and Spanish. The teachers of these classes are students working under the Community Cooperation Plan.

Our girls are very enthusiastic in the work, and the classes are proving to be most interesting and helpful. We feel that this plan which the College has instituted is not only benefiting Greeley but is giving these student teachers a broad experience.

Signed: MRS. MARY RUNNELLS,
President Business Women's League."

"I am in sympathy with the Community Cooperation Plan.

For the last two years, we have had the help of College students in the South ward School. This year there have been three girls telling stories to the second, third and fourth grades, and one who has given folk dancing to the same grades.

The story tellers have cooperated with our teachers and have tried to correlate their stories with the work of the grade, as much as possible.

On the whole, the work has been very satisfactory."

Respectfully yours,

LUNA I. SMITH
Principal of South Ward."

room in their church for the kindergarten. The College is providing the teacher and necessary equipment. There is a keen interest among the people in this opportunity for their children, and the kindergarten promises to be a great success. The opportunity for extension of this sort is thus beginning to develop.

OUTLOOK

The Community Cooperation Plan has so enlarged itself that it is becoming very evident that a Community Center is needed where not only students can conduct classes and clubs but where members of the Faculty of the College can give courses at hours convenient for people other than college students. Already the Women's Civic Federation is having Miss Redifer and Miss Kissick of the Home Economics Department give a course of lectures for the women of the city. The need of a Community Center is thus making itself felt. It is hoped that with the establishment of such a center, presumably at the college, will come the offering of College opportunities to adult and youth alike until there shall be a cooperation of community and College which will make for the best interests of both and for the upbuilding of the best type of citizenship.

See appendix for sample blank used in requesting Department to recommend students for special work under the Plan.



Class of Business Men in Commercial German

Blank used by Campfire guardian to report work to Community Cooperation supervisor.

COMMUNITY COOPERATION PLAN

State Teachers College of Colorado, 1916-17

Report of Address Phone

CAMPFIRE Church Day Time

Date of Meetings										
Number on Roll										
Members Present										
Leader Absent										
Leader Tardy										
Regular Meeting										
Ceremonial										
Honor Beads										
Hike										
Party										
Extra time with teachers										
Extra Meetings										
Visits at Members Homes										
Visitors Present										

Blank used by Story Teller to report work to Community supervisor.

COMMUNITY COOPERATION PLAN

State Teachers College of Colorado, 1916-17

Report of _____ Address _____ Phone _____
STORY TELLER: Building _____ Grade _____ Time _____ Day _____

DATE	Absent	Tardy	STORIES TOLD	EFFECT

Blank used by the Director of Community Cooperation in requesting Departments to recommend students for special work under the Plan.

A request has been received from _____

_____ for a student to work under the Community Co-operation Plan.
The work to be assigned to the student is _____

_____. Such a person should have had work in your classes and really be a specialist to fill the place. I shall greatly appreciate your interest in this matter if you can recommend some one for the work.

Cordially yours,

Director Community Cooperation

Please fill blanks and return to sender:

Person recommended _____

” ” _____

Signed _____

Blank used by Community Cooperation supervisor to get a measurement of the efficiency of the student from the organization for which the student is working

COMMUNITY COOPERATION PLAN

State Teachers College of Colorado, 1916-17

Report of _____ Date _____

COLLEGE STUDENT	General Efficiency	Response of Pupils	Regularity	Preparation

Please fill out at once and mail to _____ Signed _____

For information concerning the work of any department of the college.
Catalogue, Summer School Bulletin, Extension Bulletin, etc. address
J. G. CRABBE, President

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Colorado State Teachers College Bulletin

Series XVI

MARCH 30, 1917

Number 12

THE SUMMER TERM

1917



SIX WEEKS
JUNE 18 TO JULY 27, 1917

Published Quarterly by State Teachers College, Greeley, Colorado
Entered as Second Class Matter at the Postoffice at Greeley,
Colorado, under the Act of March 1, 1879

The Calendar

- June 18, Monday, Registration Day for the Summer Term.
June 19, Tuesday, Recitations begin.
July 4, Wednesday, Independence Day.
July 27, Friday, The Summer Convocation. The conferring of Diplomas and Degrees, and the close of the Summer Term.

Certificates of High School Graduation

Students enrolling for the first time in the College and those whose admission to the College has not yet been formally arranged must show a certificate of graduation from an acceptable high school. This certificate must cover at least fifteen units.

Students not high school graduates will be enrolled in the School of Reviews or in the Ungraded School for Adults. See Page 35.

Announcements and Catalog
of Courses

FOR THE

SUMMER TERM

1917

SIX WEEKS

JUNE 18 TO JULY 27

State Teachers College
GREELEY, COLORADO

IMPORTANT ANNOUNCEMENTS

Advanced Standing

Those who expect to attend the Summer School of Colorado State Teachers College, and who desire advanced standing, should write for application blanks for advanced standing at their earliest convenience, and should return these as soon as possible together with credentials to the College, so that they may be considered before the opening of the summer session. It is exceedingly important that full credentials, relative to all the work for which credit is expected, be forwarded. This saves the student much delay and inconvenience.

Practice Teaching in the Training School

Students who expect to teach in the Training Department, either the Elementary School or High School, during the summer session, are asked to correspond with the College before the opening of the term.

Reduced Railroad Rates

Reduced rates on all roads have been arranged for as follows: Open rate of one and one-third fare for the round trip apply through from the following territory:

A. T. & S. F. Ry.—Points south of Denver to and including Pueblo, Colo., Canon City branch; also from Trinidad, Colo.

Colo. & So. Ry.—All points in Colorado.

Colo. Midland Ry.—All points in Colorado.

C. C. & C. S. Ry.—All points in Colorado.

D. & R. G. Ry.—All points in Colorado.

Midland Terminal Ry.—All points in Colorado.

Union Pacific—All points in Colorado.

DATES OF SALE—June 16, 17 and 18, 1917.

FINAL RETURN LIMIT—July 28, 1917.

THE FACULTY

JOHN GRANT CRABBE, A.B., A.M., Pd.M., Pd.D., LL.D.....President

FRANCES LORENZO ABBOTT, B.S., A.M., Professor of Physical Science.

SAMUEL E. ABBOTT, M.D., Director of Physical Education.

LEVERETT ALLEN ADAMS, A.B., A.M., Ph.D., Professor of Biology.

LELA AULTMAN, Pd.B., Pd.M., Training Teacher, First Grade.

GEORGE A. BARKER, M.S., Professor of Geology, Physiography, and Geography.

JOHN R. BELL, Ph.B., A.M., D.Litt., Principal of High School.
Professor of Secondary Education.

RAE E. BLANCHARD, A.B., High School Preceptress. Instructor in Literature and English.

CHARLES JOSEPH BLOUT, A.B., A.M., Instructor in Chemistry, High School.

ALBERT FRANK CARTER, A.B., M.S., Librarian. Professor of Library Science.

MABEL COCHRAN, Teacher in Demonstration School.

MARY E. COCHRAN, Assistant Librarian.

JEAN CROSBY, A.B., Instructor in History, High School.

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

GRACE CUSHMAN, Ph.B., Assistant Librarian. Instructor in Library Science.

EMMA C. DUMKE, A.B., Instructor in High School Reading and Modern Foreign Languages.

EDWIN STANTON DUPONCET, A.B., Ph.D., Professor of Modern Foreign Languages.

GEORGE WILLIAM FINLEY, B.S., Professor of Mathematics.

AMY RACHEL FOOTE, A.B., Training Teacher, Sixth Grade.

CHARLES M. FOULK, Pd.B., Assistant in Manual Training.

GEORGE EARL FREELAND, A.B., A.M., Principal of the Elementary School.

HELEN GILPIN-BROWN, A.B., Dean of Women.

JENNY LIND GREEN, A.B., Training Teacher, Seventh Grade.

SAMUEL MILO HADDEN, Pd.B., A.B., A.M., Dean of Practical Arts.
Professor of Industrial Education.

JAMES HARVEY HAYS, A.B., A.M., Dean of the College, and Professor of Latin and Mythology.

JACOB DANIEL HEILMAN, A.B., Ph.D., Professor of Psychology and Child Study.

LUCILLE G. HILDEBRAND, A.B., B.E., Instructor in Latin and Mathematics, High School.

AGNES HOLMES, Pd.M., Assistant in Industrial Arts.

WALTER F. ISAACS, B.S., Professor of Fine and Applied Arts.

JOHN C. JOHNSON, A.B., M.S., Assistant Professor of Biology.

_____, Training Teacher, Kindergarten.

JOHN CLARK KENDEL, A.B., Director and Professor of Public School Music.

ELIZABETH HAYS KENDEL, Pd.B., Pd.M., A.B., Training Teacher, Fifth Grade.

MARGARET JOY KEYES, A.B., Assistant in Physical Education and Dramatic Interpretation.

MERLE KISSICK, A.B., Ph.B., Director and Professor of Household Arts.

J. HORACE KRAFT, A.B., B.S., Director and Professor of Agriculture.

CELIA LAWLER, Pd.M., A.B., Instructor in Education and Sociology.

NELLIE BELDEN LAYTON, Pd.M., Assistant in Music, Piano.

BERTHA MARKLEY, Pd.B., Pd.M., Training Teacher, Eighth Grade.

THOMAS C. McCracken, A.B., A.M., Dean of the Graduate College. Professor of the Science and Art of Education.

JOHN T. McCUNIFF, Pd.M., A.B., Assistant Professor of Industrial Arts. Printing and Mechanical Drawing.

LUCY McLANE, A.B., Instructor in English, High School.

GURDON RANSOM MILLER, Ph.B., A.M., Ph.D., Dean of the Senior College. Professor of Sociology and Economics.

WILLIAM BARNARD MOONEY, Pd.B., A.B., A.M., Director of Extension Service. Professor of School Administration.

WILLIAM B. PAGE, M.D., Assistant Librarian.

HELEN PAYNE, B.S., Director and Professor, Home Economics.

ADDISON LEROY PHILLIPS, A.B., Professor of English.

EDGAR DUNNINGTON RANDOLPH, A.B., A.M., Professor of Sociology.

FLORENCE REDIFER, A.B., Instructor in Household Science.

FRIEDA B. ROHR, Pd.M., A.B., Training Teacher, Fifth Grade.

LILA M. ROSE, Assistant in Music.

GLADYS IRENE SCHARFENSTEIN, Ph.B., Instructor in Household Science and Arts.

MAX SHENCK, Book Binding.

JOSEPH HENRY SHRIBER, A.B., Director of County School Administration.

FRANK W. SHULTIS, A.B., A.M., Professor of Business Education.

BELLA BRUCE SIBLEY, Ph.B., Pd.M., A.B., Training Teacher, Second Grade.

EDWIN B. SMITH, B.S., A.M., Professor of History and Political Science.

FRANCES TOBEY, B.S., A.B., Dean of the Junior College. Professor of Reading and Interpretation.

_____, Training Teacher, Third Grade.

CLARA HARRISON TOWN, B.S., Ph.D., Assistant Professor of Psychology and Child Study.

JENNIE TRESSEL, Assistant in Rural Education.

JEHU BENTON WHITE, B.S., Professor of Commercial Work.

GRACE WILSON, Pd.B., A.B., Assistant to the Dean of Women.

FRANK LEE WRIGHT, A.B., A.M., Professor of Education.

Special Faculty, Summer 1917

O. T. CORSON, A.M., LL.D., Editor Ohio Education Monthly.

HENRY S. CURTIS, Ph.D., Former Secretary of the Playground Association of America and Inspector of the Playgrounds of the District of Columbia.

G. STANLEY HALL, Ph.D., LL.D., President of Clark University.

M. V. O'SHEA, B.L., Professor of Education, University of Wisconsin.

JAMES E. RUSSELL, Ph.D., LL.D., Dean of Teachers College, Columbia University.

S. C. SCHMUCKER, Ph.D., State Normal School, West Chester, Pa.

A. E. WINSHIP, LL.D., Journal of Education, Boston.

H. M. BARRETT, Principal East Side High School, Denver, Colo.

D. K. DUNTON, Principal Pueblo High School, Pueblo, Colo.

KATHERINE A. FLOYD, Denver, Colo.

W. A. FRANKS, Superintendent City Schools, Fort Morgan, Colo.

J. F. KEATING, Superintendent City Schools, Pueblo, Colo.

GEORGE R. MOMYER, Superintendent of City Schools, Lamar, Colo.

J. R. MORGAN, Superintendent City Schools, Trinidad, Colo.

TRUMAN G. REED, A.B.

MARK K. SWEANY, Department of History, Colorado Springs, Colo.

D. E. WEIDMANN, Superintendent City Schools, Montrose, Colo.

J. P. CULBERTSON, Secretary to the President.

A. W. YAICH, Record Clerk.

RALPH S. BAIRD, Stenographer.

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RETROSPECT AND PROSPECT

The Summer Term of State Teachers College has been a success from the beginning. In 1905 a small number of the faculty were asked to work thru a six-weeks' summer term. Two hundred students or so attended. From that time until the present the number of instructors has been increased and the number of students attending has doubled and doubled until now more than a thousand regularly come to the school for the summer session.

Attendance

1910.....	443	1914.....	897
1911.....	612	1915.....	1,035
1912.....	824	1916.....	1,076
1913.....	864	1917.....	?

At present the regular faculty stays for the summer school, seventy in all, and ten or twelve of the leading superintendents and principals of the State are called in to assist in the courses in which they are expert. In addition to these the College employs several of the greatest men of the country to give courses of lectures, during the term.

ATTRACTIVE FEATURES

The New Rocky Mountain National Park

For forty years "Estes Park," at the base of Long's Peak, has been widely known thruout the nation as one of the grandest and most beautiful mountain resorts in North America. Thousands of tourists have visited it annually, and it has come to be known among traveled people as superior to Yellowstone in all except the geysers. But the park has not been widely advertised; no direct line of railroad goes to the park; the state has been slow to recognize its scenery as its most profitable commercial asset, and the nation has hardly been aware that there is anything west of the Alleghany mountains worth seeing except California. Notwithstanding the local and national indifference thousands have learned to come annually to the "Rocky Mountain Wonderland," to live for a month or more under the blue sky and in the clear air of the high mountains. A series of great hotels and of less pretentious, but comfortable, rustic inns has grown up in the Park.

Finally, the grandeur of this ideal mountain section was made known to the English-speaking world thru the writings of the mountain guide and naturalist, Enos Mills, who turned lecturer and essayist just to publish his enthusiasm for this spot. The result of the publicity which he has given to the place thru his books, magazine articles and lectures, is that the United States has at last made this wonderful stretch of snowy mountains "The Rocky Mountain National Park." Every student from the East or South or the plains country should arrange to spend at least a week-end from Friday afternoon to Monday morning in the Park. Commercial automobiles run to and from the Park daily, charging a reasonable fare for small parties.

One goes from Greeley across the plains and low hills to Loveland, 22 miles. It is eight miles from Loveland to the opening of the Loveland Canon, where the Big Thompson River breaks thru the first range of hills. The walls of this canon are clean cut, nearly 2,000 feet high and beautifully colored. Altho almost unknown, this canon is as imposing as the much-advertised "Royal Gorge." From this point the road follows alongside the Thompson thru groves of pine and under the shadows of wonderful geologic formations for twenty-five miles. Suddenly your car emerges from the confines of the rock walls and glides into the beautiful meadows of the Park—an ideal scene of quiet and peace. But "lift your eyes unto the hills!"

They take your breath for a moment, for there they stand all about you, the eternal snow-covered hills, 14,000 feet high—Long's Peak, Meeker, Flat Top, Ypsilon, and a dozen others. It's a big place threaded by sixty miles or more of perfect roads, and with the meadows running up to the hills. Pines, spruces, rocks, bewildering grandeur, are everywhere. Cottages for summer dwellers are tucked in everywhere. Every sort of dwelling, from a tent sheet anchored to the side of an automobile to mansions and elegant hotels are to be seen. And up at Long's Peak Inn you may be fortunate enough to catch a glimpse of, or get a word with, the young man who is the John Burroughs or John Muir of these mountains, the native naturalist, Enos Mills. and elegant hotels, are to be seen, and up at Long's Peak Inn

The College will co-operate with summer students in arranging for inexpensive trips over week ends in this Wonderland. Students can find inexpensive board and lodging in the public inns, or arrangements can be made to have a cabin and do their own cooking camp style.

Other Excursions

From Greeley there is an excellent opportunity on Saturdays and Sundays to take in a number of very interesting places, such as Estes Park, the new Rocky Mountain National Park, the greatest piece of natural scenery possibly in the world; the canons of the Poudre River; Eldora, the splendid Summer Resort; the Moffat Road experiences; the great heronries on the Poudre and the Platte; the great irrigating center of the West; fishing within two hours' travel; and above all, the great Rocky Mountain Range—250 miles of snowy range in full view from the College Campus. Once during the term a railway excursion at popular rates is arranged to take all who wish to go, into the heart of the high mountains. One excursion took the students up the "Moffat Road" to the summit of the Continental Divide, Corona, 10,600 feet. Another was over the "Switzerland Trail" to Eldora. Still another was to the summit of Pike's Peak. The students in each summer session choose the destination for their own excursion. Small parties make shorter trips to points of interest, for study or pleasure, nearer Greeley. While there are many opportunities for recreation, the School is not offering its Summer Term as a holiday outing. The work is serious and effective, the entertainments and excursions being arranged at the end of the school week.

The Climate

Colorado sunshine is a proverb. The altitude of Greeley is one mile. The combination of a moderate elevation and sunny days produces an almost ideal condition for school work in summer. The middle of the day is usually warm, but in the

shade the temperature is never unpleasant. The cool evenings are all that the student could desire. A humid, hot night is unknown.

The Opportunity

The holding of this summer term at Teachers College offers an excellent opportunity to those who have to teach. It enables one who teaches a full year to attend the College during the summer term, get credit for work done, and when sufficient credits are secured, to graduate from the school. The diploma granted is a license to teach in the public schools of Colorado for life. Work may also be done toward securing the degrees, Bachelor of Arts in Education, and Master of Arts in Education. From five to twenty hours toward graduation may be earned in the summer term.

Location

Teachers College is located at Greeley, in Weld County, on the Union Pacific, the Colorado and Southern, and the Denver, Laramie and Northwestern Railways, fifty-two miles north of Denver. The 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 10,000 inhabitants.

Equipment

The institution is well equipped in the way of laboratories, libraries, gymnasiums, playgrounds, an athletic field, art collection, museums, and a school garden. The library has 40,000 volumes bearing on the work of Teachers College. There is ample opportunity to work out subjects requiring library research. There is a handicraft department connected with the library wherein a student may learn how to conduct a library. The gymnasium is well equipped with modern apparatus. Games of all sorts suitable for schools are taught.

Buildings

The buildings which are completed at the present time consist of the administration building, the library building, the residence of the President, the training school and the industrial arts building. The main, or administration building, is 240 feet long and 80 feet wide. It has in it the executive offices, classrooms, and class museums. Its halls are wide and commodious and are occupied by statuary and other works of art which make them very pleasing.

The library is a beautiful building. The first floor is entirely occupied by the library, consisting of more than forty thousand volumes. The furniture in the library is of light oak and harmonizes with the room in a most pleasing manner. The basement is occupied by committee rooms, text-book department, taxidermy shop, wild animal museum, ceramic museum, and the departments of geography and agriculture.

The Training School is a commodious building of red pressed brick similar in style to the administration building. In its construction no pains or expense have been spared to make it sanitary, fireproof, and in every possible way an ideal building for a complete graded school from the kindergarten to the high school inclusive.

The Simon Guggenheim Hall of Industrial Arts is a beautiful structure in the classic style of architecture. It is constructed of gray pressed brick. It accommodates the departments of Manual Training and Art, including every branch of hand work and art training applicable to the highest type of public school of the present and immediate future. This building is a gift to the College from ex-Senator Simon Guggenheim.

The President's House is on the campus among the trees. In this beautiful home are held many social gatherings for students during the school year.

Scope of the Summer Term Work

The work done during the summer term is: The regular 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 course, get the diploma, which is a license to teach in the State for life, and receive the professional degrees. The work is arranged to enable graduates of State Teachers College, and others prepared to do so, to take up graduate work, whereby they may, during the summer terms, earn the higher degrees. The work is so arranged that persons who wish to pursue special lines of study may have the opportunity to do so. An opportunity is given to high school teachers to study from the pedagogical standpoint the subjects they are to teach.

An opportunity is given to principals and superintendents to study the educational problems which confront them in their daily work. An opportunity is given the rural teacher to study the problems peculiar to these schools. An opportunity is given to regular College students to make up their work when, thru sickness or otherwise, they have not been able to complete it satisfactorily during the regular year.

History of the College

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.

The Legislature of 1910-11 passed a law which became effective August 4, 1911, giving the name "The State Teachers College of Colorado" to the School. Hereafter it will be known by that name.

Greeley

Greeley is a city of homes. It is the center of the great agricultural district of Colorado, and is fast becoming the commercial center of Northern Colorado.

This is an ideal location for a summer school. The altitude of the city is near 5,000 feet, hence the nights are decidedly cool and the days are seldom uncomfortably warm.

The water supply of Greeley is obtained from the canon of the Cache la Poudre, forty miles from Greeley, in the mountains. From the canon it is taken into the settling basin, where the rougher foreign material is eliminated; from the settling basin it is taken into the filter basin, where it is freed from all foreign matter; from the filter basin it is taken to the distributing basin, from which it is distributed over the town. This water system cost the City of Greeley about \$400,000.

The Campus

Surrounding the buildings is a beautiful campus of forty acres. It is covered with trees and grass, and dotted here and there with shrubs and flowers, which give it the appearance of a natural forest. During the summer, birds, rabbits, squirrels and other small animals make the campus their home, thus increasing its value as a place of rest, recreation, or study.

During the summer and fall terms the faculty gives its evening reception to the students on the campus. At this time it presents a most pleasing appearance, being lighted, as it then is, by electric lights and Japanese lanterns.

In the rear of the buildings is a large playground, which covers several acres. In the southwestern portion of this playground is a general athletic field, a complete view of which is

secured from a grandstand, which will accommodate more than a thousand spectators. On the portion of the grounds adjacent to the building there is a complete outdoor gymnasium. To the south of the buildings are located the tennis courts.

This is one of the most complete playgrounds west of the Mississippi, and when the present plans are fully realized it will be one of the best equipped and arranged grounds in the United States.

During the summer, courses on the organization of playgrounds will be given, and demonstrations of how to carry out these courses in the public schools will be made on the campus.

Community Co-operation Plan

In March, 1915, the Council of Deans approved a plan in which provision was made for allowing students to go out to various organizations in the community to assist them in their undertakings. This plan was known as the Community Co-operation Plan. It was agreed to allow students regular College credit for acting as teachers, leaders, or directors of such groups as Boy Scouts, Girls' Camp Fire, Boys' Clubs, Girls' Clubs, Sunday School Classes, Junior Christian Endeavor Societies, Junior Epworth Leagues, Sodalities, Children's Choir or Orchestra, Modern Language Classes, Civic Training Classes for the Adult Alien, Story Telling Groups, and similar organizations.

The College was willing to inaugurate the plan because of its promise of usefulness both to the community and to the prospective teacher. The plan will benefit the community by bringing to organizations the assistance of well-trained College students. The plan will be of vital aid to the student who is preparing to be a teacher. It will give him an opportunity to study children at close range outside of the school room. He will have a richer understanding of social problems and be better able to take a place of leadership in his community. All this will make a greater success possible for him and will extend his influence for good wherever he enters upon the work of teaching.

The College believes that the plan is worth while and hopes for its extension until all students may have had such training before going into actual work in the teaching profession.

Model classes in Sunday School teaching and modern language teaching will be open to observation during the Summer Term in connection with the course, Education 44a. The work of these classes will indicate the type of teaching which is done by College students for credit under the Community Co-operation Plan.

Girls' Camp Fire Movement

Something new, something big, something destined to grow! The Camp Fire Girls' Movement is new, having been given definitely to the public, March 17, 1912. It is already an organ-

ization large in numbers, having at the last Annual Report 5,848 Camp Fires in good standing with a total membership of 85,988, an increase of 20,022 in one year. Emphasis is placed on the home, the out-of-doors, and the spirit of service. That the movement is destined to grow, is shown by the recognition given it, not only in summer camps, but also in universities and colleges where the Camp Fire Girls' work is beginning to be introduced into the curriculum. During the summer of 1916 the University of California provided such a course with marked success, and now Colorado State Teachers College is offering a similar opportunity.

The opportunity which the College will give this summer to those who wish to become Camp Fire guardians is an unusual one. For particulars see Department of Education, Course Education 44b.

School Garden

One of the pleasing features of the spring, summer and fall sessions of the school is the school garden. This garden occupies several acres of ground and is divided into four units—the conservatory, the formal garden, the vegetable garden, and the nursery. From the conservatory the student passes in to the large formal garden, where all kinds of flowers, old and new, abound. Here may be found the first snow-drop of early March and the last aster of late October. From the formal garden we pass to the school garden proper. Here in garden and nursery the student may dig and plant, sow and reap, the while gathering that knowledge, that handicraft, that is essential in the teaching of a most fascinating subject of the up-to-date school—gardening.

The Conservatory

The greenhouse is one of the best equipped of its kind in the United States. After a hard day's work it is a rest and an inspiration to visit this beautiful conservatory. Here hundreds of varieties of flowers are kept blooming all winter, and the early spring flowers and vegetables are started for the spring planting.

Fees and Expenses

Board and Room. Table board costs from \$2.50 to \$4.00 per week. Room rent costs \$8.00 to \$10.00 per month. Rooms equipped for light housekeeping from \$6.00 to \$10.00 per month.

Fees. Each student pays a fee of \$25.00 for the six weeks.

Tuition. Non-residents of Colorado pay \$5.00 in addition to fees.

Library Deposit. A deposit of \$2.00 is charged for library privileges. This deposit is returned at the time the student withdraws from school.

Summary. Total Expenses for the six weeks:

Board	\$21.00 to \$24.00
Room Rent	12.00 to 15.00
Fees	25.00 to 25.00
Total	<u>\$58.00 to \$64.00</u>

Admission to General Lectures

Students of the College are admitted to the General Lectures by showing their President's Admission card; those outside of the College who desire to attend the Lectures may do so either by purchasing single admission tickets at 25 cents each or by securing a course ticket for \$2.50 from the Secretary of the Board of Trustees, Administration Building.

General and Special Lectures

The Summer School promises to be the most interesting and valuable session the institution has ever given the teachers of the West. This is claiming a great deal for it in view of the fact that previous sessions have been universally commended for their superior value to teachers. The general lectures, which have been a feature of the summer sessions since 1910, are going to be universally attractive this year. These lectures are to be given by men whose educational visions are large and whose messages will come from hearts filled with a firm belief that education has a great mission in this modern world.

Professor M. V. O'Shea of the University of Wisconsin returns to us this summer. He has lectured at our summer sessions several times, and we are looking forward to the good things he will give. He is practical and forceful. Few men have exerted greater influence on American education.

List of Lectures

- (a) Every Day Traits of Human Nature.
- (b) The Trend of the Teens.
- (c) The Child as Heir of the Past.
- (d) How Words Get Meaning.
- (e) Seeing and Believing.
- (f) Dynamic Leading.
- (g) Nervous Friction in Modern Life: Causes and Remedies.
- (h) What Development Means.
- (i) Measurement of Intelligence.
- (j) Modern Mysteries.

Five of these lectures will be given at the general lecture period and five in an afternoon.

Conference Class: Social Development and Education.

Dean James E. Russell of Teachers College, Columbia University, was at one time a member of the faculty of the University of Colorado. It was no easy matter to persuade him to come to us for a week. His residence and study abroad will qualify him to speak to us on the subjects he has chosen. The teacher who hears Dean Russell is going to be better qualified to do the work society expects of him.

List of Lectures

- (a) Relation of Individual to the State.
- (b) The German Method of Training for Citizenship.
- (c) The English Ideal of Citizenship.
- (d) The American Situation.
- (e) What Shall We Do About It?

Conference Class: Discussions on the above lectures.

Samuel C. Schmucker will be with us three weeks. He is the thoro-going scientist who makes it possible for the unscientific listener not only to understand science but to enjoy it. If he can't make you understand by the use of words how a caterpillar crawls along a leaf eating as it goes, he will make you visualize the creature, by himself imitating it. For him truth does not clash with truth. The truths of science are in accord with other universal truths. All this he has the power of making clear to a general audience.

List of Lectures

- (a) The Nature Lovers' Spirit.
- (b) Needless Fears.
- (c) The Real Purpose of Nature Study.
- (d) The Place of Nature Study in the Course.
- (e) What Next?

Conference Class: Discussions on the above lectures.

Dr. E. A. Winship, Editor of the New England Journal of Education, is probably the most widely-known educator in this country. He knows the educational problems of America and the specific problems of a large number of local school communities. He expresses his views sympathetically, but fearlessly and vigorously. As a lecturer and as the Editor of the Journal of Education he has exerted great influence on the educational policies of our nation.

List of Lectures

- (a) The Teachers' Budget.
- (b) Educational Investment and Dividends.
- (c) Soloists and Socialists.
- (d) Nature vs. Human Nature.
- (e) Culture vs. Agriculture.

Conference Class:

- (a) Making Boys Manly.
- (b) Making Girls Womanly.

Dr. O. T. Corson is an Ohio educator. He began his work as a teacher in the rural schools of that state and advanced rapidly until he became commissioner of Public Schools of that state in 1892. He served his state in this capacity six years. In 1898 he became the editor of the Ohio Educational Monthly, the oldest and one of the most influential educational journals in America. He has done great work in the cause of education as a teacher, as an administrator, and as an editor. Those who were fortunate enough to hear him at a general session of the Department of Superintendence at Kansas City this year will testify to his greatness of soul, and to his keenness of insight into modern educational ideals and practices.

List of Lectures

- (a) The Largest Factor in the Improvement of Schools.
- (b) Cultivation of Personality.
- (c) Co-operation—Teachers with Pupils.
- (d) Co-operation—Teachers with One Another.
- (e) Originality in the Teacher.

Conference Class:

- (a) The First Day in School.
- (b) The Language of Pupils.
- (c) School Discipline.
- (d) and (e) Hindrances to Study.

President G. Stanley Hall of Clark University, the father of experimental psychology in America, and a leader in the modern phases of that subject in the world today, is to be in our Summer School again. A glance at his subjects show that he is going to deal with matters in the field of psychology and education that are of primal significance to the modern teacher and student.

List of Lectures

- (a) Some Educational Results of this War.
- (b) Tests, Standards, Scales and New Studies of Character and Human Nature.
- (c) The Pawlow School and the New Psychology of Goods and Eating.
- (d) Psychoanalysis and the Unconscious.
- (e) New Light Shed Upon the Feelings, Emotions and Sentiments.

Conference Class:

- (a) Moral and Religious Education.
- (b) Reading.
- (c) Nature Study.
- (d) Industrial Education.
- (e) Education of the Heart.

J. F. Keating, Superintendent of Schools, Pueblo, Colorado, is well known to all Colorado teachers and to a large number of teachers in surrounding states. He has been the guide and inspiration of many young men and women who have been fortunate enough to come under his instruction. He will bring a message to us which has grown out of a rich experience with western conditions. No better man could have been selected to present western ideas and ideals in education, because he helped in no small way to build them.

List of Lectures

- (a) The School and the Community.
- (b) Sanity in Education.
- (c) The Public School and Pupil Morality.
- (d) The Modern School Superintendent.
- (e) The Teacher and Growth.

Henry S. Curtis, former Secretary of the Playground Association of America and Supervisor of the Playgrounds of the District of Columbia, is the foremost exponent of Play and Recreation in this country. Besides being the author of several well-known books—Play and Recreation in the Open Country, Education Thru Play, and The Practical Conduct of Play—he is a forceful speaker with a real message. Teachers College is fortunate in securing Mr. Curtis for a week.

List of Lectures

- (a) Education Thru Play.
- (b) The Message of the Play Movement to the Teacher.
- (c) The Play Movement and Its Significance.
- (d) Play and Recreation in the Open Country.
- (e) Recreation for Teachers.
- (f) The School System of Gary.
- (g) The Kindergarten and Montessori.
- (h) Children's Gardens.
- (i) The Hygiene of the School.
- (j) The Community Center.

The Series of lectures given by these well-known men in Education is required of all students—Credit five hours.

The Series covers:

1. The Morning Lecture, daily, at 9:20, with corresponding conference-class daily at 2:50. In lieu of the conference-class the student may submit a written outline of the morning lecture.
2. Mr. Keating's evening lecture, daily, for one week, at 7 o'clock—no corresponding conference-class.
3. Mr. Curtis' evening lecture, daily, for one week, at 7 o'clock—no corresponding conference-class.

Additional lectures by Mr. Keating and Mr. Curtis will be noted on the program at 4:00 p. m. daily. The program will also indicate two regular class courses conducted by Dr. Schmucker, as follows:

- Course 1. Eugenics for Teachers, daily for three weeks— $2\frac{1}{2}$ hours credit.
- Course 2. Self-Study, daily for three weeks— $2\frac{1}{2}$ hours credit.

A student who takes these two courses under Dr. Schmucker will receive five hours credit. (See outlines in Courses of Study.)

Organization of the College

State Teachers College is organized into three divisions—The Junior College, The Senior College, and The Graduate College. Each of these has its own regulations, similar in essentials, but different in some details, for admission, advanced standing, major subjects, diplomas, degrees, graduation, etc., etc. These matters of administration are presented in different sections of this book, each College having its own place.

Only details of administration are to be found in these pages. Each department schedules all the courses it has to offer in one place. The department indicates what courses are intended primarily for Junior College, what for Senior College, and what for Graduate College. This arrangement is made to indicate the grade of work to be expected in a given course and is not intended to exclude any student from any course which he wishes to take if he has had previous training to fit himself to do that kind or grade of work.

THE JUNIOR COLLEGE

FRANCES TOBEY, B.S., A.B., Dean

The scope of the Junior College is the work of the first two years of the college proper. The student completing this course, having earned credit for 120 term-hours, is granted a diploma, which is a life certificate to teach in the public schools of Colorado.

Admission to the Junior College

Anyone may take courses in Non-Residence, but to become a resident student and a candidate for a degree and diploma, the regulations given below must be complied with.

1. Students must be of good moral character and free from contagious disease.

2. Graduates of acceptable high schools of this and other states are admitted without examination upon presenting to the Dean of the College their diplomas or certificates of graduation. The minimum of work acceptable for entrance is 30 semester hours (15 units).

3. Students of mature years, who are not high school graduates, may enter and take work in the ungraded school for adults and later be admitted to the college when they have completed the equivalent of 15 high school units.

Requirements for Graduation

A student must be in residence at least three terms before being granted a certificate of graduation from the Junior College. One hundred and twenty term-hours are required. This work is elective, except for the following subjects required of all Junior College students:

Psychology 1	
Psychology 2, 3a, 3b, or 4 (one of these)	
Biology 2	
Sociology 3	
Education 11	
Education 8, 12a, 12b, 24, 25, 33 (one of these).....	
Training School 1	
Teaching	
English 1	

Physical Education, two-thirds of the terms in which the student is in residence.

All of these required subjects are usually taken in the first year, except Education 11, the second course in Psychology, Teaching, and a part of the Physical Education courses.

Majors

No major is granted in the Junior College. Those who wish to earn a major later in the Senior College may begin work in the special subject in the Junior College. A student may obtain permission to complete as many as thirty hours in one subject in the Junior College.

THE SENIOR COLLEGE

GURDON RANSOM MILLER, A.M., Ph.D., Dean

The Senior College includes the third and fourth years of the work of The State Teachers College.

The Senior College offers to all students and professional teachers who have done not less than two years of study beyond the high school an opportunity for higher professional and scholastic work.

It furnishes special advanced preparation for normal school critics and teachers.

It offers superior opportunities for supervisors of all elementary school work.

Supervisors of special subjects, music, art, manual training, domestic science and art, agriculture and physical education, will find courses adequate to their needs in the Senior College.

High school teachers will find here superior professional and scholastic courses adapted to their professional aims.

Principals and superintendents will find in the program of the Senior College an unusual number of courses, specially intended for mature students of wide professional interests.

Our Teachers' Bureau says: "We need more A. B. graduates as candidates for normal school positions, and for first-rate places in the public school service."

Advanced Standing

Students who wish to apply for advanced standing should ask for the Blank Application Form for Advanced Standing. Upon presenting this, properly filled out and accompanied by the credentials called for, the College will grant whatever advanced standing seems to be merited. Credits from other normal schools or teachers' colleges of equal rank with The State Teachers College of Colorado are accepted, hour for hour. Credits from reputable colleges, and universities, are accepted at their original value.

Minimum Terms in Residence

No diploma of the College is granted for less than three terms of work in residence.

No person who has already received one diploma from this institution will be permitted to receive another diploma until such person shall have earned the full number of credits required for such diploma, and completed not less than one full additional term of resident work in this institution.

Admission to the Senior College

Graduates from the Junior College of The State Teachers College of Colorado are admitted to the Senior College.

Graduates of other colleges, who have earned one of the regular academic degrees, are admitted to the Senior or Graduate College without examination, and may receive advanced standing for a large part of the work done in the third and fourth years of the College.

Requirements for Graduation

One hundred and twenty term-hours in addition to those required for graduation from the Junior College are required for graduation and a degree from the Senior College. With the exception of the Teaching only 15 term-hours of academic work are required. This work must be elected from the departments of Biology, Sociology, Psychology, and Education. All Senior College programs must be approved by the Dean of the Senior College. Not less than five hours of the fifteen hours indicated above must be taken in the third year. A certificate which is a life license to teach in Colorado, and which is accepted by most of the states of the West, is granted upon the completion of the third year, if applied for by the student.

Four terms of teaching are usually required in addition to that done in the Junior College—two terms in the third year and two in the fourth. No student will be granted a diploma of the College without teaching at least three terms.

The Superintendent of the Training Department may, at his discretion, accept teaching done in other schools to satisfy the requirements in practice teaching.

Diplomas and Degrees

At the end of the fourth year of study, the student having credit for 120 term-hours in the Senior College, will be granted a diploma, which is a life certificate to teach in the public schools of Colorado. The degree of Bachelor of Arts (A. B.) in Education, will be conferred upon the graduate.

Majors

Sixty term-hours in one department is the minimum requirement for a major in the Senior College. The major notation must be approved by the head of the department in which it is sought before it can be entered on the student's diploma.

The head of a department may accept (but not require) work from an allied department as a part of required major credits.

THE GRADUATE COLLEGE

THOMAS C. MCCrackEN, A.M., Dean

The Graduate College offers advanced instruction leading to the degree of Master of Arts in Education. The principal aim of graduate study is the development of power of independent work and the promotion of the spirit of research. **Every department of the College is willing to offer not only the courses regularly scheduled but others of research and advanced nature which the candidate wishes to pursue.** Each candidate for a degree is expected to have a wide knowledge of his subject and of related fields of work.

Persons holding the degree of Bachelor of Arts, Letters, Philosophy, or Science from a reputable institution authorized by law to confer these degrees, or holding any other degree or certificate which can be accepted as an equivalent, may be admitted as graduate students in The Colorado State Teachers College upon presenting official credentials.

The prospective student shall obtain the blank "Application for Admission" and send it to the Committee on Advanced Standing for their approval before the opening of the term. Original credentials must be submitted with the application for admission. Such blanks may be secured by addressing State Teachers College, Greeley, Colorado.

GENERAL PLAN OF WORK FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION

General Requirements

1. **Residence.** One year of work in residence at the College in advance of the requirements for the A. B. degree. This is three terms of work beyond a four-year college course. Students may satisfy the residence requirement by attendance for three summer terms under the conditions specified below.

2. **Units of Work.** A year's work shall be interpreted as sixty (60) term-hours. Forty-eight hours credit will be given for graduate courses pursued and twelve (12) hours credit for the Master's thesis which is required. Twenty (20) hours credit per term during the regular school year is the maximum, inclusive of the research involved in the thesis requirement.

3. Special Interpretation of Graduate Work in Summer Term. Graduate students shall receive for each graduate course pursued in the Summer Term a credit of three (3) hours, twelve (12) hours being the maximum credit per summer term, inclusive of research work in connection with the thesis. In the three summer terms of residence work the student may earn thirty-six (36) hours credit; the remaining twenty-four (24) hours may be earned in non-residence in the intervals between Summer Terms. This organization of the work for students who cannot attend for one year of three consecutive terms is regarded as preferable to the distribution of the work thru four or five summer terms. If the work is not completed within three years, new conditions may be imposed upon the candidates or the old conditions may be modified. In no case, however, shall fewer than 36 hours of residence work satisfy the requirements for resident study.

4. The Nature of Graduate Work.

(1) **It shall be in professional lines of work.** In keeping with our function as a Teachers College, graduate work shall be confined to professional lines of work.

(2) **It shall represent specialization and intensive work.** As soon after enrollment as possible, the graduate student shall focus attention upon some specific problem which shall serve as the center for the organization of his year's work, including courses to be taken and special investigations to be conducted. **No graduate credit will be given for scattered and unrelated courses.**

(3) **Thesis.** Research work culminating in the writing of a thesis upon some vital problem of education shall be an integral part of the work for the Master's degree.

(4) **Breadth and range of professional outlook.** In addition to the intensive and specialized work which is required of candidates for the Master's degree, they are expected to know the fundamentals of professional education.

(5) **Final examination upon the whole course.** There will be a final examination, oral or written, upon the whole course. An oral examination of two hours' duration is customary. This examination will cover the following ground: (a) The field of the thesis and special research, including topics closely related thereto; (b) The field covered by the special courses taken by the candidate; (c) The general field of Psychology and Education.

General Information

1. All graduate students must register with the Dean of the Graduate College. All courses taken, both resident and non-resident, must be approved by him in advance.

2. No graduate student may enroll for more than twenty (20) hours work in any regular term, nor for more than four

courses, of a total credit value of twelve (12) hours in the Summer Term. This regulation is essential to the maintenance of the standard of intensive work for the Master's degree. In determining the maximum amount of work permitted, research upon the thesis topic must be included within the limit stated. To this end, the student doing research work upon his thesis topic must enroll for the same.

3. In order that the standard of intensive and specialized work for the Master's degree may be maintained, no graduate credit will be given for elementary courses, for scattered and unrelated courses, for public platform lectures or public platform lecture courses, for courses in which the element of routine is large as compared with the theoretical and professional aspects.

4. Excess A. B. work may be applied toward the M. A. degree only when arrangement is made in advance with the Dean of the Graduate College so that he may see that the work is made of M. A. standard and that it is in line with the specialization necessary for the M. A. degree.

5. Five-hour summer courses of the A. B. standard may be allowed to be applied as M. A. work for three hours credit only when approved in advance by the Dean of the Graduate College subject to conditions formerly adopted.

6. The courses which may be taken for graduate credit must be of an advanced character, requiring intensive study and specialization. Certain approved courses in the Junior and Senior Colleges may be pursued for graduate credit; but, when so taken, the character of the work done and the amount of ground to be covered must be judged by a higher standard than that which applies to the regular Junior or Senior College student. The standard of intensive work set for the graduate student must be maintained even if special additional assignments have to be made to the graduate student who works side by side with the Senior College student.

7. Satisfactory teaching experience shall be regarded as a prerequisite to graduation with the Master's degree. Teaching in some department of the college or its training school may, under certain conditions, be included in the graduate work of candidates for the Master of Arts degree. Routine teaching will not be recognized for graduate credit. When graduate credit is given to teaching, this work must be of an advanced character, so organized, controlled, and supervised as to insure some decided growth of the teacher in the scholarship of the subject or professional insight into its value and problems.

8. Fifteen hours credit toward the M. A. degree shall be the maximum amount allowed to be earned in a regular school year by anyone who is employed on full time, except upon the recommendation of the Dean of the Graduate College and the approval of the Council of Deans.

9. Graduate credit for leadership of group work with non-resident student shall be given only when approved in advance by the Dean of the Graduate College and the Dean of the College.

10. Final work toward the M. A. degree shall be done in residence and under the supervision of the Dean of the Graduate College unless special permission to do it in non-residence has been granted by the Council of Deans and upon the recommendation of the Dean of the Graduate College.

11. All work for the M. A. degree shall be done with distinction; work barely passed shall not be considered worthy of such an advanced degree.

12. The thesis subject of the graduate student must be approved in advance by the Dean of the Graduate College and by the head of the department concerned. Before the degree is conferred the thesis as a whole, and in detail, must be approved by the head of the department or the instructor under whose direction the thesis work has been done and also by the Dean of the Graduate College. Also three typewritten copies of the thesis must be placed on file with the Dean of the Graduate College, one copy of which he shall place in the Library for permanent reference.

13. Before the candidate for the Master of Arts degree is admitted to final examination the thesis requirement must be met in full, or the thesis must be in such a state of readiness at least two weeks previous to final examination, that only minor reconstructions need to be made, which will not delay its being put in final typewritten form for filing before the end of the term in which graduation falls.

14. The final examination will be presided over by the Dean of the Graduate College and conducted by the head of the department in which the candidate has done the main part of his work. All other members of the faculty under whom the candidate has taken courses counting toward the Master's degree shall be given an opportunity to participate in the examination. An official visitor, or official visitors, from outside the department in which the candidate has specialized shall be appointed to attend the examination.

Directions as to the Form of the Thesis

Students submitting theses should present them in typewritten form, upon paper of good quality, of customary size ($8\frac{1}{2} \times 11$), leaving a margin at the left adequate for binding—fifteen points by the typewriter, twenty if the manuscript is thick.

A title page should be prepared containing in neat lettering at the top the name of the institution THE STATE TEACHERS COLLEGE OF COLORADO; below this at some distance the title of the thesis, about the middle of the page the state-

ment: A THESIS SUBMITTED IN CANDIDACY FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION; at a lower level of the page the author's name; and at the bottom the address, and the year.

All theses should contain a brief analysis or table of contents at the beginning; should give footnote references to literature quoted by author, title of book or article, and exact page; and should contain at the end a bibliography of the literature of the subject. In giving bibliographical material, the customary form of publishing houses should be used, which is quite uniformly that of the author first, followed by title, price, copyright date, and publisher, and in case of magazine references, this by title of magazine, volume or date and page.

Fees for Graduate Courses

Fees for graduate students in the Summer Term and in the regular school year will be on the same basis as fees for all others. For that part of the work which may be done in non-residence the fees are fixed at one dollar (\$1.00) for each term hour of credit. This would mean that for a course in which recitations occur five times a week for one term the fees would be five dollars (\$5.00); for four such courses the fees would be twenty dollars (\$20.00). Students doing graduate work should expect to buy some of the books which they need.

EDUCATION

THOMAS C. McCracken, A.M.

FRANK E. WRIGHT, A.M.

WILLIAM BARNARD MOONEY, A.M.

SAMUEL MILO HADDEN, A.M.

JOSEPH H. SHRIBER, A.B.

HELEN GILPIN-BROWN, A.B.

CELIA LAWLER, A.B.

GRACE H. WILSON, A.B.

MYRTH KING, A.B., Summer 1917.

H. M. BARRETT, A.M., Summer, 1917.

D. E. WIEDMANN, A.B., Summer, 1917.

W. A. FRANKS, A.B., Summer, 1917.

D. K. DUNTON, A.B., Summer, 1917.

The work of this department, altho having to do primarily with fundamental theory underlying the educative process, shows also how such theory is of practical value to the teacher. The teacher needs a theoretical background for her work and a broad acquaintance with all fields of educational activity. The purpose of the courses offered is to meet these needs.

Courses Primarily Junior College

8. Educational Values. The methods of determining educational values adopted by leading educators of the past will be discussed and contrasted with present-day American methods. A detailed inquiry concerning the value of the various studies of the curriculum will be made with the following points in mind: (a) the way in which any particular subject-matter is acquired; (b) the social and physical needs of the individual and of the group of which he is a member; and (c) the tastes and predilections of the individual. One section of this course will be for advanced students.

Mr. Wright.

11. Principles of Education. Required second year. Open also to Senior College students who have not had its equivalent. This course is designed to set forth the theory of aims, values, and content of education; the place of a scientific basis in education; the relation of schools to other educational agencies; the social limitations upon the work of the schools; and the processes of learning and teaching.

Mr. Wiedmann and Mr. Dunton.

12a. Current Movements in Social Education. This course will include such subjects as the following: the school as a social center; school credit for home industrial work; open-air schools; organizations co-operating with the public schools; the six-three-three plan, and the school survey.

Miss Lawler.

24. School Administration. This course will deal with school and class-room management, and is designed to meet the needs of supervisors, principals, and class-room teachers. Each student may make a special study of the problem in which he is particularly interested. Problems peculiar to superintendents and supervisors in villages and small cities will be considered.

Mr. Franks.

25. Administration of Rural and Village Schools. This is a course in the study of rural education, which aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education, and a discussion of forward movements in legislation as they affect the education of country children.

Mr. Shriber.

27. General Education. Required of all undergraduate students who shall attend the regular morning lectures and, in addition to this, either attend an afternoon conference at an hour to be determined or submit a written outline of each day's lecture. Students working for the A. M. degree may take the course for credit upon approval of the Dean of the Graduate College, provided they attend the morning lecture, the afternoon conference and a regular weekly quizz on the lectures. This course will consist of a series of daily lectures by men eminent in the field of education. Lecturers: Dr. G. Stanley Hall, Dr. Samuel C. Schmucker, Dr. James E. Russell, Dr. O. T. Corson, Dr. A. E. Winship, and Prof. M. V. O'Shea.

33. History of Modern Elementary Education. Open to Senior and Graduate College students. This course will be introduced by a brief review of the education of the Renaissance to furnish the setting for the study of the trend of modern education. The main part of the course will be devoted to such subjects as the development of the vernacular schools, the early religious basis of elementary schools, and the transition to a secular basis, together with the work of such men as Comenius, Locke, Rousseau, Pestalozzi, Herbart, and Froebel. Mr. Dunton.

37. Ethical Culture for Women. A course designed for instruction in the etiquette of every-day life, and a general appreciation of culture and its necessity in the training of a teacher. Lectures, book and magazine reviews and reports. Mrs. Gilpin-Brown.

38. Vocations for Women. A course designed for the study of vocations open to women, with the idea of preparing the teacher to guide her students in the choice of their life work. The course consists of lectures, recitations, readings, and reports. Miss Wilson.

44a. Social Education. A Course planned for students who wish to organize clubs or do other work of a community co-operation nature. Scope of work: Consideration of movements and methods for social betterment, such as organization of schools, playgrounds, young people's clubs, Sunday School classes, classes in citizenship, classes in English for foreigners and classes for women in home problems.

Model Sunday School classes will be conducted by the various churches. Observation of these classes will be under College supervision. Discussions will be made profitable. Citizenship classes may be observed. Special lectures will be given by educators of note, including those giving the general lectures. Miss Lawler.

44b. Girls' Camp Fire Work. This course is intended for those who wish to become Camp Fire guardians. Groups of twenty will be organized into regular camp fires and do all the work usually required of girls in such groups. The expense covering costume, beads, music, and manual, will approximate five dollars. We recommend that the prospective student procure a catalog from the Camp Fire Outfitting Company, 16-18 West 22nd Street, New York City, and get the manual, bead loom and Camp Fire Songs in advance. This course is a substitute for any non-credit course in Physical Education. Miss King.

Courses Primarily Senior College

8. See "Courses Primarily Junior College."

16. Theory of High School Curriculum. A discussion of educational values and the arrangement of studies to suit the age of the pupil. An attempt to eliminate waste material and to stress those courses that best prepare for life. A survey of experiments in the introduction of vocational courses in the curriculum of the secondary school; this will lead to a careful study of the various types of American secondary schools. Mr. Barrett.

34. **American Education.** Open to mature students of both Junior and Senior Colleges. A careful study will be made of typical methods of meeting educational needs in the colonies, of the growth of the public school idea, and of the spread of the public school system. Attention will be paid to various features of our American school system in the present status of development. Mr. Barrett.

42. **Educational Administration.** Open to students of the Graduate College upon permission of the instructor. The plan of this course comprises a comparative study of contemporary school organization and administration, and so should be of especial value to principals and superintendents. Mr. Mooney.

Courses Primarily Graduate College

12b. **Current Movements in Social Education.** Open to mature students of the Senior College upon permission of the instructor. This course will include a discussion on vocational education and vocational guidance. Mr. McCracken.

17. **Vocational Education.** Mature students of the Senior College may take this course if granted permission by the instructor. This course has for its purpose the interpretation of the subject from the artistic, industrial, and commercial standpoints. Mr. Hadden.

23. **Research in Education.** Open to mature Senior College students upon permission of the instructor. This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of greatest interest to him, provided sufficient opportunity is at hand for original investigation. The results of such research are to be embodied in a thesis. Credit hours will be given in accordance with the amount of work done. Conference course at hours convenient to the instructor. Mr. McCracken and Mr. Wright.

29. ***Current Educational Thought.** Open to mature students of the Senior College upon permission of the instructor. This course is intended as a common meeting place for all graduate students, no matter what their line of specialization. The work of the course will consist of reviews and discussions of recent books in the various fields of education. Mr. McCracken.

35. **Educational Classics.** Such classics as Plato's Republic, Spencer's Education, and Rousseau's Emile, will be considered, (a) as interpretations and criticisms of educational practices of the various periods of history represented; and, (b) as presentations of theory related to present-day education. Mr. Wright.

41. **Master's Thesis Course.** The student who expects to work upon his Master's thesis will register for this course, no matter for what department the thesis is being prepared. Mr. McCracken.

*The books used in this course, Summer 1917, will not be the same as those used in Summer 1916.

45. **Measurements and Tests in Education.** A study of measurements of results in education, including tests of efficiency in school subjects and in the work of the individual teacher. A practical course for any teacher or supervisor who wishes to become familiar with various tests in education, their application, and their scoring. Mr. Mooney.

COUNTY SCHOOLS

JOSEPH H. SHRIBER, A.B., Director.

MABEL COCHRAN, Summer, 1917.

JENNIE L. TRESSEL, Summer, 1917.

This department recognizes that the rural problem is essentially the problem of the rural school, because it is the agency of education, and a natural center for organized community service. The object of the courses offered here is to prepare county teachers for community leadership and to assist in the proper organization and management of the type of school found in the open country. However, every effort consistent with existing conditions and lasting progress, shall be made to point out the importance of reorganizing the county educational system upon a principle that shall lead to centralization. While the new conception of a new school is in process of formation we must make the best of the present situation. Whatever may be the organization, equipment or skill in management, good teaching is the fundamental source from which the product of our schools can be judged. The rural teacher, especially, on account of limited time and a crowded curriculum, should have a clear-cut knowledge of the subject-matter he teaches. It shall be the chief aim of the department to stress the importance of academic preparation, a professional training that relates the child closely to the teaching process, and of making the county school of the future a dynamic force in the community.

Courses Primarily Junior College

Education

26. **The Rural School Curriculum and the Community.** Open to Senior College students. This course will treat of the problems of the teacher who desires to instruct country children in terms of their own environment. Methods and materials for such instruction will be outlined and discussed. Ways and means whereby stereotyped courses of study, in the various grade subjects, may be vitalized and made more significant to country children will be sought. Mr. Shriber.

12. **Rural Sociology.** See Department of Sociology.

6. **General Methods.** The application of methods to a rural school, the organization of material, class-room management, and effective presentation will be discussed. This course will aim to discover points of

difference between the graded and the ungraded school in respect to the utility of pertinent methods used in teaching the various subjects in a rural and village school. (See School of Reviews.) Mr. Shriber.

Primarily Senior College

25. **Administration of Rural Schools.** Open to mature Junior College students upon permission of the instructor, and to Graduate College students. This is a course in the study of rural education, which aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education. A discussion of forward movements in legislation as they affect the life of the farm and the education of country children. Mr. Shriber.

Demonstration School

For teachers who desire special preparation for County Schools, the West-side school, two miles west of the campus and belonging to the Greeley system of schools, will be used as a Rural Demonstration School for the Summer term. This is a one-teacher school of two rooms and basement, which was completed late in February. Its favorable location in a country environment, with a five-acre tract for agricultural projects, make it especially desirable for the demonstration of the possibilities of this type of school. Miss Mabel Cochran, a skillful teacher, who has had successful experience in one-teacher schools, will be the instructor. The work in the school for students is almost wholly an observation course. Students will be conveyed, at least once each week, to the school in groups, for the purpose of study and observation.

Observation 1. This is a part of the course mentioned above. One part cannot be taken without the other. Preparation for Observation 1 is based upon observation made in the Demonstration School, relative to correct methods used, organization, management, utility of subject matter, program, and the community in its relation to the school. The course is intended primarily for students who are unable to register for the school year following the summer term. Observation in the Demonstration School and Observation 1 will receive five hours credit.

Mr. Shriber.

Note. Students having met the College entrance requirements will receive credit for work done in the Demonstration School, in the College. Others will be given credit in the State Industrial High School.

Public School Subjects

Students taking these courses will select subjects desired, from the School of Reviews, and credit will be given in the State Industrial High School to those who have not completed their high school course.

ELEMENTARY EDUCATION

- GEORGE E. FREELAND. Professor of Elem. Ed. and Principal.
 MILDRED DEERING JULIAN. Kindergarten and kindergarten methods.
 MRS. LELA AULTMAN. First grade and primary methods.
 MRS. BELLA B. SIBLEY. Second grade and primary methods.
 NELLIE MARGARET STATLER. Third grade and story telling.
 FRIEDA B. ROHR. Fourth grade and methods.
 ELIZABETH HAYS KENDEL. Fifth grade and intermediate methods.
 AMY RACHEL FOOTE. Sixth grade and intermediate methods.
 JENNY LIND GREEN. Seventh grade and upper grade methods.
 BERTHA MARKLEY. Eighth grade.

This department offers to Summer School students a complete Elementary training and demonstration school, including kindergarten. Here will be demonstrated methods of teaching the children of each grade; there will be an outdoor school on the campus where the children do regular school work as well as take recreation; vocational work in wood, mechanics, sewing, cooking, commercial branches, etc., will be demonstrated as to value and practicability in the elementary school; and an adjustment of the day's work and programs in a manner that seems best for summer work in Colorado will be given.

Opportunity for practice teaching will be given a limited number. Only those who graduate this summer may teach.

The following courses in methods will be offered. Any of these may be substituted for Elementary Education 1, which is required of all Junior College students.

3. Elementary School Supervision. Students who have served their period of apprenticeship in the elementary school and who have done work of an exceptionally high character may be allowed to assist in the supervision of teaching in the training department. They will still work under the direction of the training teachers, but will have greater responsibilities and a larger share in the administrative work of the school. This training is intended for those seeking the more responsible positions in elementary school work and also for those who are planning to become training teachers for normal schools. Mr. Freeland.

5. Primary Methods. This course is considered under two main headings: 1. The transition of the child from the home or kindergarten to grade work—the nature of the little child, and the principles which govern early growth; 2. The stimuli by which the child is led to use the tools of wider social intercourse. This study will include (1) a comparison of typical courses of study with our own; (2) a discussion of the basis of selection of subject-matter; (3) a reorganization of this material by the student into a tentative course of study; (4) the relation of subject-matter and method; and (5) practical problems in methodology.

Mrs. Aultman.

6. **Primary Methods.** The course is based on the needs of the child between the ages of 7 and 8 years. This course leads up to the selection of subject-matter which functions in the child's life. To this end a brief comparison of courses of study in some of our larger city schools is made. The latest and most scientific articles on primary methods are read and discussed. Many devices for teaching beginning reading, phonics, rhythm, spelling, songs, as well as methods for dramatization of stories, multiplication table, and practice in blackboard illustrating are given.

Mrs. Sibley.

7. **Third and Fourth Grade Methods.** Junior College Elective. The course is based on the needs of the child between the ages of 8 and 10. It will consist of (1) a review of the most significant things in child study common to children of this period; (2) a comparison of courses of study for these grades; (3) the building of a course of study; (4) methods of presenting the material of the curriculum of the third and fourth grades.

Miss Rohr.

8. **Fifth and Sixth Grade Methods.** A brief survey of the needs and interests characteristic of children in the pre-adolescent period—with the purpose of applying the conclusions of such psychological studies to methods of teaching—and a brief study of the subjects in the curriculum of the elementary grades. Chief emphasis will be placed upon the practical side of the work, including a consideration of the subject-matter to be taught; influence governing its selection, arrangement, and distribution; methods of presentation; devices, games and drills for securing accuracy and retention; and observation of classes illustrating certain phases of the work.

Miss Kendel and Miss Foote.

9. **Grammar Grade Methods.** The physical and mental status of the grammar grade pupil—with the instinctive tendencies and dominant interests of this period. Upon this as a basis, the material actually in use in these grades in various good schools will be considered. Following this preliminary work, an attempt will be made to evaluate several of the school subjects, and to work out functionally several topics of each.

Miss Green.

15. **Handwork in the Kindergarten.** Intended to prepare teachers to meet the needs of the constructive instinct as it functions in the play life of the child. The needs that grow out of the child's play will be worked out experimentally with large building blocks, clay, paper, cardboard, and textile materials, etc.

Miss Julian.

20. **The Kindergarten Program.** This course takes up the study of the different materials of the kindergarten curriculum, together with a detailed arrangement of these materials.

Miss Julian.

SECONDARY EDUCATION

JOHN R. BELL, A.M., D.Litt., Principal.

RAE BLANCHARD, A.B., English.

JEAN CROSBY, A.B., History.

CHAS. J. BLOUT, A.M., Science.

MARK K. SWEANY, A.M., Mathematics, Summer, 1917.

LUCY McLANE, A.B., English.

LUCILLE HILDEBRAND, A.B., Mathematics.

H. M. BARRETT, D.Litt., Latin, Summer, 1917.

J. R. MORGAN, A.B., Spanish, Summer, 1917.

W. A. FRANKS, A.B., History, Summer, 1917.

GEO. R. MOMYER, A.B., Science, Summer, 1917.

FRANK A. SHULTIS, A.M., Commercial Arithmetic and Bookkeeping.

Courses

Courses will be offered in science, mathematics, English literature, history, modern languages, and those vocational subjects which best fit into a well-rounded high school education.

The State High School of Industrial Arts makes it possible, by means of its summer courses, for aspiring young men and women to save time, and thus shorten the period of preparation for life. The teaching force is excellent. The work is done on a campus which is conceded to be one of the most beautiful in the entire country and under circumstances that are peculiarly conducive to study.

Why not begin a high school course this summer, or make progress on one already begun? No fees will be charged regular high school students for the summer term. Full credit will be given for the work done.

Demonstration Classes

The High School Department of The State Teachers College is intended as a training school for such individuals as desire to become high school teachers.

The demonstration classes give to those who expect to enter the field of secondary education an opportunity to see experts teach. The program will be arranged so that every important phase of the high school curriculum will be presented.

There will be frequent conferences between the educator in charge of a given class and the student teachers who are observing the work. At these conferences both the methods of instruction and the lesson content will be freely discussed and the reason for each step taken will be clearly demonstrated.

The Ungraded School for Adults

(High School Credit)

It often happens that for economic reasons boys and girls are compelled to leave school in the grades or in the early years of high school. Upon reaching maturity they realize the value of an education and are anxious to obtain one, but are unwilling to enter classes with children. The purpose of this school is to open the door of opportunity to just such students. The work will be evaluated according to the strength shown and the individual will be classified, after sufficient time has elapsed, in accordance with the power demonstrated without the necessity of completing such omitted step.

The experiences of life have a very high educational value. The various types of schools of America have been slow to recognize the real significance of the fact that life is itself a school in which character can be developed and mental growth attained. By doing any kind of work, and doing it well, the mind is made stronger and the character more dependable. The individual of twenty years or more who has taught, worked on a farm, or in a factory, during the years that other boys and girls are going to school, usually manifests, upon returning to school, far more mental power than the pupils, fourteen or fifteen years of age, with whom he has been compelled to associate in the work of the classroom.

The Ungraded School for Adults provides a special school for adult students. It appreciates the value, in terms of character and intelligence, of the services rendered by the individual to the community and give a reasonable amount of credit for the same. And, most significant of all, it substitutes the power-unit for the time-unit. No one can enter the Ungraded School for Adults who has not reached the age of eighteen years.

THE SCHOOL OF REVIEWS**Directors**

JOHN R. BELL AND JOSEPH H. SHRIBER

Teachers and Subjects

BELL, JOHN R., A.M., D.Litt.
Principal of High School Department,
Professor of Secondary Education,
State Teachers College,
Instructor in Geography.

BLANCHARD, RAE E, A.B.
English Department,
State Teachers College,
Instructor in Grammar.

BLOUT, CHAS. J., A.M.

Chemistry Department,
State Teachers College,
Instructor in Arithmetic and General Science.

FRANKS, W. A., A.M.

Superintendent of Schools, Ft. Morgan,
Instructor in History.

MOMYER, GEO. H., A.M.,

Superintendent of Schools, Lamar,
Instructor in School Law, Civics, and Physiology.

SHRIBER, JOS. H., A.B.

Director County Schools Department,
Prof. Rural Education,
State Teachers College,
Instructor in General Methods.

SHULIS, FRANK A., A.M.

Commercial Department,
State Teachers College,
Instructor in Commercial Arithmetic.

Fees and Credits

A fee of ten dollars will cover any two or more subjects listed in the School of Reviews.

Credits will be given in the High School Department for all courses satisfactorily completed.

Scope of Work

1. **Review of Common Branches.** A thoro review of the subjects usually taught in the elementary schools.

2. **Emphasis Upon the Essential Elements of Pedagogy.** Those aspects of pedagogy which are involved in the correct teaching of the elementary curriculum, will be stressed. The learning process will be given special attention and the constant aim will be to give practical assistance to the teacher by giving her an intelligent basis for the use of methods.

3. **Application of the Principles of Psychology to Instruction.** Certain principles of psychology are so closely related to the teaching art that a knowledge of them gives inspiration and power to the teacher. These will be studied in the light of accumulated experience.

4. **Development of Personality and Community Leadership.** A dynamic knowledge of the work of the school and its environment will be encouraged. The elements of personality as a constructive force will be considered in relation to a teacher's general equipment.

PSYCHOLOGY AND CHILD STUDY.

JACOB DANIEL HEILMAN, Ph.D.

CLARA HARRISON TOWN, Ph.D.

The main purpose of the courses in Psychology and Child Study is to improve the student's ability to care for, train and educate the child by means of studying the child's nature, normal development and natural modes of learning. Provision is also made for elementary and advanced courses in General Psychology.

Courses Primarily Junior College

1. **Child Hygiene.** The preservation of the child's health is believed to be of fundamental importance in the work of the schoolroom. The following topics will be treated in the course: The significance, prevention and detection of sensory defects; malnutrition; faulty postures and deformities; hygiene of the mouth and nervous system; air, light, clothing, exercise and sleep requirements.

2. **Educational Psychology.** Instincts and capacities; psychology of learning; individual differences; mental work and fatigue.

3. **Child Study.** This course deals primarily with the mental and physical development of the child.

a. Purposes and methods; anthropometrical measurement and growth; development of attention and sense perception; instruction in observation.

b. The development of memory, imagination and thinking; the psychology of lying; the growth of feelings and ideals; volition and interest; suggestion and imitation.

4. **Psychology of School Subjects.** Drawing; writing; spelling; arithmetic; reading; and treatment of speech defects.

Required Courses: 1 in the first year.

One of the following: 2, 3a, 3b, or 4 in the second year. A minimum of seven hours in Psychology is required.

Courses Primarily Senior and Graduate Colleges

5. **Clinical Psychology.** Methods and purposes; mental classification of children; pathological classification of the feeble-minded; treatment of special classes of children; their effect upon the school, society, and the race; causes of feeble-mindedness; mental characteristics of the feeble-minded.

6. **Mental Tests.** Binet-Simon; Yerkes-Bridges-Hardwick; Terman; Goddard; form board, etc.

11. **Abnormal Psychology.** The abnormal mental conditions occurring in feeble-mindedness and insanity are considered from the psychological

viewpoint, as resultants of lack of development of, or aberrant functioning of the processes of sensation and perception, association, memory, attention, volition and emotion.

12. Methods of Teaching Backward and Feeble-minded Children.
This course will be offered by

13. Observation Class of Backward and Feeble-minded Children.

14. School of Speech Defects. Observation class of children with speech defects. This class will be taught by Miss Catherine Floyd of Denver, Colo. Miss Floyd has had extensive and successful experience in this work.

Courses 12, 13 and 14 are open to all classes of students.

BIOLOGY.

LEVERETT ALLEN ADAMS, Ph.D.

JOHN C. JOHNSON, A.B., M.S.

S. C. SCHMUCKER, Ph.D., Summer, 1917.

Courses Primarily Junior College

Biol. 2. Bionomics. Required in the Junior College. This is required in the first year. It is a study of some of the fundamental facts and laws of Biology that may be valuable in teaching. It forms a basis for the intelligent study of other educational subjects. It considers the Evolution doctrine, cell life, problems of fertilization, maturation and embryology. Mendel's Law, formation and organization of tissues.

Mr. Johnson.

Zoo. 5. Bird Study.

Mr. Adams.

Bact. 2. Bacteria, Prophylaxis and Hygiene. A study of (1) Bacteria, where they are found, what they are, how they live and grow, useful bacteria, parasitic and disease-producing bacteria; (2) Prophylaxis, how disease is spread, methods of prevention, immunity, disinfection, inspection; (3) Hygiene, of person, home and school room. Mr. Johnson.

Botany 2. General Botany. Considers the development of the plant; life history of the plant; structures of plants in relation to their functions and environment; classification. Mr. Johnson.

Courses Primarily Senior College

Biotics 2.

Mr. Adams.

Bact. 3. Continuation of Course 2.

Mr. Johnson.

Courses Primarily Graduate College.

Biotics 3.

Mr. Adams.

Special 1. Eugenics for Teachers. This class will attempt to consider the most important suggestions that have been made for the im-

provement of the race and the principles underlying heredity and the modifying effect of the environment on the development of health and character. It will attempt to show how far the teacher may wisely foster such movements. It will particularly show where the teacher can, by precept and example, be most helpful in forwarding the development of boys and girls looking towards the improvement of the next generation following.

Dr. Schmucker.

Special 2. Self Study. This will be an attempt to make the teacher able to so examine his own personal equipment, physical, mental, moral, and social, as to recognize his own strong points with the idea of fostering and increasing them. At the same time he will be taught to find where he is defective and what are the simplest methods at his disposal of remedying these defects.

Dr. Schmucker.

PHYSICAL SCIENCE

FRANCIS LORENZO ABBOTT, B.S., A.M.

7. General Science. A course complete in one term, dealing with the facts of Physics, Chemistry, Zoology, Physical Geography, etc., such as are needed by the rural teacher. Intended in the main to meet the requirements of those who take the county examinations in general science.

8. Radio-Graphic Physics. As man's applications of Physics to his problems are continually changing his environment, the teacher of physics finds himself continually under the necessity of adding to the traditional matter of the school subjects in order to keep relations between school work and outside conditions close. The title of this course suggests an extension, the need of which is now widely felt by the progressive element among teachers of physics. (See Abraham Flexner's article in the *Atlantic Monthly* for July, 1916, page 33.)

This course is intended to give such practical and detailed instruction to those who wish to attempt "WIRELESS WORK" that they shall be able to construct, set up, and operate a wireless outfit. The course discusses the function and physics of each piece of apparatus that enters into the outfit, thereby taking the operation of wireless out of the uncertain realm of "cut and try." The valuable practical experience gained by the student while making his apparatus (practically all of which he can do) is thus put on a scientific basis, so that he is later saved many blunders as an operator, and knows his material and what it must do well enough to select supplies from a catalog economically and intelligently. The course should be very useful to high school teachers and supervisors of physics.

6. Methods of Teaching Physics. A brief time will be given to the study of the history of the teaching of physics. The remainder of the time to a detailed course of presenting a method which will make the subject of physics interesting and of more value to the high school student than it ordinarily is.

CHEMISTRY

C. J. BLOUT, A.M.

1. **General Chemistry.** Primarily arranged for those wishing to begin the subject, but also offers an excellent opportunity for review work to those students who have had only a short course in chemistry. Lectures, text, and reference study. Three hours. Those electing Course 1 will also elect Course 2.

2. **General Chemistry.** Laboratory section. Four hours attendance, two hours credit. A detailed course supplementing Course 1.

3. **General Chemistry.** Continuation of Course 1. The chemistry of metals. Prerequisite, Course 1. Three hours.

4. **General Chemistry.** Laboratory section. Four hours attendance, two hours credit. A detailed course supplementing Course 3. Prerequisites, Courses 1 and 2.

5. **Qualitative Chemical Analysis.** Prerequisites, Courses 1 to 4, inclusive. The work of this course takes up the grouping, separating, and the identification of the common elements. Practically all laboratory work. Ten hours attendance, five hours credit.

8. **Food Chemistry.** Lectures, text-book, and reference study on the Chemistry of Air, Water, and Food. Three hours. Prerequisites. Courses 1 to 4, inclusive.

9. **Food Chemistry.** Accompanies Course 8. A laboratory course giving practice in the methods employed for food analysis and the detection of adulterants. Four hours attendance, two hours credit.

GEOGRAPHY AND GEOLOGY

GEORGE A. BARKER, B.S., M.S.

The courses listed in this department are not review courses covering merely the material taught in the common schools. Such review courses are listed in the high school department for which no credit is given toward graduation in the college.

2. **Physical Geography.** A course designed for those who have not had physical geography in the high school. The laboratory and field sides of the subject will be emphasized. Five hours.

3. **Climatology.** A study of climate, not only from the observational side but also from the side of method of presentation. Advantage will be taken of our weather bureau equipment to compile data, and methods of tabulating this data by means of graphs will be illustrated. Five hours.

4. **Geography of North America.** A lecture course with extensive library readings. The continent will be treated from the foundation of

its geologic and climatic controls, and upon this will be built the economic side of the subject. Five hours.

12. **Geography Method.** A general course in geography. This is the geography course that formerly was listed as Course 1. Five hours.

1. **Elementary Geology.**

MATHEMATICS

GEORGE WILLIAM FINLEY, B.S.

FRANK W. SHULTIS, A.B., A.M.

MARK K. SWEANY, A.M., Summer, 1917.

The department aims at the presentation of all work from the standpoint of those who expect to teach. The underlying principles of each subject are carefully developed and at the same time questions of method are given a place commensurate with their importance.

Courses Primarily Junior College

1. **College Algebra.** A careful review of the principles of elementary algebra and a continuation of the consideration of the graph, complex number, and theory of equations. Mr. Finley.

3. **Trigonometry.** The solution of the right triangle, a development of formulas, and the oblique triangle. Mr. Finley.

8. **Methods in Arithmetic.** The modern tendencies in the teaching of arithmetic together with a detailed discussion of the best ways to present the subject in the grades. Mr. Shultis.

8a. **Arithmetic for Teachers.** This course is intended for those who feel the need of a more thoro knowledge of the subject matter of arithmetic. Mr. Shultis.

3a. **Surveying.** Trigonometry a prerequisite. The student is here given an opportunity to apply his knowledge of Trigonometry to the solution of practical problems. The usual work of elementary surveying is done.

Courses Primarily Senior College

4. **Analytics.** An introduction to the broad field of higher mathematics with a view to enlarging the equipment of the future teacher of secondary mathematics.

9. **Algebra and Geometry for Teachers.** Open to Graduate College. A rapid review of the fundamental principles of algebra and geometry with the aim of giving that clear logical knowledge so much needed by a teacher. Mr. Finley.

Primarily Graduate College

5. **Differential Calculus.** An introduction to the powerful subject of the Calculus. This course is to be arranged for by conference. Mr. Finley.

THE SOCIAL SCIENCES

GURDON RANSOM MILLER, Ph.D.

EDGAR DUNNINGHAM RANDOLPH, A.M.

DUEFFART E. WIEDMANN, A.B., Summer, 1917.

CELIA M. LAWLER, Pd.M., A.B.

TRUMAN G. REED, A.B., Summer, 1917.

From the viewpoint of Education, this department aims to make evident to its students the close relation between the Science of Education and the subject-matter of Anthropology, Sociology, and Social Economics. All our courses lay stress upon these relationships.

However, any of our courses will prove of large value to any students specializing in Sociology or Economics. University or college students or graduates, interested in particular phases of Sociology, or any students interested in Social Reform Movements, or Social Settlement Work, should consult the head of this department for advice in electing courses.

31. Modern Civilization and Its Social Tendencies. Hypernationalism; social negatives; the survival of pagan idealisms; the need of economic, spiritual, ethical and religious revaluations; a program of social progress through education. Dr. Miller.

9. Social Economics. Labor problems and economic organizations; labor unions and labor legislation; social insurance; corporations and public ownership; socialism, taxation. Dr. Miller.

12. Rural Sociology. A study of rural social conditions; a scientific sociological study of modern changes in country life, and the organization and direction of rural education as a positive power in rural progress. Mr. Wiedmann

21. Problems and Methods of Modern Social Economy. A course in philanthropy which in the first part shows the nature and extent of past social failures and the slow progress from blind reaction to distress, to more or less rational methods of control; and in the second part deals with the extensions of social concern to the fields of social need now felt most keenly. On the whole it shows the transition from the attitude of "pity toward distress" to the attitude of "hatred of the conditions of distress." While doing this it endeavors to exhibit the factors in life that have brought the change. Elective. Senior College and Graduate College. Five hours. Mr. Randolph.

39. Social Theory of Education in Relation to the Course of Study. A course for advanced students interested in (1) reading critically the available literature upon the school subject in which they are most interested, (2) formulating the values which the subject may be expected to contribute to the pupils, (3) comparing these values with the material usually taught in the subjects in question, and (4) tentatively blocking out such a course in the subject as seems demanded

by the principles found and the values agreed upon. This is frankly an exploratory course and does not presume to settle the case of any subject discussed. Five hours. Elective. Senior College and Graduate College. Mr. Randolph.

23. **Immigration and American Social Problems.** A course dealing in the first part with the causes and motives of immigration, and the characteristics and extent of the incoming stream from 1820 to the present time; and in the second part considering in detail the most important complications of our national life, which have been ascribed to the great change in the character of our population. Five hours. Elective. Mr. Randolph.

24. **Problems and Methods of Child Welfare.** A careful study of the movement for the conservation of children. After giving the movement a setting in contemporary thought, it traces out the operative factors in a large number of attempts to improve the conditions of childhood, shows the extent of the most pressing problems, brings to light the principles of care and protection gradually evolved (both public and private), and finally in each case makes clear the present problems and points of attack. The course has two aims: (1) To unify many phases of the conservational tendency, and (2) to give much information about each of the situations discussed. Five hours. Senior and Graduate Colleges primarily. Mr. Randolph.

3. **Educational Sociology.** A course giving (1) a background of information concerning origins and interrelations of modern social problems; and making (2) a definite attempt to show the relationships to these of agencies of education and control. Four hours. Every term. Required. Junior College. Mr. Randolph.

HISTORY AND POLITICAL SCIENCE

EDWIN B. SMITH, A.M.

MARK A. SWEANY, A.M., Summer, 1917.

Courses Primarily Junior College

9. **National Government.** Party organization and party government; the relations between the government and the people; the new conception of the presidency; the growing powers of Congress; the Federal Judiciary; constitutional protection of business; the police power of the national government; civil service; corrupt practices act; recent legislation; the government serving the people.

13. **Methods in History and Civics.** The development of history instruction in schools; history and civics as taught in schools today; methods of study, presentation, and material, considered in connection with present conditions.

2. **History of the United States.** The development of the nation; organization of the national government; the Federalist party; Democratic opposition; Jefferson's policies; difficulties of neutrality; War

of 1812; reorganization after the war; westward expansion; the Monroe Doctrine; Jacksonian democracy; sectional strife; the issue of slavery; Texas and the Mexican war; the Republican party; secession of the southern states.

Courses Primarily Senior College

5. **European History.** With the history of France as the main interest, the development of modern Europe will be studied. A survey of the condition of the people previous to the Revolution; the French Revolution; the era of Napoleon; the restoration; the reign of Louis Napoleon; the second republic and the second empire; Napoleon III and the Franco-Prussian war; the third republic; the diplomatic background of the present war.

10. **Industrial History of the United States.** Industrial conditions of Europe affecting the early history of the United States; industrial England in the colonizing period; American colonial industry; the Industrial Revolution; slavery and the westward movement; the development of agriculture, manufacture, and other industries; the growth of business and labor combinations; the relation of government to business and labor; other recent movements.

16. **Spanish-American History.** This course will deal largely with South America, including Mexico, Central America and the West Indies. The period of discovery; the work of the Spanish conquerors; government and social conditions under the colonial regime; decline of Spanish power; revolution and independence; the republics; social, industrial, commercial and political conditions; the relations of the United States with Latin Americans; applications of the Monroe Doctrine; the Mexican problem; the Panama Canal and the purchase of the Danish West Indies.

Graduate College

15. **Research in History.** Students doing graduate work in history and political science may register in this course. By conference desired work will be arranged.

LATIN AND MYTHOLOGY

JAMES HARVEY HAYS, A.M.

H. M. BARRETT, A.M., Summer, 1917.

The instruction in Latin will always be given from the viewpoint of the teacher, but will aim to prepare students or further equip them in this subject.

The work offered in Mythology covers the classical myths and their relation to literature both Roman and English.

Courses for Either Junior or Senior College

Latin 1. Beginners' Course. Lessons from the first year book covering the Roman pronunciation, declensions, conjugations, with exercises in translation.

Latin 2. Intermediate or Advanced. This course is adapted to all students who have had two or more years of the subject. Readings will be given from authors adapted to the class.

Mythology 7. Studies of the Greek and Roman divinities and their relation to each other and their functions in the world. An acquaintance with distinctive myths of these several divinities. References to classical and modern authors, particularly mythical allusions in English litera-

LITERATURE AND ENGLISH

ALLEN CROSS, A.B., Ph.M.
ADDISON LEROY PHILLIPS, A.B.
RAE E. BLANCHARD, A.B.
LUCY NEELEY McLANE, A.B.

Beside the five sections of the required English course (English 1) the department offers to the 1917 Summer students a course in the functional method of teaching English grammar, a course in the materials and methods used in the composition work (oral and written) and the literature of the upper grades, a course in a selected group of plays suitable for high school classes, and three literary courses.

1. Grammar and Composition. Required in the Junior College. The work of this course consists of two parts each equally important—Grammar, and Composition.

Grammar. A careful review of the essential facts of English Grammar (the facts that function in speech and writing). The parts of speech are reviewed, and then sentence construction and analysis occupies the remainder of the time. Special lessons are given upon matters of unusual difficulty, such as troublesome verbs, "shall" and "will," predicate complements of all kinds, and verbals.

The purpose of the work in grammar is to give the students such a review as will fit them to teach grammar in the upper grades.

Composition. Six written themes and several exercises in extended oral composition are required. The weekly themes are carefully read by the instructor, marked for errors, and returned to the students promptly.

This is the only required course in English; and, consequently, students are not passed unless they come to understand the essentials of English grammar, and acquire the ability to write and speak clear, straightforward English correctly. Spelling, punctuation and paragraph structure get especial attention in the composition work.

Mr. Phillips, Miss Blanchard and Miss McLane.

1a. **The Functional Teaching of English Grammar.** Outlines of the functional method of teaching grammar. This will involve going over the details of English grammar. The course may be taken by mature Junior College students. By doing additional theme writing such students may substitute the course for the required English 1. Senior College and Graduate students are not required to write themes, but they will be asked to do an assigned piece of original investigation into the speech habits of children.

Mr. Cross

5. **Literature and Composition for the Upper Grades.** Literary material and methods of teaching these in the upper grades, with some attention to the appropriate material and the principles of work in composition.

Mr. Phillips.

7. **The Epic.** This course consists of a study of the two great Greek epics, *The Iliad* and *The Odyssey*. Outlines of study covering other national epics. The purpose of the course is to furnish teachers in the elementary schools with the foundation materials for story telling and literature studies embracing the hero tales from Greek literature.

Mr. Cross.

19. **Selected Plays of Shakespeare.** A literary study of such plays of Shakespeare as are appropriate for high school use, with a proper amount of attention to the method of teaching Shakespeare in high schools. The plays will probably be, *Julius Caesar*, *Macbeth*, *Hamlet*, *As You Like It*, *Twelfth Night*, *1 Henry IV*, and possibly some others.

Mr. Phillips.

16a. **The Recent Novel.** The reading of ten typical novels of the past five years for the purpose of observing the trend of serious fiction and to study the social, educational, and life problems with which the novelists are dealing. Students will find it difficult to read more than three novels in the six weeks of the term. The brevity of the time and the press of other work will prevent the reading of the whole list of ten. Some of the novels may be read before coming to Greeley. Others may be completed after the close of the term. The novels will be selected from a list of about seventy. Those who wish to do a part of the reading before coming to Greeley may select from the following:

Canfield-Fisher, Dorothy, "The Bent Twig."

Wells, H. G., "Mr. Britling Sees It Through."

George, W. L., "The Second Blooming."

Galsworthy, John, "The Freeland."

Deland, Margaret, "The Rising Tide."

Bennett, Arnold, "The Old Wives' Tale."

Hughes, Rupert, "The Thirteenth Commandment."

Tarkington, Booth, "The Turmoil."

Sedgwick, Anne, "The Encounter."

Maxwell, W. B., "In Cotton Wool."

Conrad, Joseph, "Victory."

Wells, H. G. "The Research Magnificent."

Mr. Cross.

17. **The Short Story.** A study of fifty typical modern short stories to observe the technical methods of modern story writers and the themes they have embodied in the magazine fiction of the present. The course is based upon Mr. Cross's book, "The Short Story," supplemented by O'Brien's "The Best Short Stories of 1915 and 1916," and other recent volumes on the Short Story. Current magazine stories are also used.

Mr. Cross.

READING AND INTERPRETATION

FRANCES TOBEY, A. B., Director.

EMMA CHARLOTTE DUMKE, A.B.

The courses in reading take cognizance of the cultural as well as the practical value that reading, as an art, offers.

a. Facility in mastery of the printed page, ready visualization and instant realization of units of thought.

b. Training in analysis of a piece of literature as an art unit.

c. Personal culture, thru an approximately adequate response (vocal, bodily, imaginative, emotional, volitional) to a wide range of beauty and truth in literature. This end is sought through devotion to the ideal of revelation, supplanting the limited and self-centering ideal too long held for the recitation—performance.

d. Mastery of methods of teaching.

Courses Primarily Junior College

1. **The Evolution of Expression.** A systematic, directed endeavor to reflect, for the inspiration of the group, the spirit and dominant truth of varied literary units. Emphasis upon personal power, manifested in presence and address, in spontaneity, life, vigor, purpose, directness, poise. Analysis of simple literary units. Miss Dumke.

2. **Reading in the Grades.** The careful organization and presentation of content in a reading class. Problems offered by the average reading class in the grades. Miss Tobey.

6. **Dramatic Interpretation.** A study of the sources of dramatic effect. The analysis and presentation upon the campus of a play (probably "The Taming of the Shrew"). Miss Tobey.

11 and 12. **Public Speaking.** Oral composition, with emphasis upon method for the grades and high school. Study of models of oratory. Practice in oratorical discourse. Miss Tobey and Miss Dumke.

Courses Primarily Senior College

15. **The Festival.** Research and original work in the organization of significant festival programs. History, sociology, symbolism, the various arts. Voice culture two days. Miss Tobey and Miss Dumke.

Courses Primarily Graduate College.

16. **The Greek Drama.** Literary and dramatic standards applied to Greek drama. The classical drama and world view (philosophic, social, religious, ethical attitudes). The intensive study of a group of Greek tragedies. By conference. Miss Tobey.

MODERN FOREIGN LANGUAGES

French, German, and Spanish

EDWIN STANTON DU PONCET, A.B., Ph.D.

EMMA C. DUMKE, A.B.

JAMES R. MORGAN, A.B., Summer, 1917.

Courses for Either Junior or Senior College

1. **Beginning French.** Thieme and Effinger's French Grammar and easy texts. Mr. Du Poncet.

1. **Beginning German.** Manfred's Ein Pragtisher Anfang and easy texts. Miss Dumke.

15. **The Recent German Drama.** Fulda, Sudermann and Hauptmann. Mr. Du Poncet.

1. **Beginning Spanish.** The Berlitz Method and easy texts. Mr. Du Poncet.

- 1a. **Commercial Spanish.** Practical Spanish. For those who want a working knowledge of the language for commercial purposes.

Miss Dumke.

1. **Beginning Spanish.** A practical introduction to the Spanish language, Grammar and easy texts. Mr. Morgan.

6. **Intermediate Spanish.** Second or third year's Spanish. Reading of graded texts. For high school teachers of Spanish. Mr. Morgan.

15. **The Modern Spanish Drama.** -Selected works of Echegaray will be studied and interpreted. Mr. Du Poncet or Mr. Morgan.

The direct method is used exclusively in all classes.

An advanced course in French will be offered if such a course is desired. This course will be devoted to modern French fiction, with lectures on the origin of fiction, etc. This course can be secured only by advanced enrollment.

A course in second year French will also be offered. This course will be devoted to short plays and short stories of recent French writers. This course can only be offered by advanced enrollment. To secure either of the above courses, at least seven students must enroll before the opening of the session. The various clubs in the modern languages will hold one meeting each only during the summer term.

Tables will be provided at two or three different boarding houses, where French, German, Spanish or Italian will be spoken during meals.

No extra charge will be made, but enrollment for same must be done before the opening of session.

Those desiring this feature must send in their names to the head of the department at least one week before the beginning of the Summer Term.

LIBRARY SCIENCE

ALBERT F. CARTER, A.B., M.S.

3. **Classification and Cataloging.** Books, pamphlets, pictures and the varied items that may be obtained for the public school library. Decimal system of classification. Dictionary catalog. Alfabeting, Library of Congress cards. Shelf lists Arrangement of books on shelves. Five hours.

MUSIC

JOHN CLARK KENDEL, A.B., Director.

LILA M. ROSE, Sight Reading, Harmony.

NELLIE B. LAYTON, Pd.M., Piano.

JOSEPHINE KNOWLES KENDEL, Voice.

LUCY B. DELBRIDGE, Pd.M., Violin.

The courses offered by the department are of two kinds: (a) Courses which are elementary and methodical in their nature and are meant to provide comprehensive training for teachers who teach vocal music in the public schools. (b) Courses which treat of the historical, literary, and esthetic side of music and are meant for those who wish to specialize in school music and become supervisors.

Courses for the grade teacher and general student. Music 1, 2, 4.

Courses for supervisors and those who combine music instruction with other subjects: Music 2, 5, 8, 10.

Courses which are cultural in their nature and meant for the general or special student: Music 10.

Private Instruction

No instruction in voice, pianoforte or violin is provided by the school, but, if a teacher wishes to take up or continue the study of any of these special branches while attending the College, the opportunity will be given by the various instructors of the music faculty at scheduled rates.

All persons contemplating taking private lessons in music of any kind in the institution for credit should see the director of the department to make arrangements as soon as possible.

1. **A Course for Beginners.** (Open to Senior College students.) Notation, theory, sight-reading. The course is designed especially for teachers desiring to make sure their knowledge of the rudiments of music, so that they may be able to teach music in the public schools more efficiently.

2. **Methods for the First Eight Grades.** (Open to Senior College.) A very practical course for teachers in which the material used in the public schools is studied and sung, with suggestions as to the best ways to introduce all phases of the work. Prerequisite for this class Music 1 or its equivalent.

4. **Rural School Music.** (Open to Senior College.) This course consists of methods and material adapted to the conditions of the rural school building where a number of children from the various grades are assembled. Three hours.

5. **A Supervisor's Course in Music.** Second year or Senior College. The material used in the grades and high school is taken up, and studied from a supervisor's standpoint. Actual practice in conducting works of a standard nature will be offered those interested in this course. Open to those majoring in the department.

8a. **Harmony. Beginning Harmony.** The work consists of written exercises on basses (both figured and unfigured) and the harmonization of given melodies. Work completed thru the harmonization of dominant discords.

8c. **Harmony.** A continuation of course 8b. The course presupposes a knowledge of work done in courses 8 a and b. Circle of chords completed, modulation, etc.

10. **Methods in Appreciation.** (Open to Senior College.) This course is planned to help teachers to present more intelligently the work in Appreciation of Music for which there is such a growing demand in all our schools. A careful graded course suitable for each grade will be given. The lives and compositions of the composers from Beethoven to Wagner are studied.

PHYSICAL EDUCATION

SAMUEL E. ABBOTT, M.D.

MARGARET JOY KEYES, A.B.

The work of the department is planned to meet the needs of three classes of students: (1) For those desiring to prepare for teaching positions in Physical Education, or as playground directors. (2) For those who desire training in a few special physical training activities, and (3) For those who desire recreational activity for their own improvement or development while pursuing courses in other branches of education.

For qualified students it is possible to secure a departmental recommendation after completing satisfactorily four semesters of work at the State Teachers College. The general requirements for such a recommendation are similar to those for major students during the regular session.

Required Work.

All students are required to take at least one course in Physical Education during four terms in order to graduate from any department except in cases of students who are in residence less than four terms, in which cases they will be held for one course each term in residence. Credit or non-credit courses will meet this requirement. Courses 2 and 16 are for major students and will not fulfill this general requirement.

Required Gymnasium Suit

Those entering physical training classes are required to wear an approved gymnasium suit. For women this consists of a bloomer suit with suitable shoes. Those taking any of the dancing courses should have ballet slippers and an accordion pleated or circular skirt.

1. **Physiology and Hygiene of Exercise.** A study of the normal tissues and organs of the body and their functions. A course for students majoring in Physical Education, but open to all, both men and women. Junior and Senior College. Five periods.

3. **Light Gymnastics.** Class organization and conduct, free arm, dumbbell, wand, Indian club drills, and marching. Credit or non-credit. For non-credit regular attendance and progress in class; for credit at least one outside hour of preparation per day. Junior College. Five periods.

Dr. Abbott.

5. **Plays and Games.** Group and team games suitable for the school yard playground. Five periods.

Dr. Abbott.

6. **Singing Games and Elementary Folk Dancing.** A course for those desiring play material for the lower grades. Junior College. Five periods.

Miss Keyes.

7. **Folk Dancing.** Folk and national dances selected and arranged to meet the needs of schools and playgrounds. Junior and Senior College. Five periods.

Miss Keyes.

8. **Esthetic Dancing.** Technique of the dance. Plastic exercises; the development of bodily co-ordination and rhythmical responsiveness. Junior and Senior Colleges. Five periods.

Miss Keyes.

9. **Classical Dancing.** Advanced technique classical dances. Prerequisite, Course 8. Junior or Senior College. Five periods.

10. **Interpretative Dancing.** The expression of thought and feeling thru rhythmical movements. Musical analysis and the composition of original dances. Junior or Senior College. Five periods.

16. **Anthropometry and Physical Examination.** Practice in making the usual measurements; signs and symptoms of physical defects; discussion of principles as related to physical training. Course for men and

women. Seaver's Anthropometry required as a text. Five periods. Junior and Senior Colleges. Dr. Abbott.

22. **Athletics for Men.** Team and group athletics. Games for boys and young men. Course is planned with needs of school principals and teachers in mind. Junior and Senior Colleges. Mr. Long.

23. **Recreation Course.** A recreational non-credit course for men and women in which numerous group and team games will be practiced. Opportunity will be given a limited number to play tennis and golf. Those desiring to play tennis or golf should arrange with the director at the beginning of the term. Dr. Abbott.

1. **Personal Hygiene.** The course will cover the fundamental facts relating to personal health and efficiency. Foods and feeding habits, clothing, housing and ventilation, baths and bathing, muscular activity, work, rest, and recreation, avoidance of communicable diseases as a health problem, etc., will form the subject-matter of the course. Lectures, recitations, reference assignments and reports.

Mrs. Gilpin-Brown.

PRACTICAL ARTS

SAMUEL MILO HADDEN, A.M., Dean

The Practical Arts Group comprises Woodwork, Metal Work, Book-binding, Printing, Drafting, Fine Art, Accounting, Commercial Arts, Domestic Science, Household Arts, and Agriculture. This group occupies the entire three floors of the Guggenheim building, the first floor of the Training School, the Library basement, and the greater part of the basement floor of the Administration building. There has also just been completed a cottage which is for the exclusive use of the home economics department.

Courses are varied in nature in every special department. These are arranged along both the lines of theory and practice, neither of which is sacrificed for the good of the other. Methods in teaching the subjects in the public school are emphasized, and when a person has done his major work in his chosen division, he is fitted to do the work, with an added advantage that he is also practically trained to teach it in the schools.

INDUSTRIAL ART

SAMUEL MILO HADDEN, A.M.

JOHN T. MCCUNIFF, A.B.

CHARLES M. FOULK, Pd.B.

Courses Primarily Junior College

5. **Methods in Practical Arts Subjects.** Required of all first-year students, and also of those in later classes who have not had its equivalent, who are majoring in the practical arts group, including manual training, art, home economics, printing, bookbinding, stenography, and elementary agriculture. The course deals with the fundamentals of teaching practical arts subjects, which includes a study of materials and processes. Correlation, e. g., inter-relation between included subjects, geography, arithmetic, and other appliances for the illumination of subjects; the introduction of practical arts subjects in the public schools, with equipment, supplies, etc. Observation of teaching in the training school classes is part of this course. Four hours. Every term.

1. **Elementary Woodwork.** This course is for beginners, and is designed to give a general knowledge of woods, a fair degree of skill in using woodworking tools, and an acquaintance with the underlying principles of manual training. It also includes mechanical and freehand drawing in their application to constructive design and decoration. Five hours. Every term.

2. **Intermediate Woodwork.** This course is designed for those who wish to become proficient in the use of woodworking tools. It includes constructive design, the principles of cabinet-making and furniture construction, and wood finishing. The different important constructive joints are discussed and applied wherever possible in the cabinet work done in class. Five hours. Fall and Winter Terms. Prerequisite: Manual Training 1, or equivalent.

19. **Wood Turning.** This course is designed for those who wish a more comprehensive knowledge of the art. The course will consist of talks, discussions, and practical work regarding various phases of the work, such as turning of patterns between centers, face plate turning, finishing, care of tools, preparation of materials, upkeep of lathes, speeds necessary for turning different diameters. Winter Term. Five hours.

8. **Elementary Art Metal.** This is a laboratory course dealing with the designing and constructing of simple artistic forms in sheet brass and copper. The aim is to create objects of artistic worth. The purpose is to realize in concrete form those qualities characteristic of good constructive design, such as fine proportion, elegance of form, and correct construction. Fall and Winter Terms. Five hours.

Courses Primarily Senior College

9. **Advanced Art Metal.** This course should be taken after Course 8, since it deals with more advanced ideas in metal work, and includes work in brass, copper, bronze, and German silver. This course deals largely with the designing, decorating, and artistic coloring of metals. It also includes a short course in the chemistry of metal colors, and the use of lacers for protection. Simple artistic jewelry is made the basis for the constructive work in this course. Five hours. Spring Term.

16. **Historic Furniture.** Lectures illustrated by pictures showing the development of and characteristics fundamental in the Netherlands, England, and early American period. One hour.

23. **Constructive Detail Drawing.** The purpose of this course is to prepare the student to draw in detail the different parts of a building or articles to be constructed of wood, stone, iron, brick, or other materials. The subject of proportion, dimension, and strength and the method of preparing and assembling will be dealt with in connection with the making of the detail drawing. The terminology in connection with this course will be given full consideration. Five hours.

13. **Advanced Architectural Drawing.** This course is a continuation of Course 12, and deals with the drawing of plans for cement, brick, and stone structures, culminating in a complete set of plans and specifications for a residence or a public building of moderate cost. Prerequisite: Courses 10 and 12. Five hours.

Special Graduate Courses and Seminar will be arranged upon application. Arrange with Dean of Practical Arts Division.

Printing

1. **Elementary Printing.** This course is intended to acquaint the student with the fundamental principles underlying the printing art. In this course the student becomes efficient in hand composition, spacing odd jobs, locking up forms, making a job ready for press, and operating presses. Five hours. Every term.

2. **Intermediate Printing.** This course is a continuation of the elementary printing and is designed to make the student more proficient in the lines already mentioned; also rule work, and designing programs, window cards, etc., underlaying and overlaying on the press, making ready half tones, two- and three-color work, proof reading, and operating in Monotype keyboard. Five hours. Fall and Winter Terms.

Bookbinding

1. **Elementary Bookbinding.** This course includes the following: Tools, machines, materials, and their uses, collating and preparing the sheets for sewing, sewing on tape and cord, preparing of end sheets, trimming, gluing, rounding, backing, headbanding and lining of backs.

Cover materials, planning and making of covers, finishing and lettering of titles, and labeling; all the steps necessary for the binding of full cloth-bound books. Five hours. Every Term.

2. **Intermediate Bookbinding.** This course includes the binding of books in half morocco and full leather, including such processes as: Tooling in gold and blank, edge gilding and marbling, and the making and finishing of cardboard boxes and leather cases. Five hours. Winter and Spring Terms.

FINE AND APPLIED ARTS

WALTER I. ISAACS, B.S.

AGNES HOLMES, Pd.M.

Courses Primarily Junior College

1. **Elementary Drawing and Design.** In this course a wide range of problems in public school drawing is taken up in a brief manner to give the student a general knowledge of the subject. Those students who are taking their majors in the department lay a foundation for their future work, and others who elect the course find it an aid in their teaching. The course includes the following subjects: (a) Freehand drawing of objects in accented outline; linear perspective; nature drawing; lectures on methods of teaching are given. Two hours.

(b) The study of elementary design principles. Exercises involving line, space, and color. Simple problems in construction. Three hours.

2. **Applied Design.** The construction and decoration of notebook covers, desk pads, and similar articles; theory of design in its relation to useful objects; the application of original designs by block printing on curtains, table runners, or pillow covers. Five hours.

5. **Water Color Painting.** Groups of still life objects and flowers are rendered in water color. The student is allowed freedom of technic, but a close study of color values is insisted upon. Prerequisite: Course 3. Five hours.

8. **Pottery.** Handbuilt vases, bowls, decorative tiles, etc., are made. The department is equipped with a modern kiln, and the work of students is fired and glazed. A variety of glazes with different colors is used. Embossed, incised, and inlaid decorations. Five hours.

19. **Household Art Design.** Theory and practice of design in relation to house decoration, costume, etc. Five hours.

Courses Primarily Senior College

15. **Methods in Art Supervision.** The supervision of art education in city systems; the planning of a course of study; methods of teaching. Three hours.

Requirements for a Major in Fine and Applied Arts.

In the Junior College, courses 1, 2, 3, 4, 5, 6, 9, 10, 11 and 19 are required for major work.

Requirements for a Major in Fine and Applied Arts

In the Senior College, Courses 12, 13, 14, and 15, are required for major work. Other courses may be substituted for Course 14, with the consent of the Director of the department.

HOME ECONOMICS

MERLE KISSICK, Ph.B., A.B.

FLORENCE REDIFER, A.B.

GLADYS SCHARFENSTEIN, Ph.B.

HELEN PAYNE, B. S.

The Junior College Courses in Home Economics are planned primarily to meet the needs of those wishing to teach these subjects in the elementary schools, and at the same time they give opportunity to elect considerable work along other lines. However, by confining electives to this department, to the sciences and to art, students may be able to fit themselves for high school teaching. While high school Home Economics teachers may be trained to do good work in a two-years' course, it is advisable to take the full four-year course if students wish to secure and hold with credit high school positions.

Opportunity is given in the Senior College to major in either Household Science or Household Art, with freedom to elect in either phase of the work.

Even tho a student may wish to take equal amounts of both Household Science and Household Art, it is advisable to choose one side of the work as a major and elect from the other side.

Uniforms

All students when in the Household Science laboratory are required to wear white tailored waists and skirts, no color. Directions for aprons will be given at the first class period.

HOUSEHOLD SCIENCE**Courses Primarily Junior College**

1. **Elementary Cooking.** A study of the following articles of food is made from the standpoint of composition, nutritive value, digestibility, growth or manufacture, marketing, adulteration, and methods of preparation: Fruits, vegetables, cereals, eggs, milk, meats, fish, and beverages. Special emphasis is laid upon the principles underlying the processes of cooking. Five hours.

3. **Fancy Cooking and Serving.** Meals are planned, prepared and served at a given cost. Due consideration is given to diet suited to individual needs, varying with age, health, and activity. Proper balancing of the menu is studied and carried out in the practical work. Five hours. Prerequisite: D. S. 1 and 2. Miss Redifer.

15. **Demonstrations.** Each girl will be given an opportunity to demonstrate some process of cooking before the entire class. Elective. Prerequisite: D. S. 1 and 2, or 1 and 3.

3. **Methods of Teaching Household Science.** A study of the problem of teaching domestic science in the elementary and high schools. It includes the arrangement of courses of study for different schools, and methods of presenting the subject-matter, planning of equipment, and laboratory management. Text books reviewed and lesson plans discussed. Prerequisite: D. S. 1 and 2, or 1 and 3.

Courses Primarily Senior College

18. **Household Management.** This course consists of one month's practice in the Domestic Science Cottage. Each girl has practice in the management of all household tasks, in cooking the three meals per day for one week, as laundress, and in the care and cleaning of the house. Miss Scharfenstein.

HOUSEHOLD ART

Courses Primarily Junior College

1. **Household Art Crafts.** A study of the construction and decoration of articles for the home and for personal use, hand work as a basis, stressing accuracy of construction and application of good designs. Required of D. S. and H. A. majors without previous training in hand work. Miss Scharfenstein.

3. **Household Arts Crafts II.** Application of color to articles for the home, paying special attention to comparative costs and attractive combinations thru the medium of woven materials. Elective for D. S. and H. A. majors or required as a substitute for Household Arts 1. Five hours. Miss Scharfenstein.

7. **House Decoration Representation.** The application of principles of design to the decoration of the home, stressing the use of color in relation to space. Water color sketches used throughout the course. Elective for domestic science and household art majors. Five hours. Miss Scharfenstein.

6. **Elementary Textiles.** Identification of textile materials from consumer's viewpoint by work with structure, color, width, price, etc. Microscopical, chemical and shopping study. Required household art majors. Five hours. Miss Kissick.

5. **Millinery.** Study of basic design principles applied to the hat and silhouette with practical shop methods of remodeling and constructing from new materials. Required household art majors. Five hours.

Miss Kissick.

8. **Methods of Teaching Household Art and Household Science.** A study of the problem of teaching household science and household art in elementary and high schools. It includes the arrangement of courses of study for different type schools; methods of presenting subject-matter; planning of equipment, and laboratory management. Text books reviewed and lesson plans discussed. Five hours.

Courses Primarily Senior College

9. **House Decoration.** An appreciation course in decorative elements with reference to practical problems in application. Illustrative work in Model Cottage. Five hours.

Miss Kissick.

Courses Primarily Graduate College.

15. **Drafting.** A study of drafting systems used in schools and colleges with aim of developing freedom in use and modeling patterns. Five hours.

COMMERCIAL ARTS

JEHU BENTON WHITE, B.S.

FRANK W. SHULTIS, A.M.

Students who have done commercial work elsewhere, for which they have received entrance or advanced credit at this institution, will be given advanced work and will be allowed to select work from both branches of the department.

Courses Primarily Junior College

1. Beginning principles of Gregg Shorthand together with supplementary exercises. Five hours.

11. **Elementary Typewriting.** Beginning work in touch typewriting, covering position at the machine, memorizing of keyboard, proper touch, and correct fingering, with instruction in the care of the machine. Five hours.

12. **Business Correspondence.** Study of approved forms of business letters, proper spacing and placing, filling in form and circular letters, addressing envelopes, manifolding, tabulating. Five hours.

40. **Business English.** The elementary principles involved in writing correct English. The sentence, the paragraph, grammatical correctness, effectiveness, clearness, punctuation.

25. **Commercial Arithmetic.** A rapid review will be given. This will processes and of common and decimal fractions will be given. This will

be followed by a comprehensive treatment of percentage and its applications. Only modern methods will be used. Special attention will be given to improvement of accuracy and speed.

26. **Business Penmanship.** This will be open to all who want to improve their penmanship or their methods of teaching it.

21. **Elementary Accounting.** Fundamental principles of double-entry bookkeeping.

22. **Intermediate Accounting.** Wholesale set.

Courses Primarily Senior College

7. **Methods in Commercial Work.** The commercial field; equipment; the course of study; special methods; equipment of teacher; relation of business school to the community. Five hours.

13. **Advanced Typewriting.** Speed practice, direct dictation, preparing all kinds of legal documents. Five hours.

23. **Advanced Accounting.** Corporation set.

AGRICULTURE

HORACE J. KRAFT, A.M.

1. **Cereal Crops.** The essentials of cereal crop production, adaptation, cultural methods, varieties, exercises in comparative judging of wheat, oats, rye and barley, speltz and emmer will also be studied. Best practice as to system of cropping and crop rotation will be noted. Five hours. Text: *Small Grains*—Carleton.

2. **Forage Crops.** A study of the forage crops, their cultural requirements, adaptability to different regions, feeding value and uses, soiling and silage crops, exercises in identification, both on plants and seeds. Five hours. Text: *Forage Plants and their Culture*.—Piper.

3. **Farm Animals.** A study of the market types of horses, beef cattle, hogs and sheep, Judging and scoring of animals. Inspection trips in the immediate vicinity of the college are made as time permits. Five hours. Text: *Types and Market Classes*.—Vaughan.

4. **Poultry.** The economic importance of poultry, buildings, feeding of poultry, egg production, grading and marketing of poultry products. Types and breeds. Scoring. Five hours. Text: *Principles and Practice of Poultry Culture*.—Robinson.

5. **Dairying.** A study of the types and breeds of dairy cattle. The dairy industry. The production of market milk. Silos and silage. Testing milk for butter fat. The building up and improvement of the herd. Judging. Five hours. Text: *Dairy Cattle and Milk Production*.—Eskles.

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Hand Book of Practice

FOR

Training Teachers, Supervisors
and
Student Teachers
in
The Training School



Colorado State Teachers College

A Statement of the
Underlying Principles and
Some Regulations
Governing
The Elementary School

State Teachers College
Greeley, Colorado

The General Plan of the Training School

In considering the general scheme of an elementary demonstration and training school it must be understood that the highest type of work is desired and expected in the minute details of administration, curricula, methods of teaching, etc. It is our intention to make out as soon as possible a careful and minute description of every small detail of our school.

Those considering the training school from any standpoint should keep in mind the fact that some of our aims are as follows:

1. To prepare teachers to teach the common branches as well as special subjects in the schools of Colorado. Keeping this fact in mind, one can readily understand that we do not want to develop a school that is entirely different from the common schools of the state. Especially is this true in respect to the subjects taught. However, the training school should stand out as a model of all that is practicably best in an elementary school. The word "practicable" is vital in this case, for ideal or theoretical schemes should only be tried out with the greatest caution. The word of any scientist, educator, or superintendent without the backing of plenty experimental evidence and concrete illustration is not sufficient reason for changing any of the vital parts of the school. On the other hand, we should be the leader in the state in all that is modern and new. New methods that save time, new schemes for better preparing the children for life, new curricula, etc., should be continually considered by us. When these warrant, they should be tried out. But peculiar individual schemes which, it is evident, are not at all likely to be adopted by the schools of the state should not be introduced here. This does not exclude any carefully considered scheme which may first be introduced here and eventually bring the better schools of the state to a higher plane. We should be the leader, and are willing to take full responsibility for innovations which are practicable and get results.

2. Growing out of feature No. 1 is the problem of how best to deal with the student teacher in order to give her the most practical teaching knowledge and experience possible and at the same time make the school a model of all that is best from the standpoint of the children. Our school should not be regarded as one in which inexperienced girls "practice on the children." In the first place, we take care of this problem by having in each grade a training teacher, one chosen with the greatest care, whose personality, native intelligence, and training, all fit her for the double duty (a) of teaching student teachers to teach and (b) teach-

ing the children. The scheme which we use at present is as follows:

(1). The training teacher is to be the director and shall have control of every class taught, at regular intervals herself teaching each class. As much regular teaching is to be given the student teacher as the interests of the children will allow. In any case the training teacher is at all times responsible for the entire work of her grade. The discipline, ventilation, subject matter to be taught, etc., is never to be left entirely to the student teacher, and it is the duty of the training teacher to interfere, even in the middle of a lesson, if the work of the student teacher is injuring the children. (2). It is expected that the training teacher will teach demonstration lessons for each student teacher. These should not be occasional and far between but should cover large units. In this way inexperienced students will not be allowed to disturb the advancement of the children. To assist in these demonstrations, each training teacher is given an assistant. This assistant is supposed to be an experienced teacher and to have had special methods and training school practice in the grade in which she assists. She will spend two full hours a day assisting the training teacher, and most of her time will be employed in supervising and demonstrating for student teachers rather than doing clerical work. In other words, the assistant is employed primarily for the purpose of teaching. In making out report cards and records of this nature, it is understood she will be employed to the best advantage by the training teacher.

3. Supervisors from the college departments of English, Mathematics, Reading, Geography, Child Study and Psychology, Education, Printing, Woodwork, Commercial work, Sewing, Cooking, Science, Art, Nature Study, Music, and Physical Training are, at present, assisting in the work of their respective departments. The adjustments between the training school and college teachers who supervise is as follows:

(1). It is expected that all shall understand and agree upon the general aims of the school, which are to be given in this report.

(2) In cases of differences of opinion between supervisors and training teachers, these should be straightened out as quickly as possible through conferences. These rarely persist when both parties fully understand each other. It is the intention of the training school to recognize and utilize the special abilities of the supervisors. Authority is never to be in evidence on one side or the other. We have not had, and do not expect, difficulty from this source.

(3) The direct management of the student teacher in methods, discipline, etc., is in the hands of the training teacher. In grading for teaching the recommendations of the supervisors are considered and appreciated.

Plans: The subject matter and plans for the term's work are made out by supervisors and training teachers together and furnished to the student teachers. Written statements of method etc., may be demanded of the student teacher by the training teacher, until the training teacher is satisfied that there is no further need of such plans in furthering the best possible work. In no case are these plans to be considered a formal duty, a part of work in order to earn credit, etc. They are for the sole purpose of improving the work of the student teacher and to ascertain the extent of her preparation. All training teachers use the same form for plans, which, after careful study, we have decided shall contain the three headings: Subject matter or "What to teach", Aim and Purpose or "Why it is taught", Method or "How it is taught". There is no limit as to what may be given under each heading, so long as it conforms to the general plan of the school and produces the desired results. In method the student teacher is guided by the following outline:

TEACHER'S GUIDE FOR SELF MEASUREMENT

These questions have been selected as embodying the essential features of the recitation. You should study this sheet continually. Every question is of vital importance. A careful report on each question will be demanded from you twice each term—the first report at the end of the first five weeks and the second report two weeks before the end of the term. Definite statements concerning each individual child will be asked for whenever it is possible to do this. Be honest in your reports, and do not try to pad them. Confer often with your training teacher and with the principal. It is their business to give you attention. Know what you are doing, why you are doing it, and where you are going. The Training School is yours. Be sure that you have a good supply of definite, practical, teaching knowledge before you have finished your practice teaching. If necessary, elect teaching beyond the regular requirements.

1. Are the children acquiring good habits of study and recitation?
2. Are you sure that the child knows for what he is working in each recitation?
3. How do you make sure that a pupil who fails on a point finally gets it?
4. Insist upon good English, best writing, etc. in all classes. State your experience in this work with your class.
5. Is the form of your questions improving?
6. Is the center of the recitation in you or in the pupils. Who does the work? Do the children ask intelligent questions as well as you?
7. What definite facts or in what definite ways have your pupils gained?

8. Can the children organize material with an outline or give a connected talk on a topic which has been developed?

9. Have you paid any attention to the weighing of values in your classes? And have the pupils been given opportunities to weigh values?

10. Give several methods you use in meeting the needs of both slow and quick children in the same class.

11. Is there any confusion in the class at the beginning of a lesson? At the end? Why?

12. Do the children all have a fair chance to recite?

13. Is there an improvement in each one who was troublesome about speaking out without permission?

14. Does any child interfere with the work of another?

15. Are you able to cause a child to want to do right?

16. How do you care for the hygiene of your room? Ventilation?

In addition to this, a concrete record of the work of each student teacher will be filed at the end of each term's work. This record runs as follows:

CONCRETE TEACHING RECORD

Give Careful Description Under Each Heading.

Name

Age

Personal Appearance

Discipline

Professional attitude

Results obtained

Personality

DISCIPLINE

Military rule and dogmatic authority are not in evidence. The children are trained to be careful of the rights of others, to protect and preserve the beautiful campus and the equipment furnished them by the state, to do all rough playing out-of-doors and keep the inside of the schoolhouse quiet and in a condition so that others who want to study and read may not be disturbed. Each child is given the largest amount

of liberty that the interests of the group will allow. However, we go to the extent of even corporal punishment in special cases. Honest effort to do right is demanded of every child.

Subjects and Their Aims

The entire plan and method of teaching a school subject will depend upon the aim of teaching it. Too often school subjects are taught as an end in themselves. They are often taught long after they have ceased to be valuable.

The training school has a definite reason and aim in teaching each subject in the curriculum. The following pages state these aims. Anyone interested in the work of the school should read and study them carefully, for they are the culmination of the best thought and practice we are able to find.

General Attitude on Subject Matter

School subjects are to train the children to live, and should be taught only to the extent that they are useful to the children at present or at some future time. Present needs do not cover the entire situation, but future must be considered as well. For example, we may say that there is little immediate need for a child to know the multiplication table; yet when he is an adult, he will appreciate the fact that as a child he learned to multiply. Thus it is our intention to complete the mechanics of such subjects as English, Reading, Arithmetic, Spelling, and Writing as early in the school course as it is possible to do so, and at the same time give full attention to the child's physical growth, mental and nervous hygiene, play life, and imagination. We believe that a child may be well grounded in the mechanics of the above subjects without interfering with his mental development in other ways, provided, of course, that all sides of the problem are continually kept before us and that nothing is carried to **excess**. Eating, sleeping, physical exercise, or any other life process is bad when carried to excess. On the other hand it must be understood that we do not intend to stunt any beneficial side of a child's nature.

In all subjects, methods which gain and hold interest in a normal and natural manner are favored. Play methods which produce the desired results are to be used especially in the lower grades. However, extensive entertainment, peculiar antics, continuous talking, etc. by the teacher in order to attract the children are not to be tolerated. Stimulation which is likely to result in depression later on is to be avoided. Play methods which are entirely play and are called "arithmetic", "language work" etc., and do not get results in the subjects they are supposed to teach are to be avoided.

As to disciplinary effect of school work, we believe that good, hard effort accompanied by healthy interest under hygienic surroundings

is likely to have a good effect upon the child's entire physical, mental, and moral development. In this case, however, we avoid "formal discipline" by dropping the formalism, and believe that good, hard work that is useful is more beneficial than hard work that is useless. Mental gymnastics are, therefore, excluded from our plan. We think that there is plenty of useful work to employ all the time of the elementary school child.

A part of teaching the child to live is teaching him to earn a living. Vocational subjects should be introduced into the elementary school as early as it is possible to accomplish worth while results. The more useful modern languages should be included here. These subjects cannot be required of all children.

Electives in the Elementary School

In making such subjects elective we do not mean to allow the child to be free to choose and drop subjects at will. The following rules govern here:

1. A subject such as Spanish or Manual training is assigned to a child only after a study of his needs, his purposes in life, and his special abilities.

2. The parents, the training teacher, and the child all have a voice in the choice of elective subjects.

3. A subject, when once elected, should be continued for the remainder of the elementary school course, and cannot be dropped before the end of the school year. In case a subject is dropped the reasons must be such that the training teacher and principal agree that it is best for the child to drop it. For illustration, if a girl elects sewing in the 5th grade, it is understood that she, her parents, and her teacher all think it wise for her to learn to sew. She should learn to sew well before she drops the subject. The elective is as much a serious part of the school work as the required subject, and often it is more important.

English and Reading

Our aim in teaching these subjects is to advance the children as far in their mother tongue as is possible in the elementary school. To teach each child to read, write, and speak the English language fluently and correctly is our sole aim. We employ methods which seem to work best in accomplishing the above stated purpose.

Physical Training

Physical training is considered fundamental in this school. There is a forty minute play period each day in which supervised play is carried on. In addition to this, a full course in folk and esthetic dancing is provided for the girls, and in the intermediate grades gymnastics and mili-

tary drills for the boys are taught at present. We are working on a complete course in these subjects, including corrective exercises for all the grades.

The purpose of this work is to make health and happiness fundamental in all education. An educated man should have better health and more physical vigor—heredity and environment being equal—than an uneducated man.

Spelling

Special lists are learned in the spelling periods. The spelling of each child is made a problem which he and his teachers attempt to solve in all his written work. Correct spelling of ordinary words in regular written work is our aim.

Arithmetic

Accuracy and enough speed for practical purposes in the fundamentals are stressed. In addition, practical work in fractions, decimals, percentage, interest, taxes, partial payments, and mensuration is given. Book-keeping and business arithmetic as an elective is given in the eighth grade. We are also considering algebra as an elective in the same grade.

Writing

It is our aim to have our children do good writing at all times. We are not advocates of any system or movement, but work for the necessary speed and legibility to meet the practical demands of life.

Geography and History

These subjects are taught in order to give the children a knowledge of the world and its people and a knowledge of their past. Thought work and wide reading are stressed rather than the memorizing of facts and dates. In history, a knowledge and an intelligent understanding of the present are considered especially necessary.

Hygiene

Incidental to the work of every grade, instruction and practice in hygiene is stressed. One term of careful work covering two practical text-books is given in the eighth grade.

Woodwork and Mechanics

Woodwork, one hour a day, is given from the fifth grade up. It is our aim to give the boy a technic as well as to have him acquire an interest in this kind of work.

Mechanics, electricity, wireless, etc. are given in the seventh and eighth grades one hour a day. A knowledge of the theory and a degree of technical skill may thus be acquired early and serve as a basis for life activities.

Sewing and Cooking

These subjects begin in the fifth grade. We strive to teach the girls to do their own sewing and to manage a house. The work is serious, and large results are expected from it.

Modern Foreign Languages

In this work it is our intention to make the children proficient in one or two of the modern foreign languages. At present German and Spanish are taught.

Typewriting and Printing

Typewriting and Printing are taught in the seventh and eighth grades. These subjects are taught to children who are likely to use them in life.

Music

Music is taught regularly in all the grades. The pupils are taught to read notes and memorize common songs and the national airs. The elementary school has an orchestra, and instruction in this work is given free of charge to children who may be interested in the instruments.

Art

Drawing, modeling, paper-cutting, etc. are done in the lower grades. In the upper grades pupils with special art abilities are selected and are given as much work in art as the demands of other studies will admit. Picture study and art appreciation are stressed.

Nature Study and Agriculture

In the spring and summer terms these subjects are taught quite extensively. We desire to teach every child to love and understand nature. We endeavor to have every child cultivate his home garden and to learn scientific methods of growing vegetables, flowers, and lawns. We have a large demonstration garden for the elementary school. A good plot is given to each grade, and the children do as much of the work of planting and caring for it as is possible.

SOME REGULATIONS

1. For five hour's credit a student teacher is required to do work in the training school five 45-minute periods a week. If the subject to be taught is given less time than this, carefully reported observations for the remaining time may complete the period, or special research and reading assignments may be made by the training teacher. Any special work which the training teacher thinks will be beneficial to the student may be assigned in order to complete a 45-minute period.

Example—Miss B. teaches arithmetic for 30 minutes. She observes and carefully notes the teaching of spelling, geography, history and writ-

ing on different days during the remaining 15 minutes of her period. These observations are to be kept in a note book, so that the training teacher, principal, or supervisor may call for them at any time. They should be written during the observation.

2. In addition to the regular work as outlined above, each student teacher is to read from two to four books, and make note of any valuable helps obtained from these collateral readings. The name of the book or article and the pages on which the helpful information is to be found are also to be recorded. The same notebook used for observations may be used for these records.

Example—Miss B. who teaches arithmetic reads in **Brown and Coffman** that short drill periods are more beneficial than long ones. In her notebook she records this with the page on which it is found.

3. Training teachers have regular hours for conferences with the student teachers. These will vary during the different terms, as the work of the training teacher is not always the same. Conference hours of the training teachers will be posted upon the bulletin board in the office of the principal at the beginning of each term.

4. Student teachers meet the training teachers in their respective rooms for a regular meeting each Monday at 3:15, except on the first Monday of each month when they all meet with the principal in the training school assembly room. At these meetings the problems of the student teacher are taken up, and demonstrations of special methods are given.

5. In addition to the above, student teachers are given practice in planning lessons, programs, and curricula. Special practice and instruction in grading papers and keeping records is also a necessary part of the work.

SUPERVISORS AND TRAINING TEACHERS

1. Special Branches. In art, music, woodwork, cooking, sewing, and some phases of physical training the supervisors work directly with the student teachers. In these branches the supervisor may demand special preparation of the student teacher aside from the requirements of the training teacher; or the supervisor and training teacher may agree that the plans of the student teacher are to be approved by both before the lesson or series of lessons are taught.

2. In the remaining subjects the supervisors work thru the training teachers. Their suggestions are always to be given due consideration.

3. Supervisors and training teachers must be careful not to issue opposing instructions to student teachers. The broadening influence of

seeing both sides of a question is valuable in academic life, but in a case where these instructions are to go into practice the student should not be confused by the opposing views of her superiors.

4. In any case the training teacher is directly responsible for the work of her room, and no one should change the work without her approval. This includes the work in the special subjects mentioned above.

5. The value of the supervisor's special training is to be recognized at all times. Each supervisor should feel that the work in his special branch is in accordance with the best practice.

6. Definite records (dated) with concrete samples of work should be kept on file. These indicate the character of the work of the children as well as the records made by student teachers. These records are to be kept by the training teachers. Type work from each child is to be filed each term in the office of the principal.

7. No one is to hold conferences or carry on conversation in a class room while the children are trying to recite and study. The chaos into which the class rooms immediately drift is sufficient reason for strict enforcement of this regulation. With all the ordinary distractions attendant upon the work of a school of this nature, the study and recitation periods must be carefully guarded in order to obtain good results from them. Thus the training teachers who hold conferences in their class rooms should have these during physical training, manual work, or like periods, but most often before or after the regular school sessions.

REGULATIONS FOR OBSERVATION

1. College instructors should feel free at any time to plan observation lesson in the training school. It is a part of the function of this school to demonstrate for these classes. In asking for demonstrations, college instructors should arrange for these at least two days, and when possible, one week in advance. This provides time to adjust the regular work and also gives the training teacher an opportunity to prepare for the observation.

2. All observers, class or otherwise, shall come at the beginning of a lesson and remain until it is finished. This regulation is imperative, since the large number of observers who constantly attend the training school would, if they were allowed to run in and out of class-rooms at will ruin the work of the children.

3. Observations of ordinary lesson periods without a full understanding of the purpose of the lesson as well as its place in a series of lessons are very likely to lead to mistaken ideas of the work of the school. Therefore we advise both students and faculty members to observe a series of

lessons in any subject in order to get a better understanding and conception in the catalog as observation classes.

4. An entire college class cannot expect more than five special demonstration a term. The large number of college classes makes such a regulation necessary. This does not include classes that are scheduled as observation in the catalog.

SUGGESTIONS FOR OBSERVATION

The observation of a class of live boys and girls who are being taught according to the highest ideals of modern pedagogy should form the very best type of instruction for prospective teachers. Books may explain, teachers may lecture and question the students, but an actual class observation is necessary to furnish the real specimen, and is the only way of providing definite understanding of theory.

Observers are often in doubt about what to look for in a class. We are providing the following outline. We suggest that the observer dwell upon a few points in each class.

SUGGESTED PLAN OF OBSERVATION

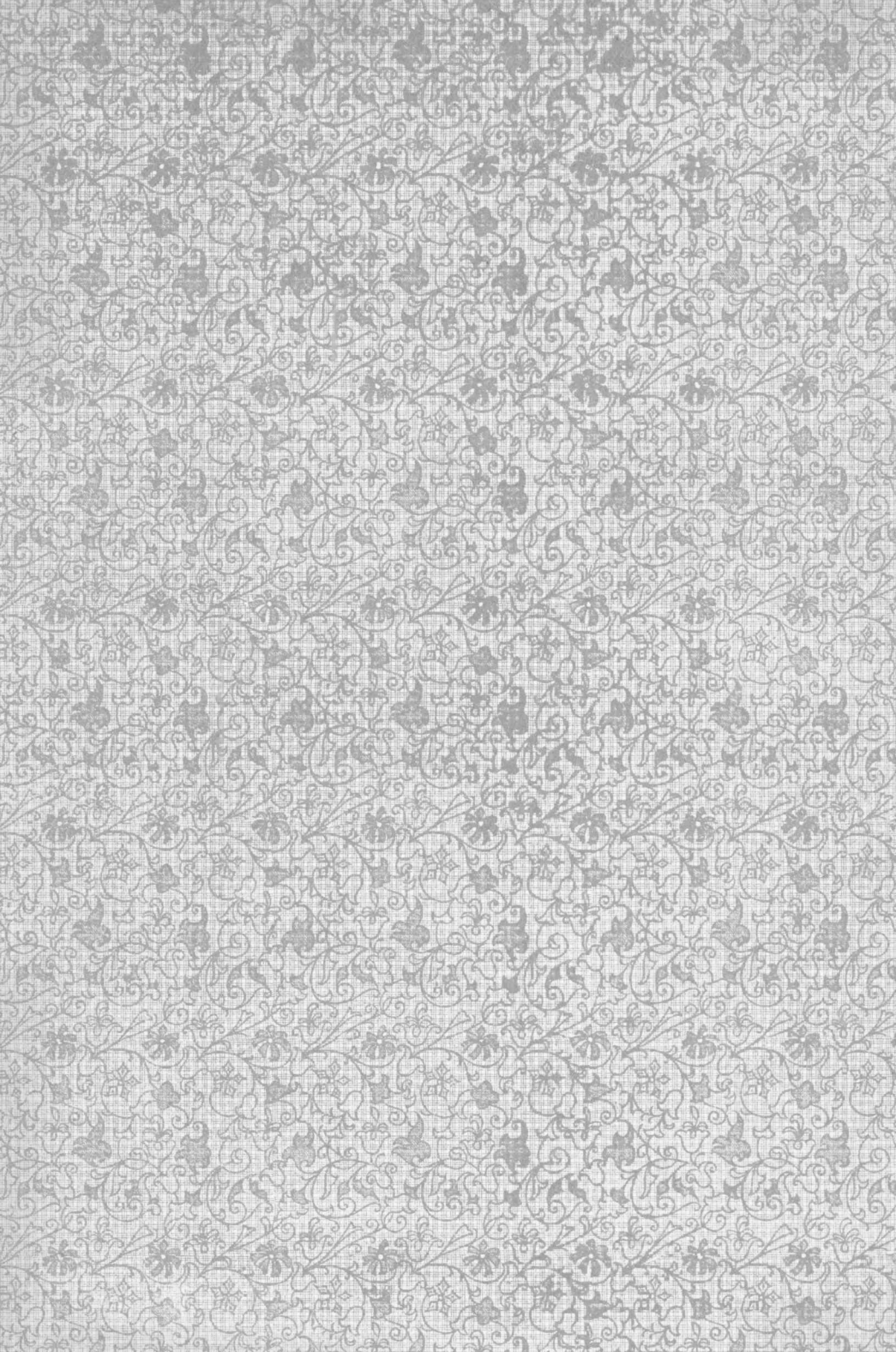
- I. Subject Matter.
 - Description of the amount covered.
- II. Preparation.
 1. Teacher.
 2. Pupil.
- III. Skill in Presentation.
- IV. Means employed.
 1. Blackboard.
 2. Questions.
 3. Skill in Drill.
 4. Story.
 5. Other Means.
 4. Number of times different pupils recited.
(Were these used to proper advantage?)
- V. Effort.
 1. Teacher.
 2. Pupil.
- VI. Manner of Meeting Children.
 1. General.
 2. Slow Child.
 3. Quick Child.
 4. Number of times different pupils recited.
 5. How was the child who failed given the instruction he needed?

- VII. Use of English (Oral and Written).
 - 1. Teacher.
 - 2. Pupil.
 - VIII. Use of Voice.
 - 1. Teacher.
 - 2. Pupil.
 - IX. Personal Appearance—Teacher and Pupils.
 - X. Care and Hygiene.
 - 1. Room.
 - 2. Children.
-

THE KINDERGARTEN

As a part of our school a regular kindergarten is maintained. Students may teach or observe in the kindergarten under the same regulations as have been stated for other grades.

Every student who is working for a kindergarten major is required to teach thru the session of kindergarten every morning during the term. The subjects taught in the kindergarten are so closely related and depend so much upon the present needs and interests of the children that it is very important for the student teachers to know the kindergarten as a whole. Every student is given some experience in teaching every phase of kindergarten work and practice in planning this work.



1916-17

Colorado State Teachers College of Greeley Preliminary Announcement. The Summer Term 1917. June 18-July 27. Series 16, No.7.

A School of Reviews. State Teachers College, February 1, 1917. Series 16, No.8.

Colorado State Teachers College Bulletin Handbook of the Extension Department February 24, 1917. Series 16, No.9.

Colorado State Teachers College Bulletin Summer Term 6 weeks June 18 to July 27, 1917. (March 1, 1917) Series 16, No.10.

Community Cooperation Plan March 15, 1917 (Colorado State Teachers College Bulletin.) Series 16, No.11.

Announcements and Catalog of Courses for the Summer Term 1917. Series 16, No.12.

Handbook of Practice for Training Teachers Supervisors, and Student Teachers in the Training School. (No Date; Series 16, No.13?)

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Series 16, No.2.

Twenty-sixth YearBook and Catalog of the
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State High School of Industrial Arts High
School Department of the State Teachers
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In Memoriam. Zachariah Xenophon Snyder.
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A Study in Addition, Research Bulletin
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The State Teachers College of Colorado

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THE SUMMER TERM

1916



SIX WEEKS
JUNE 12 TO JULY 21, 1916

PUBLISHED BY THE BOARD OF TRUSTEES
GREELEY, COLORADO

BULLETIN OF THE STATE TEACHERS COLLEGE OF COLORADO

Series XVI.

March, 1916

Number 1

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The State Teachers College of Colorado

ANNOUNCEMENTS AND CATALOG OF COURSES FOR THE SUMMER TERM

1916

SIX WEEKS
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GREELEY, COLORADO

In all publications of the College certain of the recommended spellings of the
Simplified Spelling Board are used

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IMPORTANT ANNOUNCEMENTS.

THE CALENDAR.

- June 12, Monday, Registration Day for the Summer Term.
- June 13, Tuesday, Recitations begin.
- July 4, Tuesday, Independence Day.
- July 21, Friday, The Summer Convocation. The conferring of Diplomas and Degrees, and the close of the Summer Term.

ADVANCED STANDING.

Individuals who expect to attend the Summer School of the State Teachers College, and who desire advanced standing, should write for application blanks for advanced standing at their earliest convenience, and should return these as soon as possible together with credentials to the College, so that they may be considered before the opening of the summer session. It is exceedingly important that full credentials, relative to all the work for which credit is expected be forwarded. This saves the student much delay and inconvenience.

PRACTICE TEACHING IN THE TRAINING SCHOOL.

Students who expect to teach in the Training Department, either the Elementary School or High School, during the summer session, are asked to correspond with Mr. Hugh before the opening of the term.

REDUCED RAILROAD RATES.

Reduced railroad rates on all railroads will be offered, the details of which may be obtained from your local agent or from the Secretary of the College at a later date.

THE STATE TEACHERS COLLEGE OF COLORADO.

FACULTY.

- †ZACHARIAH XENOPHON SNYDER, Ph.D., LL.D., President and Professor of Education.
-
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- GRACE CUSHMAN, Pd.B., Assistant Librarian, and Instructor in Library Work.
- GEORGE A. BARKER, M.S., Professor of Geology, Physiography, and Geography.

† Deceased, November 11, 1915.

* On leave of absence—Sabbatical year.

- JOHN R. BELL, A.B., A.M., D.Litt., Principal of the High School, and Professor of Secondary Education.
- RAE E. BLANCHARD, A.B., High School Preceptress and Instructor in Literature and English.
- AMY RACHEL FOOTE, A.B., Training Teacher, Sixth Grade.
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- JEHU BENTON WHITE, B.S., Professor of Commercial Work.
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- FRANK LEE WRIGHT, A.B., A.M., Professor of Education.

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Lecturers.

- G. STANLEY HALL, PH.D., LL.D., President of Clark University.
 EDWARD A. STEINER, PH.D., Grinnell College, Iowa.
 SAMUEL C. SCHMUCKER, PH.D., State Normal School, Westchester, Pa.
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 E. A. KIRKPATRICK, PH.M., Fitchburg, Mass.
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 JOHN A. SEXSON, A.B., Superintendent of Logan County Industrial High School, Sterling, Colorado.
 S. S. PHILLIPS, A.B., Superintendent of Otero County, La Junta, Colorado.
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 MABEL AUGUSTINE, Pd.M., Training Teacher, Third Grade.

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 ROSE SOTHMAN, Stenographer.
-

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RETROSPECT AND PROSPECT.

The Summer Term of the State Teachers College has been a success from the beginning. In 1905 a small number of the faculty were asked to work thru a six-weeks' summer term. Two hundred students or so attended. From that time until the present the number of instructors has been increased and the number of students attending has doubled and doubled until now more than a thousand regularly come to the school for the summer session.

ATTENDANCE.

1910.....	443	1914.....	897
1911.....	612	1915.....	1035
1912.....	824	1916.....	?
1913.....	864		

At present the regular faculty stays for the summer school, sixty in all, and ten or twelve of the leading superintendents and principals of the State are called in to assist in the courses in which they are expert. In addition to these the College employs six of the greatest men of the country to give courses of lectures, one week each during the term.

ATTRACTIVE FEATURES.

EXCURSIONS.

From Greeley there is an excellent opportunity on Saturdays and Sundays to take in a number of very interesting places, such as Estes Park, the new Rocky Mountain National Park, the greatest piece of natural scenery possibly in the world; the canons of the Poudre River; Eldora, the splendid Summer Resort; the Moffat Road experiences; the great heronries on the Poudre and the Platte; the great irrigating center of the West; fishing within two hours' travel; and above all, the great Rocky Mountain Range—250 miles of snowy range in full view from the College Campus. Once during the term a railway excursion at popular rates is arranged to take all who wish to go, into the heart of the high mountains. One excursion took the students up the "Moffat Road" to the summit of the Continental Divide, Corona, 10,600 feet. Another was over the "Switzerland Trail" to Eldora. Still another was to the summit of Pike's Peak. The students in each summer session choose the destination for their own excursion. Small parties make shorter trips to points of interest, for study or pleasure, nearer Greeley. Frequent week-end parties make the automobile tour to Estes Park and Long's Peak. Public automobiles take parties of four or five, making a charge of \$20.00 for the round trip for the whole party. The trip can be made in a day, or parties may go up to one of the beautiful rustic mountain inns on one day and return the day following. While there are many opportunities for recreation, the School is not offering its Summer Term as a holiday outing. The

work is serious and effective, the entertainments and excursions being arranged at the end of the school week.

THE CLIMATE.

Colorado sunshine is a proverb. The altitude of Greeley is one mile. The combination of a moderate elevation and sunshiny days produces an almost ideal condition for school work in summer. The middle of the day is usually warm, but in the shade the temperature is never unpleasant. The cool evenings are all that the student could desire. A humid, hot night is unknown.

THE OPPORTUNITY.

The holding of this summer term at The Teachers College offers an excellent opportunity to those who have to teach. It enables one who teaches a full year to attend the College during the summer term, get credit for work done, and when sufficient credits are secured, to graduate from the school. The diploma granted is a license to teach in the public schools of Colorado for life. Work may also be done toward securing the degrees, Bachelor of Arts in Education, and Master of Arts in Education. From five to twenty hours toward graduation may be earned in the summer term.

LOCATION.

The Teachers College is located at Greeley, in Weld County, on the Union Pacific, the Colorado and Southern, and the Denver, Laramie and Northwestern Railways, fifty-two miles north of Denver. The 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 10,000 inhabitants.

EQUIPMENT.

The institution is well equipped in the way of laboratories, libraries, gymnasiums, playgrounds, an athletic field, art collection, museums, and a school garden. The library has 40,000 volumes bearing on the work of the Teachers College. There is ample opportunity to work out subjects requiring library research. There is a handicraft department connected with the library wherein a student may learn how to conduct a library. The gymnasium is well equipped with modern apparatus. Games of all sorts suitable for schools are taught.

BUILDINGS.

The buildings which are completed at the present time consist of the administration building, the library building, the residence of the President, the training school and the industrial arts building. The main, or administration building, is 240 feet long and 80 feet wide. It has in it the executive offices, class-rooms, and class museums. Its halls are wide

and commodious and are occupied by statuary and other works of art which make them very pleasing.

The library is a beautiful building. The first floor is entirely occupied by the library, consisting of more than forty thousand volumes. The furniture in the library is of light oak and harmonizes with the room in a most pleasing manner. The basement is occupied by committee rooms, text-book department, taxidermy shop, wild animal museum, ceramic museum, and the departments of geography and agriculture.

The Training School is a commodious building of red pressed brick similar in style to the administration building. In its construction no pains or expense have been spared to make it sanitary, fireproof, and in every possible way an ideal building for a complete graded school from the kindergarten to the high school, inclusive.

The Simon Guggenheim Hall of Industrial Arts is a beautiful structure in the classic style of architecture. It is constructed of gray pressed brick. It accommodates the departments of Manual Training and Art, including every branch of hand work and art training applicable to the highest type of public school of the present and immediate future. This building is a gift to the School from Senator Simon Guggenheim.

The President's house is on the campus among the trees. In this beautiful home are held many social gatherings for students during the school year.

SCOPE OF THE SUMMER TERM WORK.

The work done during the summer term is: The regular 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 course, get the diploma, which is a license to teach in the State for life, and receive the professional degrees. The work is arranged to enable graduates of the State Teachers College of Colorado, and others prepared to do so, to take up graduate work, whereby they may, during the summer terms, earn the higher degrees. The work is so arranged that persons who wish to pursue special lines of study may have the opportunity to do so. An opportunity is given to high school teachers to study from the pedagogical standpoint the subjects they are to teach.

An opportunity is given to principals and superintendents to study the educational problems which confront them in their daily work. An opportunity is given the rural teacher to study the problems peculiar to these schools. An opportunity is given to regular Normal students to make up their work when, thru sickness or otherwise, they have not been able to complete it satisfactorily during the regular year.

HISTORY OF THE COLLEGE.

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.

The Legislature of 1910-11 passed a law which became effective August 4, 1911, giving the name "The State Teachers College of Colorado" to the School. Hereafter it will be known by that name.

GREELEY.

Greeley is a city of homes. It is the center of the great agricultural district of Colorado, and is fast becoming the commercial center of Northern Colorado.

This is an ideal location for a summer school. The altitude of the city is near 5,000 feet, hence the nights are decidedly cool and the days are seldom uncomfortably warm.

The water supply of Greeley is obtained from the canon of the Cache la Poudre, forty miles from Greeley, in the mountains. From the canon it is taken into the settling basin, where the rougher foreign material is eliminated; from the settling basin it is taken into the filter basin, where it is freed from all foreign matter; from the filter basin it is taken to the distributing basin, from which it is distributed over the town. This water system cost the City of Greeley about \$400,000.

THE CAMPUS.

Surrounding the buildings is a beautiful campus of forty acres. It is covered with trees and grass, and dotted here and there with shrubs and flowers, which give it the appearance of a natural forest. During the summer, birds, rabbits, squirrels and other small animals make the campus their home, thus increasing its value as a place of rest, recreation, or study.

During the summer and fall terms the faculty gives its evening reception to the students on the campus. At this time it presents a most pleasing appearance, being lighted, as it then is, by electric lights and Japanese lanterns.

In the rear of the buildings is a large playground, which covers several acres. In the southwestern portion of this playground is a general athletic field, a complete view of which is secured from a grandstand, which will accommodate more than a thousand spectators. On the portion of the grounds adjacent to the building there is a complete outdoor gymnasium. To the south of the buildings are located the tennis courts.

This is one of the most complete playgrounds west of the Mississippi, and when the present plans are fully realized it will be one of the best equipped and arranged grounds in the United States.

During the summer, courses on the organization of playgrounds will be given, and demonstrations of how to carry out these courses in the public schools will be made on the campus.

SCHOOL GARDEN.

One of the pleasing features of the spring, summer and fall sessions of the school is the school garden. This garden occupies several acres of ground and is divided into four units—the conservatory, the formal garden, the vegetable garden, and the nursery. From the conservatory the student passes into the large formal garden, where all kinds of flowers, old and new, abound. Here may be found the first snow-drop of early March and the last aster of late October. From the formal garden we pass to the school garden proper. Here in garden and nursery the student may dig and plant, sow and reap, the while gathering that knowledge, that handicraft, that is essential in the teaching of a most fascinating subject of the up-to-date school—gardening.

THE CONSERVATORY.

The greenhouse is one of the best equipped of its kind in the United States. After a hard day's work it is a rest and an inspiration to visit this beautiful conservatory. Here hundreds of varieties of flowers are kept blooming all winter, and the early spring flowers and vegetables are started for the spring planting.

EXPENSES.

1. Table board costs from \$3.50 to \$4.00 per week. Room rent costs from \$8.00 to \$10.00 per month; one or two in a room. Rooms may be had equipped for light housekeeping privileges from \$6.00 to \$10.00 per month. There are a number of opportunities for students to earn a part or all of their expense of board and room by helping in households, etc.

2. **Fees.** All students pay a fee of \$25.00 for the six weeks.

3. **Tuition.** Those who are not citizens of Colorado pay \$5.00 in addition to the above.

4. Each student deposits \$2.00 upon entrance as a guarantee to the School against loss of books; this deposit is returned at the end of the term or at the time of the student's permanent withdrawal from the School.

ADMISSION TO GENERAL LECTURES.

Students of the College are admitted to the General Lectures by showing their President's Admission card; those outside of the College who desire to attend the Lectures may do so either by purchasing single admission tickets at 25 cents each or by securing a course ticket for \$2.50 from the Secretary of the Board of Trustees, Administration Building.

THE GENERAL LECTURES.

For a number of years it has been the custom of the Teachers College to call to Greeley for the summer term six of the most distinguished men in Education of the whole country to present a series of lectures of general interest to the entire summer school. No change has been made in this policy except that for the summer of 1916 the attendance is not compulsory. Credit will be given only to those students who do assigned

reading and make written reports upon the lectures. These students will be mainly Senior College and Graduate students.

THE LECTURERS.

G. STANLEY HALL, PH.D., LL.D., is the distinguished president of Clark University, a school that has made itself world famous by training a few men thoroly in limited fields. He has been with us so many times that our summer students regard him as a beloved member of our regular teaching faculty.

SAMUEL C. SCHMUCKER, PH.D., is the thoro-going scientist who makes it possible for the unscientific listener not only to understand science but to enjoy it. If he can't make you understand by the use of words how a caterpillar crawls along a leaf eating as it goes, he will make you visualize the creature, by himself imitating it. For him truth does not clash with truth. The truths of science are in accord with other universal truths. All this he has the power of making clear to a general audience.

EDWARD A. STEINER, PH.D. Here is a man who knows Sociology by contact with the social mass. Dr. Steiner is a very well known writer, and a popular lecturer upon a variety of sociological topics and an authority on the immigrant. He comes to us this year for the third time.

E. A. KIRKPATRICK, PH.M. Fitchburg, Massachusetts, Normal School is noted for a number of its achievements, but perhaps it is best known on account of its distinguished director of child-study, Professor Kirkpatrick. He is the author of *Inductive Psychology*, *The Fundamentals of Child Study*, *Genetic Psychology*, and *The Individual in the Making*. As a lecturer on educational subjects he has appeared at the University of Chicago, at Cornell, and a number of other well-known colleges.

SAMUEL McCHORD CROTHERS, D.D. LL.D. This man is known to the English reading world thru his humorously philosophical essays, which have been appearing from time to time for a number of years in *The Atlantic Monthly*. Like the great humorists, Charles Lamb and Oliver Wendell Holmes (and Dr. Crothers is much like these in temper, by the way), he is a philosopher who just happens to have a vein of humor that makes the philosophy palatable. Dr. Crothers is Pastor of the First Unitarian Church of Cambridge, Mass., "The Harvard University Church." He is as pleasing as a lecturer as he is as an essayist—and that is saying much.

EDWARD HOWARD GRIGGS, A.M., L.H.D. As a lecturer in general literature, in ethics, and in the theory of education, Dr. Griggs is famous all over America. He comes to the Teachers College summer school this year for the first time. Dr. Griggs was for a number of years a teacher of literature and ethics in Indiana University and Stanford University. All his time is now devoted to writing and lecturing on his favorite subjects. This man is an unusually forceful and magnetic speaker.

ORGANIZATION OF THE COLLEGE.

The State Teachers College is organized into three divisions—The Junior College, The Senior College, and The Graduate College. Each of

these has its own regulations, similar in essentials, but different in some details, for admission, advanced standing, major subjects, diplomas, degrees, graduation, etc., etc. These matters of administration are presented in different sections of this book, each College having its own place. These may be seen on the pages indicated below:

Junior College	Page 14
Senior College	Pages 15 to 16
Graduate College	Pages 17 to 21

Only details of administration are to be found in the pages noted. Each department schedules *all* the courses it has to offer in one place. The department indicates what courses are intended primarily for Junior College, what for Senior College, and what for Graduate College. This arrangement is made to indicate the grade of work to be expected in a given course and is not intended to exclude any student from any course which he wishes to take if he has had previous training to fit himself to do that kind or grade of work.

THE JUNIOR COLLEGE.

FRANCES TOBEY, B.S., Dean.

The scope of the Junior College is the work of the first two years of the college proper. The student completing this course, having earned credit for 120 term-hours, is granted a diploma, which is a life certificate to teach in the public schools of Colorado.

ADMISSION TO THE JUNIOR COLLEGE.

Anyone may take courses in Non-Residence, but to become a resident student and a candidate for a degree and diploma, the regulations given below must be complied with.

1. Students must be of good moral character and free from contagious disease.
2. Graduates of acceptable high schools of this and other States are admitted without examination upon presenting to the Dean of the College their diplomas or certificate of graduation. The minimum of work acceptable for entrance is 30 semester hours (15 units).
3. Practical teachers of mature years, who are not high school graduates, may enter and take such work as will make up the deficiency and then become candidates for graduation and the state certificate in the same way as other students.

ADVANCED STANDING.

Students who wish to apply for advanced standing should ask for the Blank Application Form for Advanced Standing. Upon presenting this, properly filled out and accompanied by the credentials called for, the College will grant whatever advanced standing seems to be merited. Credits from other normal schools or teachers' colleges of equal rank with The State Teachers College of Colorado are accepted, hour for hour. Credits from reputable colleges, and universities, are accepted at their original value. No advanced standing will be recognized until the necessary credentials (certification of training or experience) have been submitted.

REQUIREMENTS FOR GRADUATION.

A student must be in residence at least three terms before being granted a certificate of graduation from the Junior College. One hundred twenty term-hours are required. This work is elective, except for the following subjects required of all Junior College students:

Psychology 1 and 2.	Biology 1.
Education 11.	English 1.
Sociology 3.	Training School 1.
Teaching 1, 2, and 3.	Physical Education, 4 terms.

(Students who are in residence less than four terms are required to take Physical Education each term they are in residence.)

All of these required subjects are usually taken in the first year, except Education 11, Teaching, and a part of the Physical Education courses.

THE SENIOR COLLEGE.

GURDON RANSOM MILLER, A.M., Dean.

The Senior College includes the third and fourth years of the work of The State Teachers College.

The Senior College offers to all students and professional teachers who have done not less than two years of study beyond the high school an opportunity for higher professional and scholastic work.

It furnishes special advanced preparation for normal school critics and teachers.

It offers superior opportunities for supervisors of all elementary school work.

Supervisors of special subjects, music, art, manual training, domestic science and art, agriculture and physical education, will find courses adequate to their needs in the Senior College.

High school teachers will find here superior professional and scholastic courses adapted to their professional aims.

Principals and superintendents will find in the program of the Senior College an unusual number of courses, specially intended for mature students of wide professional interests.

Our Teachers Bureau say: "We need more A.B. graduates as candidates for normal school positions, and for first-rate places in the public school service."

ADVANCED STANDING.

Students who wish to apply for advanced standing should ask for the Blank Application Form for Advanced Standing. Upon presenting this, properly filled out and accompanied by the credentials called for, the College will grant whatever advanced standing seems to be merited. Credits from other normal schools or teachers' colleges of equal rank with The State Teachers College of Colorado are accepted, hour for hour. Credits from reputable colleges, and universities, are accepted at their original value.

MINIMUM TERMS IN RESIDENCE.

No diploma of the College is granted for less than three terms of work in residence.

No person who has already received one diploma from this institution will be permitted to receive another diploma until such person shall have earned the full number of credits required for such diploma, and completed not less than one full additional term of residence work in this institution.

ADMISSION TO THE SENIOR COLLEGE.

Graduates from the Junior College of The State Teachers College of Colorado are admitted to the Senior College.

Graduates of other colleges, who have earned one of the regular academic degrees, are admitted to the Senior College without examination,

and may receive advanced standing for a large part of the work done in the third and fourth years of the College. These applications for advanced standing must be treated individually and credit granted by the Dean as each case merits.

REQUIREMENTS FOR GRADUATION.

One hundred and twenty term-hours in addition to those required for graduation from the Junior College are required for graduation and a degree from the Senior College. With the exception of the Teaching only 15 term-hours of academic work are required: namely, Education 18a, 18b, and 18c; Sociology 4, 5, and 6; and Teaching 4, 5, 6, and 7. One of these three-hour courses in Education must be taken in the third year, and one two-hour course in Sociology.

Four terms of teaching are usually required in addition to that done in the Junior College—two terms in the third year and two in the fourth. No student will be granted a diploma of the College without teaching at least three terms.

The Superintendent of the Training Department may, at his discretion, accept teaching done in other schools to satisfy the requirements in practice teaching.

DIPLOMAS AND DEGREES.

At the end of the fourth year of study, the student having earned credit for 120 term-hours in the Senior College, will be granted a diploma, which is a life certificate to teach in the public schools of Colorado. The degree of Bachelor of Arts (A.B.) in Education, will be conferred upon the graduate.

MAJORS.

Senior College students may earn a major notation in some department or group of departments. In the Senior College not less than 40 nor more than 60 term-hours are required as a major. At least half of this major work must be done in the Senior College. For example, a student having completed work for a major in the Junior College by earning 30 term-hours in a subject would have 20 more term-hours (one-half of the 40 required) to earn in the Senior College.

THE GRADUATE COLLEGE.

THOMAS C. MCCrackEN, A.M., Dean.

The Graduate College offers advanced instruction leading to the degree of Master of Arts in Education. The principal aim of graduate study is the development of the power of independent work and the promotion of the spirit of research. *Every department of the College is willing to offer not only the courses regularly scheduled but others of research and advanced nature which the candidate wishes to pursue.* Each candidate for a degree is expected to have a wide knowledge of his subject and of related fields of work.

Persons holding the degree of Bachelor of Arts, Letters, Philosophy, or Science from a reputable institution authorized by law to confer these degrees, or holding any other degree or certificate which can be accepted as an equivalent, may be admitted as graduate students in The Colorado State Teachers College upon presenting official credentials.

The prospective student shall obtain the blank "Application for Admission" and send it to the Dean of the Graduate College for his approval before the opening of the term. Original credentials must be submitted with the application for admission. Such blanks may be secured by addressing The State Teachers College, Greeley, Colorado.

**GENERAL PLAN OF WORK FOR THE DEGREE OF MASTER OF ARTS
IN EDUCATION.****General Requirements.**

1. **Residence.** One year of work in residence at the College in advance of the requirements for the A.B. degree. This is three terms of work beyond a four-year college course. Students may satisfy the residence requirement by attendance for three summer terms under the conditions specified below.

2. **Units of Work.** A year's work shall be interpreted as sixty (60) term-hours. Forty-eight hours credit will be given for graduate courses pursued and twelve (12) hours credit for the Master's thesis which is required. Twenty (20) hours credit per term during the regular school year is the maximum, inclusive of the research involved in the thesis requirement.

3. **Special Interpretation of Graduate Work in Summer Term.** Graduate students shall receive for each graduate course pursued in the Summer Term a credit of three (3) hours, twelve (12) hours being the maximum credit per summer term, inclusive of research work in connection with the thesis. In the three summer terms of residence work the student may earn thirty-six (36) hours credit; the remaining twenty-four (24) hours may be earned in non-residence in the intervals between Summer Terms. This organization of the work for students who cannot attend for one year of three consecutive terms is regarded as preferable to the distribution of the work thru four or five summer terms. If the

work is not completed within three years, new conditions may be imposed upon the candidates or the old conditions may be modified. In no case, however, shall fewer than 36 hours of residence work satisfy the requirements for resident study.

4. The Nature of Graduate Work.

(1) *It shall be in professional lines of work.* In keeping with our function as a Teachers College, graduate work shall be confined to professional lines of work.

(2) *It shall represent specialization and intensive work.* As soon after enrollment as possible, the graduate student shall focus attention upon some specific problem which shall serve as the center for the organization of his year's work, including courses to be taken and special investigations to be conducted. *No graduate credit will be given for scattered and unrelated courses.*

(3) *Thesis.* Research work culminating in the writing of a thesis upon some vital problem of education shall be an integral part of the work for the Master's degree.

(4) *Breadth and range of professional outlook.* In addition to the intensive and specialized work which is required of candidates for the Master's degree, they are expected to know the fundamentals of professional education.

(5) *Final examination upon the whole course.* There will be a final examination, oral or written, upon the whole course. An oral examination of two hours' duration is customary. This examination will cover the following ground: (a) The field of the thesis and special research, including topics closely related thereto; (b) The field covered by the special courses taken by the candidate; (c) The general field of Psychology and Education.

General Information.

1. All graduate students must register with the Dean of the Graduate College. All courses taken, both resident and non-resident, must be approved by him in advance.

2. No graduate student may enroll for more than twenty (20) hours work in any regular term, nor for more than four courses, of a total credit value of twelve (12) hours in the Summer Term. This regulation is essential to the maintenance of the standard of intensive work for the Master's degree. In determining the maximum amount of work permitted, research upon the thesis topic must be included within the limit stated. To this end, the student doing research work upon his thesis topic must enroll for the same.

3. All work allowed as resident work toward the M.A. degree shall be done in residence at this institution except when it is done by specific arrangement with the Dean of the Graduate College of this institution under the direction of one of the regular summer exchange professors (*e. g.*, Dr. Hall) in institutions of collegiate rank of whose faculty they are members.

4. In order that the standard of intensive and specialized work for the Master's degree may be maintained, no graduate credit will be given for elementary courses, for scattered and unrelated courses, for public platform lectures or public platform lecture courses, for courses in which the element of routine is large as compared with the theoretical and professional aspects.
5. Excess A.B. work may be applied toward the M.A. degree only when arrangement is made in advance with the Dean of the Graduate College so that he may see that the work is made of M.A. standard and that it is in line with the specialization necessary for the M.A. degree.
6. Five-hour summer courses of the A.B. standard may be allowed to be applied as M.A. work for three hours credit only when approved in advance by the Dean of the Graduate College subject to conditions formerly adopted.
7. The courses which may be taken for graduate credit must be of an advanced character, requiring intensive study and specialization. Certain approved courses in the Junior and Senior Colleges may be pursued for graduate credit; but, when so taken, the character of the work done and the amount of ground to be covered must be judged by a higher standard than that which applies to the regular Junior or Senior College student. The standard of intensive work set for the graduate student must be maintained even if special additional assignments have to be made to the graduate student who works side by side with the Senior College student.
8. Satisfactory teaching experience shall be regarded as a prerequisite to graduation with the Master's degree. Teaching in some department of the college or its training school may, under certain conditions, be included in the graduate work of candidates for the Master of Arts degree. Routine teaching will not be recognized for graduate credit. Mere experience in the practical activities of teaching is not adequate. When graduate credit is given to teaching, this work must be of an advanced character, so organized, controlled, and supervised as to insure some decided growth of the teacher in the scholarship of the subject or professional insight into its value and problems.
9. Fifteen hours' credit toward the M.A. degree shall be the maximum amount allowed to be earned in a regular school year by anyone who is employed on full time, except upon the recommendation of the Dean of the Graduate College and the approval of the Council of Deans.
10. A class admission card similar to that used in under-graduate work but of different color shall be used for admission to class in order to indicate clearly to the instructor that the student is to do graduate work. This card should be approved by the Dean of the Graduate College as well as by the Dean of the College.
11. Instructors who have graduate students in their classes shall report in writing to the Dean of the Graduate College their statement of extra work for such students.

12. Graduate credit for leadership of group work with non-resident students shall be given only when approved in advance by the Dean of the Graduate College and the Dean of the College.

13. Final work toward the M.A. degree shall be done in residence and under the supervision of the Dean of the Graduate College unless special permission to do it in non-residence has been granted by the Council of Deans and upon the recommendation of the Dean of the Graduate College.

14. All work for the M.A. degree shall be done with distinction; work barely passed shall not be considered worthy of such an advanced degree.

15. The thesis subject of the graduate student must be approved in advance by the Dean of the Graduate College and by the head of the department concerned. Before the degree is conferred the thesis as a whole, and in detail, must be approved by the head of the department or the instructor under whose direction the thesis work has been done and also by the Dean of the Graduate College. Also three typewritten copies of the thesis must be placed on file with the Dean of the Graduate College, one copy of which he shall place in the Library for permanent reference.

16. Before the candidate for the Master of Arts degree is admitted to final examination the thesis requirement must be met in full, or the thesis must be in such a state of readiness that only minor reconstructions need to be made, which will not delay its being put in final typewritten form for filing before the end of the term in which graduation falls.

17. The final examination will be presided over by the Dean of the Graduate College and conducted by the head of the department in which the candidate has done the main part of his work. All other members of the faculty under whom the candidate has taken courses counting toward the Master's degree shall be given an opportunity to participate in the examination. An official visitor, or official visitors, from outside the department in which the candidate has specialized shall be appointed to attend the examination.

Directions as to the Form of the Thesis.

Students submitting theses, should present them in typewritten form, upon paper of good quality, of customary size ($8\frac{1}{2}$ x 11), leaving a margin at the left adequate for binding—fifteen points by the typewriter, twenty if the manuscript is thick. One copy of the thesis will be bound for the library by our bindery at the student's expense.

A title page should be prepared containing in neat lettering at the top the name of the institution THE STATE TEACHERS COLLEGE OF COLORADO; below this at some distance the title of the thesis, about the middle of the page the statement: A THESIS SUBMITTED IN CANDIDACY FOR THE DEGREE OF MASTER OF ARTS IN EDUCATION; at a lower level of the page the author's name; and at the bottom the address, and the year.

All theses should contain a brief analysis or table of contents at the beginning; should give footnote references to literature quoted by author, title of book or article, and exact page; and should contain at the end a bibliography of the literature of the subject. In giving bibliographical material, the customary form of publishing houses should be used, which is quite uniformly that of the author first, followed by title, price, copy-right date, and publisher, and in case of magazine references, this by title of magazine, volume or date and page.

Fees for Graduate Courses.

Fees for graduate students in the Summer Term and in the regular school year will be on the same basis as fees for all others. For that part of the work which may be done in non-residence the fees are fixed at one dollar (\$1.00) for each term hour of credit. This would mean that for a course in which recitations occur five times a week for one term the fees would be five dollars (\$5.00); for four such courses the fees would be twenty dollars (\$20.00). Students doing graduate work should expect to buy some of the books which they need. The binding of the thesis required for filing in the library will be charged to the student at cost.

PSYCHOLOGY AND CHILD STUDY.

JACOB DANIEL HEILMAN, PH.D.

GEORGE EARL FREELAND, A.B., A.M.

Courses Primarily Junior College.

1. **General Psychology.** Required in Junior College. The various forms of human behavior will be described and explained. Three Sections.
Mr. Freeland.

2. **Educational Psychology.** The purpose of the course is to solve educational problems with the aid of psychology. Three sections.
Dr. Heilman.

Courses for All But First Year Students.

3b. **Child Study.** The mental development of the child.
Dr. Heilman.

6. **Mental and Educational Tests.** The tests are designed to measure the child's intelligence and the efficiency of his school work.
Mr. Freeland.

Conference Course for Graduate Students.

9. **Advanced Psychology.** A comprehensive thesis will be required on some specific subject. Examples: formal discipline, mental and physical tests, sex hygiene, adolescence, speech defects, defective children, retardation, etc.
Dr. Heilman.

EDUCATION.

THOMAS C. McCracken, A.M.

FRANK L. WRIGHT, A.M.

JOHN R. BELL, A.M.

SAMUEL MILO HADDEN, A.M.

J. F. KEATING, A.M., Summer 1916.

S. S. PHILLIPS, A.B., Summer 1916.

H. M. BARRETT, A.M., Summer 1916.

JOSEPH I. REECE, A.M., Summer 1916.

The work of this department, altho having to do primarily with fundamental theory underlying the educative process, shows also how such theory is of practical value to the teacher. The teacher needs a theoretical background for her work and a broad acquaintance with all fields of educational activity. The purpose of the courses offered is to meet these needs.

Courses Primarily Junior College.

9. **Theory and Practice of Teaching.** Open to Senior College students. This course will treat of principles of instruction, discipline, and details of class-room management as they are applied to the conditions of the elementary school. The work of the course will consider the practical problems of the class-room in their relation to the life of the community.

Mr. Phillips.

11. **Principles of Education.** Required second year. Open to Senior College students who have not had its equivalent. This course is designed to set forth the theory of aims, values, and content of education; the place of a scientific basis in education; the relation of schools to other educational agencies; the social limitations upon the work of the schools; and the process of learning and teaching.

Mr. Wright and Mr. Keating.

24. **School Administration.** Open to Senior and Graduate College students. This course will deal with school and class-room management, and is designed to meet the needs of supervisors, principals, and class-room teachers. Each student may make a special study of the problem in which he is particularly interested. Problems peculiar to superintendents and supervisors in villages and small cities will be considered.

Mr. Keating.

26. **The Rural School Curriculum and the Community.** See Department of County Schools.

27. **General Education.** A non-credit course except for Senior and Graduate College students upon permission of the Head of the Department of Education. This course will consist of a series of daily lectures by men eminent in the field of education. Class notes, special readings, reports, and theses will be required of those taking the course for credit. Lecturers: Dr. G. Stanley Hall, Dr. Edward A. Steiner, Dr. Samuel C. Schmucker, Dr. S. M. Crothers, Dr. E. A. Kirkpatrick, Dr. Edward Howard Griggs.

33. History of Modern Elementary Education. Open to Senior and Graduate College students. This course will be introduced by a brief review of the education of the Renaissance to furnish the setting for the study of the trend of modern education. The main part of the course will be devoted to such subjects as the development of the vernacular schools, the early religious basis of elementary schools, and the transition to a secular basis, together with the work of such men as Comenius, Locke, Rousseau, Pestalozzi, Herbart, and Froebel.

Mr. Phillips.

Courses Primarily Senior College.

16. Theory of High School Curriculum. Open to Graduate College students. A discussion of educational values and the arrangement of studies to suit the age of the pupil. An attempt to eliminate waste material and to stress those courses that best prepare for life. A survey of experiments in the introduction of vocational courses in the curriculum of the secondary school; this will lead to a careful study of the various types of American secondary schools.

Mr. Bell.

20. High School Administration. Open to Graduate College students. This course will deal with the organization, management, and administration of high schools.

Mr. Barrett.

25. Administration of Rural Schools. See Department of County Schools.

Courses Primarily Graduate College.

12. Current Movements in Social Education. Open to mature students of the Junior and Senior Colleges upon permission of the instructor. This course will include such subjects as the following:—the school as a social center; open-air schools; vocational education; vocational guidance; the school survey; and other subjects of current interest.

Mr. McCracken.

23. Research in Education. Open to mature Senior College students upon permission of the instructor. This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of greatest interest to him, provided sufficient opportunity is at hand for original investigation. The results of such research are to be embodied in a thesis. Credit hours will be given in accordance with the amount of work done. Conference course at hours convenient to the instructor.

Mr. McCracken and Mr. Wright.

29. *Current Educational Thought. Open to mature students of the Senior College upon permission of the instructor. This course is intended as a common meeting place for all graduate students, no matter what their line of specialization. The work of the course will consist of reviews and discussions of recent books in the various fields of education.

Mr. McCracken.

* The books used in this course, Summer 1916, will not be the same as those used in Summer 1915.

34. American Education. Open to mature students of both Junior and Senior Colleges. A careful study will be made of typical methods of meeting educational needs in the colonies, of the growth of the public school idea, and of the spread of the public school system. Attention will be paid to various features of our American school system in the present status of development.

Mr. Wright.

41. Master's Thesis Course. The student who expects to work upon his Master's thesis will register for this course, no matter for what department the thesis is being prepared.

Mr. McCracken.

42. Administrative and Social Aspects of Education. Open to mature students of the Junior and Senior Colleges upon permission of the instructor. The plan of this course comprises a comparative study of contemporary school organization and administration, with special reference to underlying social and economic problems.

Mr. Keating.

17. Vocational Education. Mature students of the Senior College may take this course if granted permission by the instructor. This course has for its purpose the interpretation of the subject from the artistic, industrial, and commercial standpoints.

Mr. Hadden.

THE TRAINING DEPARTMENT.

DAVID DOUGLAS HUGH, A.M., Dean.

High School.

JOHN R. BELL, D.LITT., Principal.
 RAE E. BLANCHARD, A.B., English.
 J. F. KEATING, D.LITT., Grammar, Summer 1916.
 J. R. MORGAN, A.B., Spanish and English, Summer 1916.
 MARK K. SWEANEY, A.M., Mathematics, Summer 1916.
 KEITH C. MORSE, A.B., Science, Summer 1916.
 JEAN CROSBY, A.B., History and Civics.
 FRANK W. SHULTIS, A.M., Bookkeeping and Commercial Arithmetic.
 EDNA WELSH, Pd.B., Typewriting.
 S. S. PHILLIPS, A.B., History, Summer 1916.
 H. M. BARRETT, D.LITT., Latin, Summer 1916.
 MARGARET JOY KEYES, A.B., Physical Education.
 FLORENCE REDIFER, A.B., Cooking.
 GLADYS IRENE SCHARFENSTEIN, Ph.B., Sewing.
 C. M. FOULK, Pd.B., Manual Training.

Elementary School.

WILLIAM B. MOONEY, A.B., Principal and Eighth Grade Training Teacher,
 Summer 1916.
 JENNIE LIND GREEN, Seventh Grade Training Teacher.
 AMY R. FOOTE, A.B., Sixth Grade Training Teacher.
 FRIEDA B. ROHR, A.B., Fifth Grade Training Teacher.
 CELIA M. LAWLER, A.B., Fourth Grade Training Teacher.
 MABEL AUGUSTINE, Pd.M., Third Grade Training Teacher, Summer 1916.
 BELLA B. SIBLEY, A.B., Second Grade Training Teacher.
 KATHRYN M. LONG, A.B., First Grade Training Teacher.
 MILDRED DEERING JULIAN, B.S., Kindergarten Training Teacher.

The Training School of State Teachers College includes the complete public school unit from the kindergarten to the high school, inclusive. It consequently affords opportunity for practice teaching and observation of classes in practically all grades and subjects to be found in public school work. It also provides courses upon various practical phases of school work, such as the organization of the curriculum and the principles and methods of instruction. The observation of classes in the Training School and a discussion of the merits of the lessons observed will form an organic part of most of the courses listed below.

Courses for High School Credit.

An Ungraded School for Adults. Classes are organized in the High School for mature students who have not completed a high school course. The work will be evaluated according to the strength shown, and the indi-

vidual will be classified after sufficient time has elapsed, in accordance with power demonstrated, without the necessity of completing each omitted step.

Review Courses. A department of reviews has been established in the High School, whereby teachers wishing to take the fall examinations, may receive not only a thoro review of the common branches but also instruction in the latest and best methods of teaching the same. Full credit will be given for this work in the High School.

Courses Primarily Junior College.

1. **Observation in the Training School.** Required in the Junior College. This is not offered as a separate course during the summer term, but any starred course listed below will be accepted as a substitute. Industrial Arts 5 is also offered as a substitute for students in that department.

2. **Elementary School Teaching.** This consists of teaching one period a day under the supervision of a Training Teacher. Required in the Junior College unless ample evidence of adequate training in teaching is furnished. Required also in the Senior College of those who do not satisfy the requirements for high school teaching. Those needing this course for graduation this summer must correspond at once with Mr. Hugh.

5. **Primary Methods*.** Lectures on the nature of the child, the basis of the selection of material, and the relation of subject-matter to method. Outlines of subject-matter are given in detail. Classes of children are used in illustrative lessons. Emphasis on first grade work.

Miss Long.

6. **Primary Methods*.** A brief comparison of courses of study in leading cities in United States, and of our own and other Training Schools. Many devices for teaching the subjects of the primary curriculum. Related especially to second grade work. Illustrative lessons.

Mrs. Sibley.

7. **Third and Fourth Grade Methods*.** A consideration of subject-matter and methods of presentation suitable for third and fourth grade children. Demonstration lessons.

Miss Lawler.

8. **Fifth and Sixth Grade*.** A study of the fundamental needs of children of this age, and how the subject-matter may be made to function in their lives. The testing of results. Demonstration of typical lessons.

Mr. Mooney.

9. **Seventh and Eighth Grade Methods*.** This course will deal with the instructive tendencies and dominant interests of grammar grade children, and the fitness of subject-matter and methods of instruction for this age. Illustrative class work.

Miss Green.

15. **Story Telling.** A study of the different classes of stories suitable for children with practice in story telling.

Miss Augustine.

* Accepted for Training School 1, Summer 1916.

36. Construction in the Kindergarten. A study of problems and practice in presenting them. Centering the work with the different materials about these problems. Miss Julian.

Courses Primarily Senior College.

37. The Kindergarten Program. A study of the different materials of the kindergarten curriculum together with the detailed organization of these materials. Miss Julian.

40. High School Teaching. Required in the Senior College of students preparing to be high school teachers, unless they can show satisfactory evidence of having had such training. Applications for this summer should be made at once to Mr. Hugh.

29. Kindergarten Seminar. Primarily for Senior College and Graduate College students. Hours to be arranged. Miss Julian.

COUNTY SCHOOLS.

JOSEPH H. SHRIBER, A.B., Director.

This department recognizes that the rural problem is essentially the problem of the rural school, because it is the agency of education, and a natural center for organized community service. The object of the courses offered here is to prepare county teachers for community leadership and to assist in the proper organization and management of the type of school found in the open country. However, every effort consistent with existing conditions and lasting progress, shall be made to point out the importance of reorganizing the county educational system upon a principle that shall lead to centralization. While the new conception of a new school is in process of formation we must make the best of the present situation. Whatever may be the organization, equipment or skill in management, good teaching is the fundamental source from which the product of our schools can be judged. The rural teacher, especially, on account of limited time and a crowded curriculum should have a clear-cut knowledge of the subject-matter he teaches. It shall be the chief aim of the department to stress the importance of academic preparation, a professional training that relates the child closely to the teaching process, and of making the county school of the future a dynamic force in the community.

Courses Primarily Junior College.**Education.**

26. **The Rural School Curriculum and the Community.** Open to Senior College students. This course will treat of the problems of the teacher who desires to instruct country children in terms of their own environment. Methods and materials for such instruction will be outlined and discussed. Ways and means whereby stereotyped courses of study, in the various grade subjects, may be vitalized and made more significant to country children will be sought. Mr. Shriber.

12. **Rural Sociology.** See Department of Sociology.

6. **County School Methods.** The application of methods to a rural school, the organization of material, class room management, and effective presentation will be discussed. This course will aim to discover points of difference between the graded and the ungraded school in respect to the utility of pertinent methods used in teaching the various subjects in a rural and village school. Mr. Shriber.

Primarily Senior College.

25. **Administration of Rural Schools.** Open to mature Junior College students upon permission of the instructor, and to Graduate College students. This is a course in the study of rural education, which aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment

of rural education. A discussion of forward movements in legislation as they affect the life of the farm and the education of country children.

Mr. Shriber.

Public School Subjects.

Students taking these courses will receive credit in the High School Department of the Teachers College. See High School Department.

1. **History and Civics.** Primary emphasis is placed on the subject matter of History and Civics in this course. Mr. Phillips.

2. **Grammar.** A thorough review of the essentials of grammar will be given, including functional values, sentence structure, and literary interpretations. Mr. Keating.

3. **Arithmetic.** The principal operations and the application side of arithmetic will receive special emphasis; decimal and common fractions, measurements and the applications of percentage. Practical farm problems and their use in vitalizing the subject will be considered.

Mr. Shultis.

4. **Geography.** A review of the subject-matter of geography is given. The central idea is the description of the earth's surface as the home of man.

5. **Physiology and Hygiene.** This course will give special attention to the subject-matter of physiology and hygiene. Mr. Morse.

6. **General Science.** See Department of Physical Science.

Mr. Abbott.

NOTE. Courses in orthography, reading, writing, and school law will be given if there are any students desiring work in these subjects.

For vocational subjects such as Manual Training, Domestic Science, Agriculture, and Sewing, see Department of Practical Arts.

BIOLOGY.

LEVERETT ALLEN ADAMS, PH.D.

JOHN C. JOHNSON, A.M.

Courses Primarily Junior College.

5. Bird Study. A study of the common birds of Greeley and the state. Takes up their habits, life history, home, food and economic importance. Meets Tues., Wed., Thurs., Fri. An early morning trip lasting until eight o'clock every Saturday. Chapman's Color Key to North American Birds is used in this course. Bring a copy if possible. Field glasses are very convenient.

Mr. Adams.

Biol. 2. Bionomics. Required in the Junior College. This is required in the first year. It is a study of some of the fundamental facts and laws of Biology that may be valuable in teaching. It forms a basis for the intelligent study of other educational subjects. It considers the Evolution doctrine, cell life, problems of fertilization, maturation and embryology. Mendel's Law, formation and organization of tissues.

Mr. Johnson.

Zool. 2. Bacteria, Prophylaxis, and Hygiene. A study of (1) Bacteria, where they are found, what they are, how they live and grow, useful bacteria, parasitic and disease-producing bacteria; (2) Prophylaxis, how disease is spread, methods of prevention, immunity, disinfection, inspection; (3) Hygiene, of person, home and school room.

Mr. Johnson.

Courses Primarily Senior College.

Biotics 1. Biotics in Education. History of the Human Body. Takes up the history of the human body and its derivation and something of its evolution. History of some of the more important prehistoric men. Prerequisite, Biol. 2. Wilder's "History of the Human Body" used. Bring one.

Mr. Adams.

Biotics 2. Biotics. Heredity in Education. A study of Heredity and its relation to education. It takes up the problems of heredity and considers some of the new movements for the betterment of the human race. Thomson's Heredity is used in this course with other texts.

Mr. Adams.

Primarily Graduate College.

14. Advanced Biotics. Graduate students and other students of maturity. Special topics of interest to the teacher will be taken up in an intensive way. Subject-matter to be drawn from some of the problems in Heredity, Eugenics, and Genetics. A seminar course to meet once a week for two hours. Three hours credit, or credit according to work done.

Mr. Adams.

PHYSICAL SCIENCE.

FRANCIS LORENZO ABBOTT, B.S., A.M.

Courses Primarily Junior College.

7. **General Science.** A course, complete in one term, dealing with the facts of Physics, Chemistry, Zoology, Physical Geography, etc., such as are needed by the rural teacher. Intended in the main to meet the requirements of those who take the county examination in general science.

1. **Elementary Chemistry.** The usual beginners' college course in chemistry. Theory and experiments.

2. **Quantitative Chemical Analysis.** The second term of college chemistry. Separating and identifying the common elements. Prerequisite, Chemistry 1.

Courses Primarily Senior College.

4. **Advanced Physics.** Radio-Activity and Wireless Telegraphy. To have a clear conception of Radio-Activity one must clearly understand the nature of Kathode rays. We are equipped to fully illustrate the nature of Kathode and X-rays. This is followed by discussions of the Radio-Active substances, the disintegration products of Radium and Radium-Emmations. The X-rays and the Canal Rays are closely associated with Kathode rays and must be studied.

Courses Primarily Graduate College.

12. **Theory of Relativity.** Comprehensive review of the Hypothesis of the Ether and the structure of matter, showing the necessity for the theory of Relativity. By conference.

13. **History and Methods of Physics Teaching.** Much of this course must be original work. By conference.

GEOGRAPHY AND GEOLOGY.

GEORGE ALEXANDER BARKER, B.S., M.S.

The work given in this department aims to prepare the student for geography teaching from the standpoint of organization of subject-matter. The endeavor will be made in all the courses to sift and sort the material so that the frame-work of the science of geography will stand out plainly, rather than be buried in an unorganized, unrelated heap of facts.

Courses Primarily Junior College.

2. **Physical Geography.** A course designed for those who have not had physical geography in the high school. The laboratory and field sides of the subject will be stressed.

12. **Geography Method.** A course largely based on the geography course in the State Course of Study. A library course with some field work. This is the geography method course corresponding to Course 1 in the older catalogs.

Primarily Senior College.

3. **Climatology.** A study of climate and weather from both the observation side and the side of method of class presentation. The great climatic provinces in America will be illustrated by temperature and rainfall data and the corresponding provinces in the other continents will be classified by the American climatic province which parallels their conditions. This data will be largely tabulated by means of curves and block diagrams.

Primarily Graduate College.

15. **Geography of Australasia.** A study of that isolated corner of the earth's surface, bringing out the geographic laws that have controlled the plant, animal, and human expansion in Australasia.

MATHEMATICS.

GEORGE WILLIAM FINLEY, B.S.

FRANK W. SHULTIS, A.B., A.M.

The department aims at the presentation of all work from the standpoint of those who expect to teach. The underlying principles of each subject are carefully developed and at the same time questions of method are given a place commensurate with their importance.

Courses Primarily Junior College.

1. **College Algebra.** A careful review of the principles of elementary algebra and a continuation of the consideration of the graph, complex number, and theory of equations. Mr. Finley.

3. **Trigonometry.** The solution of the right triangle, a development of formulas, and the oblique triangle. Mr. Finley.

8. **Methods in Arithmetic.** The modern tendencies in the teaching of arithmetic together with a detailed discussion of the best ways to present the subject in the grades. Mr. Shultis.

8a. **Arithmetic for Teachers.** This course is intended for those who feel the need of a more thoro knowledge of the subject matter of arithmetic. Mr. Shultis.

3. **Arithmetic for Country Schools.** See Department of County Schools.

Courses Primarily Senior College.

4. **Analytics.** An introduction to the broad field of higher mathematics with a view to enlarging the equipment of the future teacher of secondary mathematics.

9. **Algebra and Geometry for Teachers.** Open to Graduate College. A rapid review of the fundamental principles of algebra and geometry with the aim of giving that clear logical knowledge so much needed by a teacher. Mr. Finley.

Primarily Graduate College.

5. **Differential Calculus.** An introduction to the powerful subject of the Calculus. This course is to be arranged for by conference.

Mr. Finley.

SOCIOLOGY AND ECONOMICS.

GURDON RANSOM MILLER, A.M.

EDGAR DUNNINGTON RANDOLPH, A.M.

JOHN A. SEXSON, A.B., Summer 1916.

From the viewpoint of Education this department aims to make evident to its students the close relation between the Science of Education and the subject-matter of Anthropology, Sociology, and Social Economics. All our courses lay stress upon these relationships.

However, any of our courses will prove of large value to any students specializing in Sociology or Economics. University or college students or graduates, interested in particular phases of Sociology, or any students interested in Social Reform Movements, or Social Settlement Work, should consult the head of this department for advice in electing courses.

20. The Consumption of Wealth. An advanced course in Social Economics; a constructive analysis of the modern tendency to subject the consumption of wealth to scientific treatment, emphasizing the human costs of production versus the human utilities of scientific consumption; a human valuation. Elective for all Senior College and Graduate College students.
Mr. Miller.

28. Principles of Social Progress. A study of the basal principles of Social Evolution and Social Progress; consideration of present social tendencies; and speculations as to future social control. Elective for all Senior College and Graduate College students.
Mr. Miller.

3. Educational Sociology. Required in Junior College. A course for teachers in applied sociology; modern social institutions; changing social ideals; social reforms, and their relation to schools, curricula, and teaching.
Mr. Randolph and Mr. Sexson.

21. Methods and Aims of Organized Social Work. A course in modern philanthropy, opening with data to show the nature and extent of the problems involved; passing to a survey of the methods gradually evolved; and closing with consideration of the principles underlying present programs.
Mr. Randolph.

24. Problems and Methods of Child Welfare. A course dealing with the present conception of social responsibility for the well-being of children; the factors behind the shifting of effort from remedial to preventive measures; and the evolution of present methods and aims. A survey of the various agencies and institutions that attempt to meet the diverse needs of more or less hapless children.
Mr. Randolph.

12. Rural Sociology. A study of rural social conditions; a scientific sociological study of modern changes in country life, and the organization and direction of rural education as a positive power in rural progress.
Mr. Sexson.

HISTORY AND POLITICAL SCIENCE.

EDWIN B. SMITH, B.S.

JOHN A. SEXSON, A.B., Summer 1916.

Courses Primarily Junior College.

3. **History of the United States (1861-1916).** Civil War and reconstruction; economic and diplomatic problems; development of the West; civil service and economic reform; industrial combinations; imperialism; party policies; Wilson's administration; foreign complications.

Mr. Sexson.

9. **Civics—National Government.** Government of American colonies; process of union; independence; Articles of Confederation; Federal Constitution; states' rights theory; party organization and party government; primary legislation; government serving the people.

Mr. Smith.

13. **Methods in History.** Development of history instruction in schools; history as taught in schools today; methods of study, presentation, and material.

Mr. Smith.

Courses Primarily Senior College.

6. **History of Germany.** Early people; conditions before the Reformation; development of the German Empire; German people at present; German institutions; The European War; Germany of to-day and conditions traceable to that country.

Mr. Smith.

10. **Industrial History of United States.** Industrial conditions of Europe leading to discovery and exploration; English Industrial conditions affecting the colonies; revolutionary period; industrial America after independence; westward movement; slavery; recent industrial movements.

Mr. Smith.

Primarily Graduate College.

15. **American Constitutional Law.** Modern theories of political self-government; personal, property, and political rights of the individual; powers of the Federal Government.

Mr. Smith.

LITERATURE AND ENGLISH.

ETHAN ALLEN CROSS, A.B., PH.M.

ADDISON LEROY PHILLIPS, A.B.

RAE E. BLANCHARD, A.B.

The Department of Literature and English gives three sections of the required course English 1 for the accommodation of those Junior College students who wish to meet that requirement during the Summer of 1916. In addition to this, one course in methods and four literary courses are scheduled.

Courses Primarily Junior College.

1. **Grammar and Composition.** The purpose of this course is to give some practice in writing under careful direction, and to teach those facts about sentence structure that every teacher needs to know in order to guide herself in the use of English in school, and in judging the correctness of her own writing and speaking. Three sections.

Mr. Phillips and Miss Blanchard.

10. **American Literature.** The development of literature in America illustrated by assigned readings in the literature itself.

Mr. Phillips.

Courses Primarily Senior College.

1a. **The Functional Teaching of English Grammar.** Outlines of the functional method of teaching grammar. This will involve going over the details of English grammar. The course may be taken by mature Junior College students. By doing additional theme writing such students may substitute the course for the required English 1. Senior College and Graduate students are not required to write themes, but they will be asked to do an assigned piece of original investigation into the speech habits of children.

Mr. Cross.

13. **Tennyson and Browning.** A comprehensive reading course covering the more significant works of these two great poets of the second half of the Nineteenth Century.

Mr. Phillips.

15. **Modern Plays.** The development of the drama, Continental, English, and American, since Ibsen. Each student will read a number of representative modern plays.

Mr. Cross.

19. **Shakespeare, Selected Comedies.** It is fitting that students should manifest a renewed interest in Shakespeare in this year, the tercentenary of his death. The course offered here is a reading of a few of the best plays belonging to his period of joyous comedy.

Mr. Cross.

Graduate College.

30. **Conference.** Students doing work toward the degree of Master of Arts in English will register in English 30. Here they will get their assignments for reading and meet their instructor for consultations and criticism. By appointment.

Mr. Cross.

READING AND INTERPRETATION.

FRANCES TOBEY, B.S.,

The courses in reading take cognizance of the cultural as well as the practical value that reading, as an art, offers:

- a. Facility in mastery of the printed page, ready visualization and instant realization of units of thought.
- b. Training in discriminating analysis of a piece of literature as an art unit.
- c. Personal culture thru an approximately adequate response (vocal, bodily, imaginative, volitional) to a wide range of beauty and truth in literature. This end is sought thru devotion to the social ideal of revelation.
- d. Mastery of principles and methods of teaching.

Courses Primarily Junior College.

2. **Reading in the Grades.** The careful organization and presentation of content in a reading lesson. Problems offered by the average reading class in the grades.

6. **Dramatic Interpretation.** A study of the sources of dramatic effect. The analysis and the presentation upon the campus of a play (probably "A Midsummer Night's Dream").

1. **The Evolution of Expression.** A systematic, directed endeavor to reflect, for the inspiration of the class, the spirit and dominant truth of varied literary units. Emphasis on personal power, manifested thru presence and address, in spontaneity, life, vigor, purpose, directness, poise. Analysis of simple literary units.

Primarily Graduate College.

16. **The Greek Drama.** Literary and Dramatic standards applied to Greek drama. The classical drama and world view (philosophic, social, religious, ethical attitudes). The intensive study and dramatic presentation of a Greek tragedy. By conference.

15. **The Festival.** Research and original work in the organization of significant festival programs. History, sociology, symbolism, the various arts. By conference.

MODERN FOREIGN LANGUAGES—FRENCH, GERMAN AND SPANISH.

EDWIN STANTON DU PONCET, PH.D.

JAMES R. MORGAN, A.B., Summer 1916.

The direct method is used in all courses in this department. A number of standard dictaphones have recently been added and will be used to aid in securing a better pronunciation. Le Cercle Français, El Club Español, and Deutscher Verein will hold regular meetings fortnightly.

Courses for Either Junior or Senior College.

(Graduate courses in the three languages may be offered by conference only.)

French 1. Beginners' Course. *Walter-Ballard's French Grammar*. Reading of *Assollant's L'Aventure du Célèbre Pierrot*, and *La Biche's La Grammaire*.
Dr. Du Poncet.

French 5. Intermediate Course. Reading of *Malot's Sans Famille*; *Daudet's Tartarin de Tarsacon*; *Marivaux's Le jeu de l'Amour et du Hasard*. Conducted entirely in French.
Dr. Du Poncet.

French 10. Advanced Course. *Les Femmes dans La Littérature Française*. Lectures on the lives of the leading feminine French novelists and the reading of *Sand's*, *de La Fayette's* and *de Stael's* principal works. Conducted in French.
Dr. Du Poncet.

NOTE. Courses numbered 5 and 10, that one will be given for which the greater number enroll.

German 1. Beginners' Course. *Manfred's German Grammar*. Reading of *Altes und Neues*, and *Elz's Er ist nicht Eifersüchtig*.
Mr. _____

German 5. Intermediate Course. Reading of *Gerstücker's Germelshausen*; and *Moser's Der Bibliothekar*. Conducted in German.
Mr. _____

German 10. Advanced Course. Studies in *Schiller's Wilhelm Tell*. Primarily intended for High School teachers in German. Lectures on the value of editions now available; the use of the "Fragen," and the best methods of teaching this text.
Dr. Du Poncet.

NOTE. Of the two courses numbered 5 and 10, that one will be offered for which the greater number enroll, with the understanding that both may be offered if the demand is sufficient.

Spanish 1. Beginners' Course. *Wagner's Spanish Grammar*; *Valera's Pájaro Verde*; *Du Poncet's La Tierra del Diablo*.
Dr. Du Poncet.

Spanish 5. Intermediate Course. *Newton's Spanish Daily Life*; *Larra's Partir á Tiempo*; *Escrich's Amparo*. Conducted in Spanish.
Mr. Morgan.

Spanish 10. Advanced Course. *Valera's Pepita Jiménez*; *Echegaray's Ó Locura ó Santidad*; *Bonilla's y San Martín's Historia de Literatura Española* to be used as a reference in writing biographical essays.
Mr. Morgan.

LIBRARY SCIENCE.

ALBERT F. CARTER, A.B., M.S.

2. **Reference Work.** The subject covers a study of the standard works of reference, such as the principal encyclopedias, dictionaries, atlases and reference manuals of various kinds, with comparisons of the several forms, their arrangement, etc. Also a study of indexes and aids. Public documents, their selection and use. Periodicals, etc. Practical questions and problems assigned.

MUSIC.

JOHN CLARK KENDEL, A.B., Director.

ADELINE HOLLOWAY, B.M., Sight Reading, Harmony.

NELLIE B. LAYTON, Pd.M., Piano.

JOSEPHINE KNOWLES KENDEL, Voice.

LUCY B. DELBRIDGE, Pd.M., Violin.

LEE M. LOCKART, Brass and Reed Instruments.

The courses offered by the department are of two kinds: (a) Courses which are elementary and methodical in their nature and are meant to provide comprehensive training for teachers who teach vocal music in the public schools. (b) Courses which treat of the historical, literary, and esthetic side of music and are meant for those who wish to specialize in school music and become supervisors.

Courses for the grade teacher and general student: Music 1, 2.

Courses for supervisors and those who combine music instruction with other subjects: Music 2, 5, 8, 10.

Courses which are cultural in their nature and meant for the general or special student: Music 10.

Private Instruction.

No instruction in voice, pianoforte or violin is provided by the school, but, if a teacher wishes to take up or continue the study of any of these special branches while attending the College, the opportunity will be given by the various instructors of the music faculty at scheduled rates.

All persons contemplating taking private lessons in music of any kind in the institution for credit should see the director of the department to make arrangements as soon as possible.

1. **A Course for Beginners.** (Open to Senior College students.) Notation, theory, sight-reading. The course is designed especially for teachers desiring to make sure their knowledge of the rudiments of music so that they may be able to teach music in the public schools more efficiently.

2. Methods for the First Eight Grades. (Open to Senior College.) A very practical course for teachers in which the material used in the public schools is studied and sung, with suggestions as to the best ways to introduce all phases of the work. Prerequisite for this class Music 1 or its equivalent.

5. A Supervisor's Course in Music. Second year or Senior College. The material used in the grades and high school is taken up, and studied from a supervisor's standpoint. Actual practice in conducting works of a standard nature will be offered those interested in this course. Open to those majoring in the department.

8a. Harmony. Beginning Harmony. The work consists of written exercises on basses (both figured and unfigured) and the harmonization of given melodies. Work completed thru the harmonization of dominant discords.

8b. Harmony. A continuation of course 8a. The course presupposes a knowledge of work done in course 8a. Circle of chords completed, modulation, etc.

10. Methods in Appreciation. (Open to Senior College.) This course is planned to help teachers to present more intelligently the work in Appreciation of Music for which there is such a growing demand in all our schools. A careful graded course suitable for each grade will be given. The lives and compositions of the composers from Beethoven to Wagner are studied.

PHYSICAL EDUCATION.

ROYCE REED LONG, A.B.
MARGARET JOY KEYES, A.B.

The work of the department is planned to meet the needs of three classes of students: (1) For those desiring to prepare for teaching positions in Physical Education, or as playground directors. (2) For those who desire training in a few special physical training activities, and (3) For those who desire recreational activity for their own improvement or development while pursuing courses in other branches of education.

For qualified students it is possible to secure a departmental recommendation after completing satisfactorily four summers of work at the State Teachers College. The general requirements for such a recommendation are similar to those for major students during the regular session.

Required Work.

All students are required to take at least one course in Physical Education during four terms in order to graduate from any department except in cases of students who are in residence less than four terms, in which cases they will be held for one course each term in residence. Credit or non-credit courses will meet this requirement. Courses 2 and 16 are for major students and will not fulfill this general requirement.

Required Gymnasium Suit.

Those entering physical training classes are required to wear an approved gymnasium suit. For women this consists of a bloomer suit with suitable shoes. Those taking folk or esthetic dancing have ballet slippers and the accordion pleated circular skirts. The men may use a track or regular gymnasium suit.

2. Applied Anatomy. Anatomy as it relates to physical training, Junior or Senior College. Five periods, five hours. 10:20. Mr. Long.

3. Light Gymnastics. Class organization and conduct, free arm, dumbbell, wand, Indian club drills, and marching. Credit or non-credit. For non-credit regular attendance and progress in class; for credit at least one outside hour of preparation per day. Junior College. Five periods. 8:10-9:10. Mr. Long.

5. Plays and Games. Group and team games suitable for the school yard playground. Five periods. 7:00-8:00. Mr. Long.

6. Children's Singing Games. Junior College. Five periods. 10:20-11:20. Miss Keyes.

7. Folk Dances for School and Playground. Various national dances selected and arranged to meet the needs of schools and playgrounds. Credit or non-credit. Five periods. 8:10-9:10. Miss Keyes.

8. Esthetic Dancing. Tecnic of the dance. Plastic exercises; the development of bodily co-ordination and rythmed responses. Credit or non-credit. Junior or Senior College. Five periods. 7:00-8:00. Miss Keyes.

9. Classical Dancing. Junior or Senior College. Advanced technique, classical dances. Prerequisite, Course 8. Credit or non-credit. Five periods. 11:30-12:30. Miss Keyes.

13. Play, Playground Organization and Conduct. Meaning of play, relation to mental and physical development, importance in moral and social training, relation to formal education, practical consideration as to organization, equipment, and administration of playgrounds. A course given in co-operation by Mr. Bell and Mr. Long. Credit course. Two lectures and three practice hours per week. Junior, Senior, or Graduate College. Five periods. 3:40. Mr. Long and Mr. Bell.

16. Anthropometry and Physical Examination. Practice in making the usual measurements; signs and symptoms of physical defects; discussion of principles as related to physical training. Course for men and women. Seaver's Anthropometry required as a text. Five periods. 1:45-2:45. Junior and Senior College. Mr. Long.

22. Athletics for Men. Team and group athletics. Games for boys and young men. Course is planned with needs of school principals and teachers in mind. Five hours. Junior and Senior College. 5:00-6:00. Mr. Long.

23. Recreation Course. Junior College. A recreational non-credit course for men and women in which numerous group and team games will be practiced. Opportunity will be given a limited number to play tennis and golf. Those desiring to play tennis or golf should arrange with the director at the beginning of the term. Daily, 7:00-8:00 p. m. Mr. Long and Miss Keyes.

24. Research in Physical Education. Qualified Senior College and graduate students may elect a subject in research in Physical Education. The following subjects are suggested, but others, depending upon the student's interest and available materials, may be chosen:

(1) The status of Physical Education in the Schools of Colorado, with proposed plan for improvement.

(2) The Playground and Recreation movement. Its rise, growth, and present status.

(3) A Recreational Survey of a selected community, with a suggested plan for improvement.

(4) A Study of the Playground Games of different age periods, sexes, and races.

(5) Educational Athletics. Plan for a County or City School System. By arrangement. Three or more hours, according to the piece of work accomplished. Mr. Long.

Major Subject—Physical Education. Students electing Physical Education as a major are expected to complete the following courses in addition to the general college requirements in Education: Physical Education, 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, and 16, with enough hours in other courses to complete 30 hours. Only students with a vigorous constitution and sound health are advised to elect this subject as a major, for without these essential requisites, success is impossible.

THE PRACTICAL ARTS.

SAMUEL MILO HADDEN, A.M., Dean.

The Practical Arts Group includes the following departments: industrial art, printing, bookbinding, mechanical drawing, fine and applied art, domestic science, household art, commercial art, and agriculture. In all of these departments are offered majors and combination majors with other departments in the group and with other departments of the College.

INDUSTRIAL ART.

SAMUEL MILO HADDEN, A.M.

JOHN T. MCCUNNIFF, A.B.

CHARLES M. FOULK, Pd.B.

MAX SHENCK.

Courses Primarily Junior College.

5. **Methods in Practical Arts Subjects.** Required of all first-year students, and also of those in later classes who have not had its equivalent, who are majoring in the practical arts group, including manual training, art, home economics, printing, bookbinding, commercial art, and agriculture.

The course deals with the fundamentals of teaching practical arts subjects, which includes a study of materials and processes.

10. **Elementary Mechanical Drawing.** A course designed to give a knowledge of the use of drawing instruments and materials, geometrical drawing, elements of projections, straight lines and circles; problems involving tangents and planes of projections, development of surfaces, elementary isometric and oblique projections, simple working drawings and lettering.

Mr. McCunniff.

17. **Elementary Machine Design.** The development of the helix and its application to V and square threads; conventions of materials, screw threads, bolts and nuts, rivets, keys, etc. Sketches, drawings, and tracings are made from simple machine parts, such as collars, face plate, screw center, clamps, brackets, couplings, simple bearings, and pulleys.

Mr. McCunniff.

8. **Elementary Art Metal.** A laboratory course dealing with the designing and constructing of sample artistic forms in sheet brass and copper. The aim is to create objects of artistic worth.

Mr. Hadden.

1. **Elementary Woodwork.** A course for those who have had little or no experience in woodworking. The use of tools is emphasized.

Mr. Foulk.

2. **Intermediate Woodwork.** This course is a continuation of Course 1.

Mr. Foulk.

Printing.

1. **Elementary Printing.** Intended to acquaint the student with the fundamental principles underlying the printing art. In this course the

student becomes efficient in hand composition, spacing out jobs, locking up forms, making a job ready for press and operating presses.

Mr. McCunniff.

2. **Intermediate Printing.** A continuation of the elementary printing designed to make the student more proficient in the lines already mentioned; rule work, designing programs, window cards, etc., underlaying and overlaying on the press, making ready half tones, two and three-color work and proofreading.

Mr. McCunniff.

Bookbinding.

1. **Elementary Bookbinding.** Tools, machines, materials, and their uses, collating and preparing the sheets for sewing, sewing on tape and cord, preparing of end sheets, trimming, gluing, rounding, backing, headbanding and lining of backs, cover materials, planning and making of covers, finishing and lettering of titles, and labeling; all the steps necessary for the binding of full cloth-bound books.

Mr. Shenck.

2. **Intermediate Bookbinding.** The binding of books in half morocco and full leather, including such processes as: Tooling in gold and blank, edge gilding and marbling, and the making and finishing of cardboard boxes and leather cases.

Mr. Shenck.

Courses Primarily Senior College.

18. **Advanced Machine Design.** A study of the transmission of motion by belt and pulley, and gears and cams. Such curves as the involute, cycloid, and epicycloid are applied in the designing of gears. Sketches, detail, and assembly drawings are made of intricate pieces of machinery, such as the globe valve, vise, head stock lathe, and such shop machinery as lathes, band saws, motors, and gas and steam engines.

Mr. Hadden.

12. **Elementary Architectural Drawing.** This course includes designs, plans, elevations, and longitudinal sections of framing, doors, windows, sills, rafters, etc., in building construction in its application to work for barns, outbuildings and residences. It also includes the making of tracings, blueprints, and specifications. Prerequisite Course 10.

Mr. Hadden.

9. **Advanced Art Metal.** This course should be taken after Course 8, since it deals with more advanced ideas in metal work, and includes work in brass, copper, bronze, and German silver. This course deals largely with the designing, decorating, and artistic coloring of metals. It also includes a short course in the chemistry of metal colors, and the use of lacquers for projection. Simple artistic jewelry is made the basis for the constructive work in this course.

Mr. Hadden.

19. **Wood Turning.** A course for those wishing to acquaint themselves with a knowledge of the working of a power lathe and its possibilities.

Mr. Foulk.

14. **Care and Management.** A course for those wanting to acquaint themselves with the art of caring for the equipment of a woodworking department.

Mr. Foulk.

Major Subjects—Teaching Industrial Art in Secondary Schools. Senior College requirement: Courses 7, 13, 16, 19, 24. The remaining courses necessary to satisfy the requirement of forty to sixty hours are to be selected upon consultation with the Dean of Practical Arts.

Major Subject—Teaching Industrial Art in Elementary Schools. Junior College requirement: Courses 1, 2, 3, 4, 6, 8, 10, 12, 15, and 19. The remaining courses necessary to satisfy the requirement are to be selected upon consultation with the Dean of Practical Arts.

Combination Majors.

This department upon consultation will arrange other combination majors within the department, also upon consultation with the other departments concerned, arrange combination majors, making such combinations as Manual Training and Physics.

FINE AND APPLIED ARTS.

WALTER F. ISAACS, B.S.

AGNES HOLMES, Pd.M.

Courses Primarily Junior College.

1. **Elementary Drawing and Design.** A wide range of problems in public school drawing is taken up in a brief manner to give the student a general knowledge of the subject. Those students who are taking their majors in the department lay a foundation for their future work, and others who elect the course find it an aid in their teaching. Mr. Isaacs.

2. **Applied Design.** The construction and decoration of notebook covers, desk pads, and similar articles; theory of design in its relation to useful objects; the application of original designs by block printing on curtains, tablerunners, or pillow covers. Miss Holmes.

5. **Water Color Painting.** Groups of still life objects and flowers are rendered in water color. The student is allowed freedom of technic, but a close study of color values is insisted upon. Oil painting also may be done in this class. Prerequisite: Course 3. Mr. Isaacs.

8. **Pottery, Handbuilt.** Vases, bowls, decorative tiles, etc., are made. The department is equipped with a modern kiln, and the work of students is fired and glazed. A variety of glazes with different colors is used. Embossed, incised, and inlaid decorations. Miss Holmes.

11. **Household Art Design.** Interior decoration. A study of good taste in common articles, costumes, etc. Original designs are executed by the student. Mr. Isaacs.

Primarily Senior College.

13. **Commercial Design.** Design considered in its relation to advertising art. Posters, cover designs, and various advertising problems are executed by the student. Lectures on the appreciation of newspaper, magazine, and book illustration. Drawing for reproduction. A course with direct bearing on life and industry, and essential in every course of study. Mr. Isaacs.

Requirements for a Major in Fine and Applied Arts. In the Junior College, courses 1, 2, 3, 5, 6, 9, 10, and 11 are required for major work.

COMMERCIAL ARTS.

JEHU BENTON WHITE, B.S.

Courses Primarily Junior College.

1. **Principles of Shorthand.** First six lessons in Gregg Manual, with supplementary exercises.

11. **Elementary Typewriting.** Beginning work in touch typewriting, covering position at the machine, memorizing of keyboard, proper touch, and correct fingering, with instructions in the care of the machine.

25. **Commercial Arithmetic.** A rapid review of common and decimal fractions will be given. This is followed by comprehensive treatment of percentage and its application. Only modern methods will be used.

Courses Primarily Senior College.

14. **Advanced Typewriting.** Speed practice, direct dictation, transcribing from shorthand notes.

4. **Dictation.** Review of principles, phrasing, dictation. Beginning office practice.

Junior College Requirement for a Major. Courses 1, 2, 3, 4, 5, 6, 11, 12, 13, 14, 15 are required for a major in Shorthand branch courses 21, 22, 23, 24, 25, 26, 27, and 28.

Combination Majors. This department upon consultation will arrange other combination majors within the department, also upon consultation with the other departments concerned, arrange combination majors, making such combinations as Manual Training, etc.

HOME ECONOMICS.

AUDREY B. McINTOSH, Summer 1916.

FLORENCE REDIFER, A.B.

Courses Primarily Junior College.

1. **Elementary Cooking.** A study of the following articles of food is made from the standpoint of composition, nutritive value, growth or manufacture, marketing, adulteration, and methods of preparation: Fruits, vegetables, cereals, eggs, milk and beverages. Special emphasis is laid upon the principles underlying the processes of cooking.

3. **Fancy Cooking and Serving.** Open to Senior College students. Meals are planned, prepared and served at a given cost. Due consideration is given to diet suited to individual needs, varying with age, health, and activity. Proper balancing of the menu is studied and carried out in the practical work. Prerequisite: D. S. 1 and 2.

5. **Housewifery.** Open to Senior and Graduate College students. The place of the home and the homemaker in the economic world. Methods of organizing and conducting the affairs of the household, care of the house and its furnishings, and care of the family.

Miss Redifer.

8. Methods of Teaching Domestic Science. Open to Senior and Graduate College students. A study of the problems of teaching Domestic Science in the elementary and high schools. It includes the arrangement of courses of study for schools, methods of presenting the subject-matter, planning of equipment, and laboratory management. Text-books are reviewed and lesson plans discussed. Miss Redifer.

HOUSEHOLD ART.

MERLE KISSICK, A.B., PH.B.
GLADYS SCHARFERSTEIN, PH.B.

Courses Primarily Junior College.

2. Elementary Dressmaking. Fundamental principles of garment construction with four problems based on drafted patterns. Lectures and laboratory. Miss Scharferstein.

8. Methods of Teaching. A study of various types of schools in relation to modern subject-matter in Household Art and methods of presentation. Lectures. Miss Kissick.

Courses Primarily Senior College.

5. Millinery. Study of basic design principles applied to the hat and silhouette with shop methods of construction. Lectures and laboratory. Miss Kissick.

9. House Decoration. An appreciation course in decorative elements with reference to the house and application to practical problems. Lectures and illustrative work in Model Cottage. Miss Kissick.

Primarily Graduate College.

20. Seminar. Individual work on research problems in the Household Art field. Conference. Miss Kissick.

BUSINESS ACCOUNTING.

FRANK W. SHULTIS, A.B., A.M.

The work offered will be of the same quality and amount as in the regular terms. The instruction will be individual, allowing each student to make all the progress he can.

Courses Primarily Junior College.

21. Elementary Accounting. Fundamental principles of double-entry bookkeeping.

22. Intermediate Accounting. Wholesale set.

23. Advanced Accounting. Corporation set.

AGRICULTURE.

CHARLES HALL WITHINGTON, M.S., A.M.

The large collection of plants growing upon the College campus, in the arboretum, in the gardens, and in the greenhouses, furnishes very rich illustrative material for classes in all agriculture and nature study subjects. As a laboratory for the study of landscape gardening the campus furnishes one of the finest in the state.

Courses Primarily Junior College.

3. **Nature Study.** The theory, practice, and materials of nature study. Designed to fit teachers for teaching nature study in the elementary schools.

Mr. Withington.

4. **School Gardening.** The meaning of the school gardening movement. The relation of gardening to nature study and elementary agriculture. The school garden as a laboratory of nature study and agriculture. The principles of landscape improvement applied to school and home grounds. How to beautify school and home grounds.

Mr. Withington.

5. **Elementary Agriculture.** This course is planned primarily for teachers in the rural and village schools. The subject-matter is selected and the work presented with this end in view. The course covers a year's work in elementary agriculture for the rural and village teachers. All laboratory work will be presented in such a way that it can be adapted to the needs of the individual teacher. Practical work is given in the greenhouse, field, and garden.

Mr. Withington.

Courses Primarily Senior College.

15. **General Entomology.** The study of our local insect fauna, together with the systematic relation and the identification of the orders and the more important families, genera, and species, and the habit and life histories of representative species.

Mr. Withington.

The State Teachers College of Colorado

PROGRAM—SUMMER TERM.

Time Designation.	Description.	Teacher.	Room.
7:00			
Zool. 5	Bird Study	Adams	101
Lat. 1	Elementary Latin	Barrett	211
Rural 4	Geography (H. S. Credit)	Bell	L7
Eng. 1	Grammar and Composition	Blanchard	212
Eng. 15	Modern Plays	Cross	108
Math. 3	Trigonometry	Finley	304
Ind. A. 14	Care and Management	Foulk	G1
Ind. A. 8 & 9	Art Metal	Hadden	G5
Psy. 2	Educational	Heilman	103
Art. 2	Applied Design	Holmes	G203
Art. 15	Methods in Supervision	Isaacs	G200
Biol. 2	Bionomics	Johnson	303
Tr. Sch. 37	Kindergarten Program	Julian	T100
Ed. 11	Principles of Education	Keating	102
Mus. 2	Methods in Music	Kendel	203
Phys. Ed. 8	Esthetic Dancing	Keyes	6
H. Art. 5	Millinery (2 Periods)	Kissick	T2
Phys. Ed. 5	Plays and Games	Long	6
Ed. 41	Master's Thesis Course	McCracken	114
Ind. A. 10	El. Mech. Drawing	McCunniff	G100
Ind. Arts 17	Elementary Machine Design	McCunniff	G100
Dom. Sci. 1	Elementary Cooking (2 Periods)	McIntosh	5
Span. 5	Intermediate Spanish	Morgan	301
Eng. 10	American Literature	Phillips	210
Soc. 21	Methods and Aims of Organized Social Work	Randolph	208
Soc. 12	Rural Sociology	Sexson	201
Bk. Bdg. 1	Elementary	Shenck	G105
Math. 8	Elementary in Arith. (H. S. Credit)	Shultis	205
Hist. 6	History of Germany	Smith	104
Read. 2	Reading in the Grades	Tobey	202
Com. A. 25	Commercial Arithmetic	White	G201
Ed. 34	American Education	Wright	100
Ag. 4	School Garden	Withington	L13
8:10			
Phys. 4	Advanced Physics	Abbott	1
Geog. 3	Climatology	Barker	L7
Eng. 1a	Functional Grammar	Cross	108
French 5	Intermediate	Du Poncet	301
Ind. A. 1	Elementary Woodwork	Foulk	G1
Psy. 1	General Psychology	Freeland	103
Art. 1	El. Drawing and Design	Isaacs	G200
Tr. Sch. 36	Handwork in Kindergarten	Julian	T100
Ed. 24	School Administration	Keating	201
Phys. Ed. 7	Folk Dances for School and Playground	Keyes	6
Tr. Sch. 7	Third and Fourth Grade Methods	Lawler	T4
Phys. Ed. 3	Light Gymnastics	Long	6
Ed. 12	Current Movements in Social Education	McCracken	100
Soc. 20	The Consumption of Wealth	Miller	208
Tr. Sch. 8	Fifth and Sixth Grade Methods	Mooney	T201
Eng. 13	Tennyson and Browning	Phillips	203
Ed. 33	History of Modern Education	Phillips	G205
Soc. 24	Problems and Methods, Child Welfare	Randolph	210
Dom. Sci. 8	Methods of Teaching Domestic Science	Redifer	G202
Bk. Bdg. 2	Advanced	Shenck	G105
Co. Sch. 6	County School Methods	Shriber	102
Math. 8a	Arithmetic for Rural Teachers (H. S. Credit)	Shultis	205
Tr. Sch. 6	Primary Methods	Sibley	T200
Hist. 13	Methods in History	Smith	104
Read. 1	Evolution of Expression	Tobey	202
Com. A. 1	Elementary Shorthand	White	G100
Ag. 3	Nature Study	Withington	L13
Ed. 11	Principles of Education	Wright	101

PROGRAM OF COURSES.

51

Time	Designation.	Description.	Teacher.	Room.
9:20		General Lectures		
10:20				
Chem. 1		Elementary Chemistry	Abbott	302
Ed. 18a		Biotics	Adams	101
Tr. Sch. 15		Story Telling	Augustine	T4
Geog. 12		Methods in Geography	Barker	L7
Lat. 2		Advanced	Barrett	102
French 1		Beginning	Du Poncet	301
Math. 4		Analytics	Finley	304
Ind. A. 19		Wood Turning	Fouk	G5
Psy. 1		General Psychology	Freeland	104
Tr. Sch. 9		Seventh and Eighth Grade Methods	Green	T201
Ind. A. 5		Methods of Teaching	Hadden	G202
Psy. 2		Educational	Heilman	103
Mus. 8a		Harmony	Holloway	201
Art. 8		Pottery	Holmes	G204
Biol. 2		Bionomics	Johnson	303
Mus. 10		Methods in Appreciation	Kendel	203
Phys. Ed. 6		Children's Singing Games	Keyes	6
H. Art. 9		House Decoration	Kissick	G205
Tr. Sch. 5		Primary Methods	Long	T200
Phys. Ed. 2		Applied Anatomy	Long, R. R.	6
Ed. 29		Current Educational Thought	McCracken	100
Print. 2		Advanced Printing	McCunniff	G106
Dom. Sci. 3		Advanced Cooking and Serving (2 Periods)	McIntosh	5
Rural 1		History and Civics (H. S. Credit)	Phillips, S. S.	210
Dom. Sci. 5		Housewifery	Redifer	5
H. Arts.		Machine Sewing (2 Periods)	Scharfenstein	T2
Soc. 3		Educational Sociology	Sexson	208
Bk. Bdg. 1		Elementary	Shenck	G105
Com. Arts. 21, 22, and 23		Accounting	Shultis	205
Com. A. 4		Advanced Shorthand	White	G100
Ag. 15		General Entomology	Withington	L13
11:30				
G. Sci. 7		General Science	Abbott	1
Biot. 14		Advanced Biotics	Adams	101
Geog. 15		Geography of Australasia	Barker	L7
Eng. 19		Shakespeare (Selected Comedies)	Cross	108
Germ. 10		Advanced	Du Poncet	301
Math. 9		Algebra and Geometry for Teachers	Finley	304
Ind. A. 14		Care and Management	Fouk	G1
Psy. 6		Mental and Educational Tests	Freeland	T4
Ind. A. 12		El. Arch. Drawing	Hadden	G100
Ind. A. 18		Adv. Mech. Drawing	Hadden	G100
Psy. 2		Educational	Heilman	103
Art. 13		Commercial Design	Isaacs	G200
Zool. 2		Bacteria, etc.	Johnson	303
Ed. 42		Social Adm. of Education	Keating	201
Mus. 8b		Advanced Harmony	Kendel	203
Phys. Ed. 9		Classical Dancing	Keyes	6
H. Art. 8		Methods	Kissick	T2
Print. 1		Elementary Printing	McCunniff	G106
Soc. 28		Principles of Social Progress	Miller	208
Span. 10		Advanced	Morgan	300
Eng. 1		Grammar and Composition	Phillips	210
Soc. 3		Educational Sociology	Sexson	200
Bk. Bdg. 2		Advanced	Shenck	G105
Ed. 25		Administration of Rural Schools	Shriber	102
Hist. 10		Industrial History	Smith	104
Com. A. 11		Elementary Typewriting	White	G100
Ed. 11		Principles of Education	Wright	100
1:45				
Chem. 2		Qualitative Analysis	Abbott	302
Ed. 18b		Biotics	Adams	101
Geog. 2		Physical Geography	Barker	L7
Ed. 20		H. S. Administration	Barrett	211
Ed. 16		H. S. Curriculum	Bell	215
Libr. 1		Reference Work	Carter	L
Span. 1		Beginning	Du Poncet	301
Math. 1		College Algebra	Finley	304
Ind. A. 2		Advanced Woodwork	Fouk	G1
Psy. 1		General Psychology	Freeland	T200

Time Designation.	Description.	Teacher.	Room.
Mus. 1	School Music for Beginners	Holloway	201
Psy. 3b	Child Study	Heilman	103
Art. 3	Water Color Painting	Isaacs	G203
Biol. 2	Bionomics	Johnson	303
Rural 2	Grammar (H. S. Credit)	Keating	210
Mus. 5	Supervisors' Course	Kendel	203
Phys. Ed. 16	Anthropometry and Phys. Exams.	Keys	6
Print. 1	Elementary Printing	McCunniff	G106
Eng. 1	Grammar and Composition	Phillips	108
Ed. 9	Theory and Practice in Education	Phillips, S. S.	G205
Soc. 3	Educational Sociology	Randolph	208
Soc. 12	Rural Sociology	Sexson	100
Ed. 26	Rural School Curriculum	Shriber	102
Hist. 9	Civics, National Government	Smith	104
Hist. 3	American History	Sweaney	200
Read. 6	Dramatic Interpretation	Tobey	202
Com. A. 14	Advanced Typewriting	White	G100
Ed. 23	Research in Education	Wright	114
Ag. 5	Elementary Agriculture	Withington	L13
3:40			
Phys. Ed. 13	Playground Organization and Conduct	Long	6
5:00			
Phys. Ed. 22	Athletics for Men	Long	6
7:00			
Phys. Ed. 23	Recreation Course	Long	6

TEACHERS' PROGRAMS—SUMMER TERM, 1916

Hour.	Designation.	Description.	Room.
ABBOTT.			
8:10	Phys. 4	Advanced Physics	1
10:20	Chem. 1	Elementary Chemistry	302
11:30	G. Sc. 7	General Science	1
1:45	Chem. 2	Qualitative Analysis	302
ADAMS.			
7:00	Zool. 5	Bird Study	101
10:20	Ed. 18a	Biotics	101
11:30	Biot. 14	Advanced Biotics	101
1:45	Ed. 18b	Biotics	101
AUGUSTINE.			
10:20	Tr. Sch. 15	Story-Telling	T4
BARKER.			
8:10	Geog. 3	Climatology	L7
10:20	Geog. 12	Methods in Geography	L7
11:30	Geog. 15	Geography of Australasia	L7
1:45	Geog. 2	Physical Geography	L7
BARRETT.			
7:00	Lat. 1	Elementary Latin	211
10:20	Lat. 2	Advanced	102
1:45	Ed. 20	H. S. Administration	211
BELL.			
11:00	Rural 4	Geography	L7
1:45	Ed. 16	H. S. Curriculum	215
BLANCHARD.			
7:00	Eng. 1	Grammar and Composition	212
CARTER.			
1:45	Libr. 1	Reference Work	Lib.
CROSS.			
7:00	Eng. 15	Modern Plays	108
8:10	Eng. 1a	Function Gram.	108
11:30	Eng. 19	Shakespeare (Selected Comedies)	108
	Eng. 30	Conference on Master's Thesis (By Appointment)	
DU PONCET.			
8:10	French 5	Intermediate	301
10:20	French 1	Beginning	301
11:30	Germ. 10	Advanced	301
1:45	Span. 1	Beginning	301
FINLEY.			
7:00	Math. 3	Trigonometry	304
10:20	Math. 4	Analytics	304
11:30	Math. 9	Alg. and Geom. for teachers	304
1:45	Math. 1	College Algebra	304
FOULK.			
7:00	Ind. A. 14	Care and Management	G1
8:10	Ind. A. 1	Elementary Woodwork	G1
10:20	Ind. A. 19	Wood Turning	G5
11:30	Ind. A. 14	Care and Management	G1
1:45	Ind. A. 2	Adv. Woodwork	G1
FREELAND.			
8:10	Psy. 1	General Psychology	103
10:20	Psy. 1	General Psychology	104
11:30	Psy. 6	Mental and Ed. Tests	T4
1:45	Psy. 1	General Psychology	T200
GREEN.			
10:20	Tr. Sch. 9	Seventh and Eighth Gr. Methods	T201
HADDEN.			
7:00	Ind. A. 8 and 9	Art Metal	G5
10:20	Ind. A. 5	Methods of Teaching	G202
11:30	Ind. A. 12	El. Arch. Drawing	G100
11:30	Ind. A. 18	Adv. Mech. Drawing	G100

Hour	Designation.	Description.	Room.
HEILMAN.			
7:00	Psy. 2	Educational	103
10:20	Psy. 2	Educational	103
11:30	Psy. 2	Educational	103
1:45	Psy. 3b	Child Study	103
HOLLOWAY.			
10:30	Mus. 8a	Harmony	201
1:45	Mus. 1	School Music for Beginners	201
HUGH.			
8:10		Training School Supervision	
11:30			
2:30			
4:50		Office	
HOLMES.			
7:00	Art 2	Applied Design	G203
10:20	Art 8	Pottery	G204
ISAACS.			
7:00	Art 15	Methods in Supervision	G200
8:10	Art 1	El. Draw. and Design	G200
11:30	Art 13	Commercial Design	G200
1:45	Art 3	Water Color Painting	G203
JOHNSON.			
7:00	Biol. 2	Bionomics	303
10:20	Biol. 2	Bionomics	303
11:30	Zool. 2	Bacteria, etc.	303
1:45	Biol. 2	Bionomics	303
JULIAN.			
7:00	Tr. Sch. 37	Kindergarten Program	T100
8:10	Tr. Sch. 36	Handwork in Kindergarten	T100
KEATING.			
7:00	Ed. 11	Principles of Education	102
8:10	Ed. 24	School Administration	201
11:30	Ed. 42	Social Adm. of Education	201
1:45	Rural 2	Grammar (H. S. Credit)	210
KENDEL.			
7:00	Mus. 2	Methods in Music	203
10:20	Mus. 10	Methods in Appreciation	203
11:30	Mus. 8b	Advanced Harmony	203
1:45	Mus. 5	Supervisor's Course	203
KEYES.			
7:00	Phys. Ed. 8	Esthetic Dancing	6
8:10	Phys. Ed. 7	Folk Dances for Sch. and Playground	6
10:20	Phys. Ed. 6	Children's Singing Games	6
11:30	Phys. Ed. 9	Classical Dancing	6
7:00 p. m.	Phys. Ed. 23	Recreation Course	6
KISSICK.			
7:00	H. Art 5	Millinery (Two Periods)	T2
10:20	H. Art 9	House Decoration	G205
11:30	H. Art 8	Methods	T2
1:45		Seminar	T2
LAWLER.			
8:10	Tr. Sch. 7	Third and Fourth Grade Methods	T4
LONG.			
10:20	Tr. Sch. 5	Primary Methods	T200
LONG, R. R.			
7:00	Phys. Ed. 5	Plays and Games	6
8:10	Phys. Ed. 3	Light Gymnastics	6
10:20	Phys. Ed. 2	Applied Anatomy	6
1:45	Phys. Ed. 16	Anthropometry, etc.	104
3:40	Phys. Ed. 13	Playground Organization and Conduct	104
5:00	Phys. Ed. 22	Athletics for Men	6
7:00	Phys. Ed. 23	Recreation Course	6
MCCRACKEN.			
7:00	Ed. 41	Master's Thesis Course	114
8:10	Ed. 12	Current Movements in Social Ed.	100
10:20	Ed. 29	Current Ed. Thought	100
	Ed. 23	Research in Education	114

TEACHERS' PROGRAMS.

55

Hour.	Designation.	Description.	Room.
McCUNIFF.			
7:00	Ind. A. 10	El. Mech Drawing	G100
7:00	Ind. A. 17	El. Machine Design	G100
10:20	Print. 2	Advanced Printing	G106
11:30	Print. 1	Elementary Printing	G106
1:30	Print. 1	Elementary Printing	G106
McINTOSH.			
7:00	Dom. Sci. 1	Elementary Cooking (Two Periods)	5
10:20	Dom. Sci. 3	Adv. Cook. and Serving (Two Periods)	5
MILLER.			
8:10	Soc. 20	The Consumption of Wealth	208
11:30	Soc. 28	Principles of Social Progress	208
MOONEY.			
8:10	Tr. Sch. 8	Fifth and Sixth Grade Methods	T201
MORGAN.			
7:00	Span. 5	Intermediate Spanish	301
8:10		High School	
10:20		High School	
11:30	Span. 10	Advanced	300
PHILLIPS, A. L.			
7:00	Eng. 10	American Literature	210
8:10	Eng. 13	Tennyson and Browning	203
11:30	Eng. 1	Grammar and Composition	210
1:45	Eng. 1	Grammar and Composition	108
PHILLIPS, S. S.			
8:10	Ed. 33	Hist. of Mod. El. Ed.	G205
10:20	Rural 1	Am. Hist. (H. S. Credit)	210
1:45	Ed. 9	Theory and Practice of Teaching	G205
RANDOLPH.			
7:00	Soc. 21	Methods and Aims of Organized So- cial Work	208
8:10	Soc. 24	Problems and Methods, Child Wel- fare	210
1:45	Soc. 3	Edu. Sociology	208
REDIFER.			
8:10	Dom. Sc. 8	Methods of Teaching D S.	G202
10:20	Dom. Sc. 5	Housewifery	5
SCHARFENSTEIN.			
10:20	H. Arts	Machine Sewing (Two Periods)	T2
SEXSON.			
7:00	Soc. 12	Rural Sociology	201
10:20	Soc. 3	Ed. Sociology	208
11:30	Soc. 3	Ed. Sociology	200
1:45	Soc. 12	Rural Sociology	100
SHENCK.			
7:00	Bk. Bdg. 1	Elementary	G105
8:10	Bk. Bdg. 2	Advanced	G105
10:20	Bk. Bdg. 1	Elementary	G105
11:30	Bk. Bdg. 2	Advanced	G105
SHRIBER.			
8:10	Co. Sch. 6	County School Methods	102
11:30	Ed. 25	Administration of Rural Schools	102
1:45	Ed. 26	Rural School Curriculum	102
SHULTIS.			
7:00	Math. 8	Methods in Arithmetic	205
8:10	Math. 8a	Arithmetic for Rural Teachers (H. S. Credit)	205
10:20	Com. Arts, 21, 22, 23	Accounting	205
SIBLEY.			
8:10	Tr. Sch. 6	Primary Methods	T200
SMITH.			
7:00	Hist. 6	History of Germany	104
8:10	Hist. 13	Methods in History	104
11:30	Hist. 10	Industrial History	104
1:45	Hist. 9	Civics, National Government	104

THE STATE TEACHERS COLLEGE.

Hour.	Designation.	Description.	Room.
SWEANY.			
1:30	Hist. 3	High School	200
1:45		American History	
TOBEY.			
7:00	Read. 2	Reading in the Grades	202
8:10	Read. 1	Evolution of Expression	202
1:45	Read. 6	Dramatic Interpretation	202
	Read. 15 & 16	By Conference	202
WHITE.			
7:00	Com. A. 25	Commercial Arithmetic	G201
8:10	Com. A. 1	Elementary Shorthand	G100
10:20	Com. A. 4	Advanced Shorthand	G100
11:30	Com. A. 11	Elementary Typewriting	G100
1:45	Com. A. 14	Advanced Typewriting	G100
WITHINGTON.			
7:00	Ag. 4	School Gardening	L13
8:10	Ag. 3	Nature Study	L13
10:20	Ag. 15	General Entomology	L13
1:45	Ag. 5	Elementary Agriculture	L13
	Ag. 16	Entomology Seminar (By Appointment)	L13
WRIGHT.			
7:00	Ed. 34	American Education	100
8:10	Ed. 11	Principles of Education	101
11:30	Ed. 11	Principles of Education	100
	Ed. 23	Research in Education	114

**PROGRAM FOR ADULT STUDENTS SPECIALIZING IN THE
DEPARTMENT OF COUNTY SCHOOLS.**

(High School Credit Only.)

Time	Designation.	Description.	Teacher.	Room.
7:00	Rural 4	Geography	Bell	L7
8:10	Rural 3	Arithmetic	Shultis	205
10:20	Rural 1	History and Civics	Phillips	210
11:30	Rural 6	General Science	Abbott	1
1:45	Rural 2	Grammar and Composition	Keating	210
1:45	Rural 5	Physiology and Hygiene	Morse	300

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The
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SECOND SUMMER TERM
BULLETIN

1916



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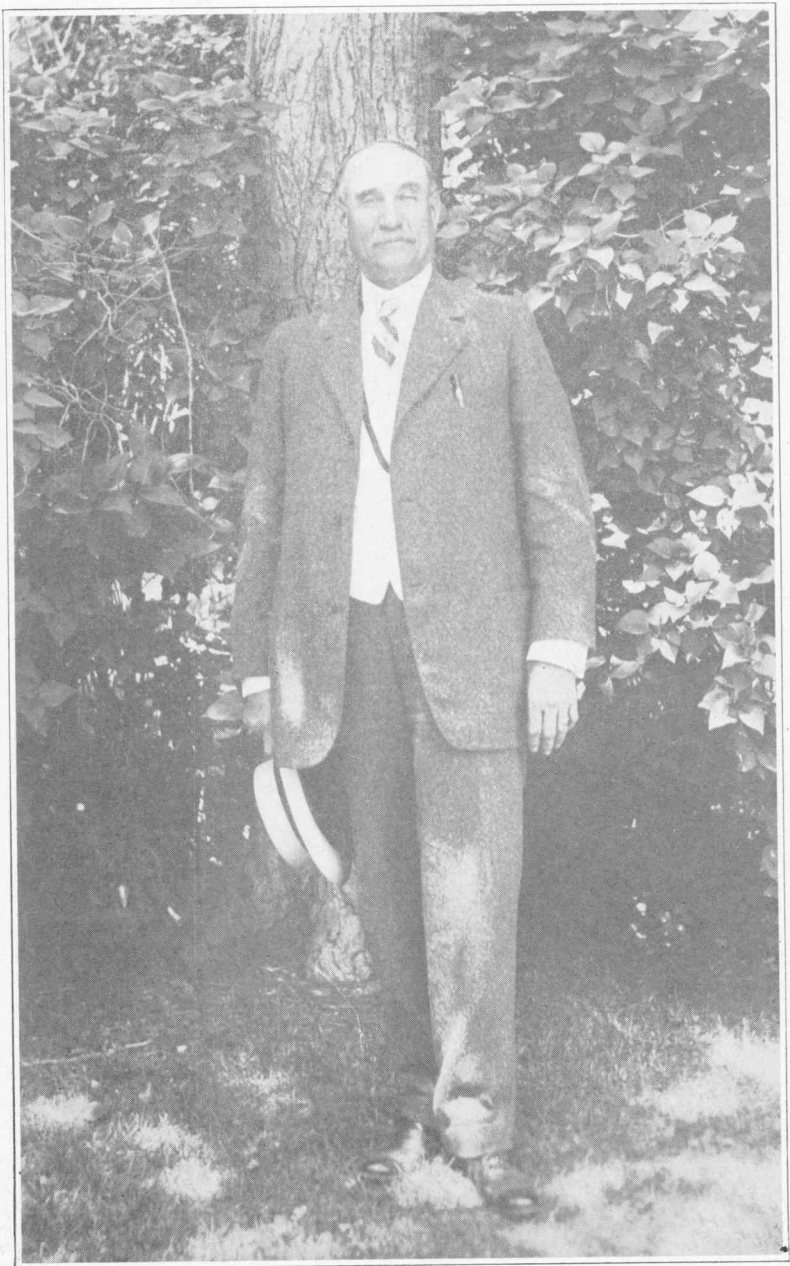
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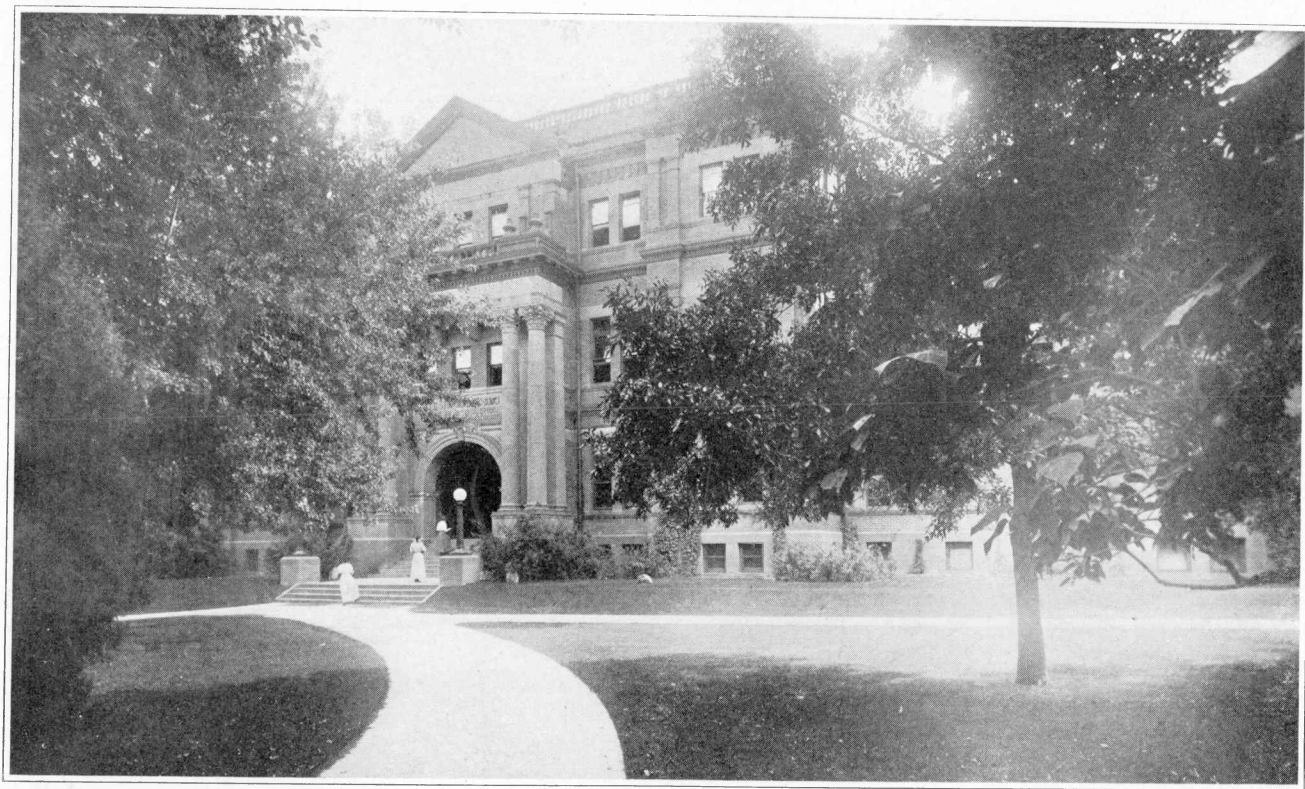
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APPROACH TO THE ADMINISTRATION BUILDING



CHILDREN AT PLAY ON THE CAMPUS IN SUMMER



EDWARD HOWARD GRIGGS, L.H.D.

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*Moral Reformers and
Leaders*

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2. Luther.
3. Victor Hugo.
4. Carlyle.
5. Emerson.

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2. The Immigrant at Home and en Route.
3. The Education of the Immigrant.
4. Hyphenated Americans.
5. Assimilating the Immigrant.



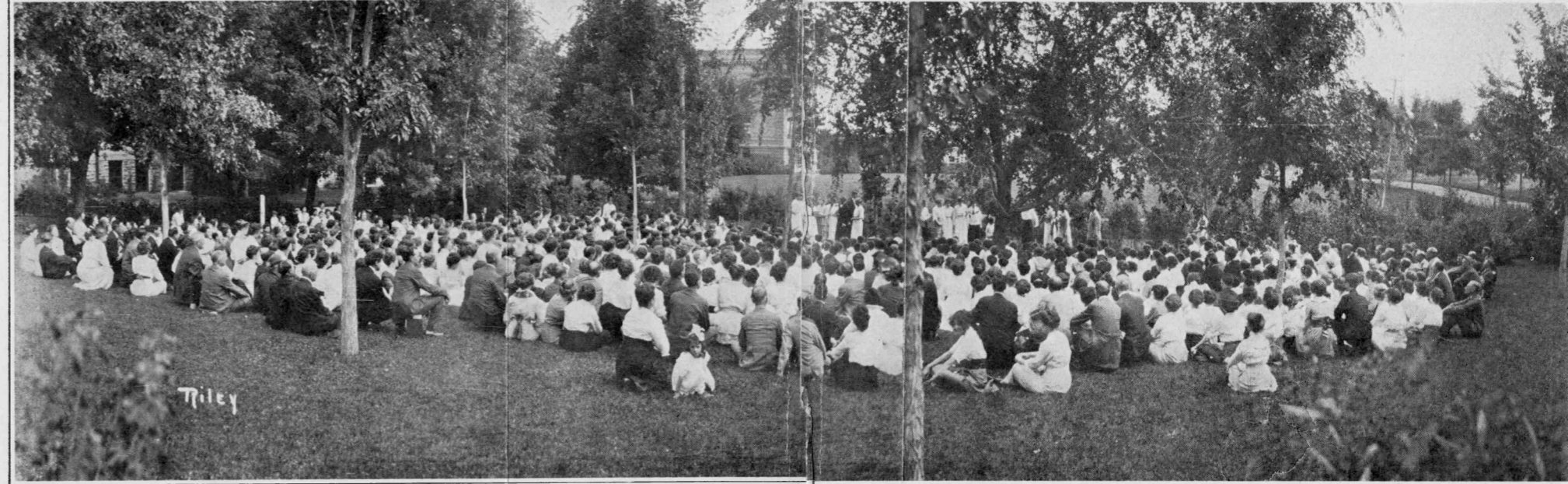
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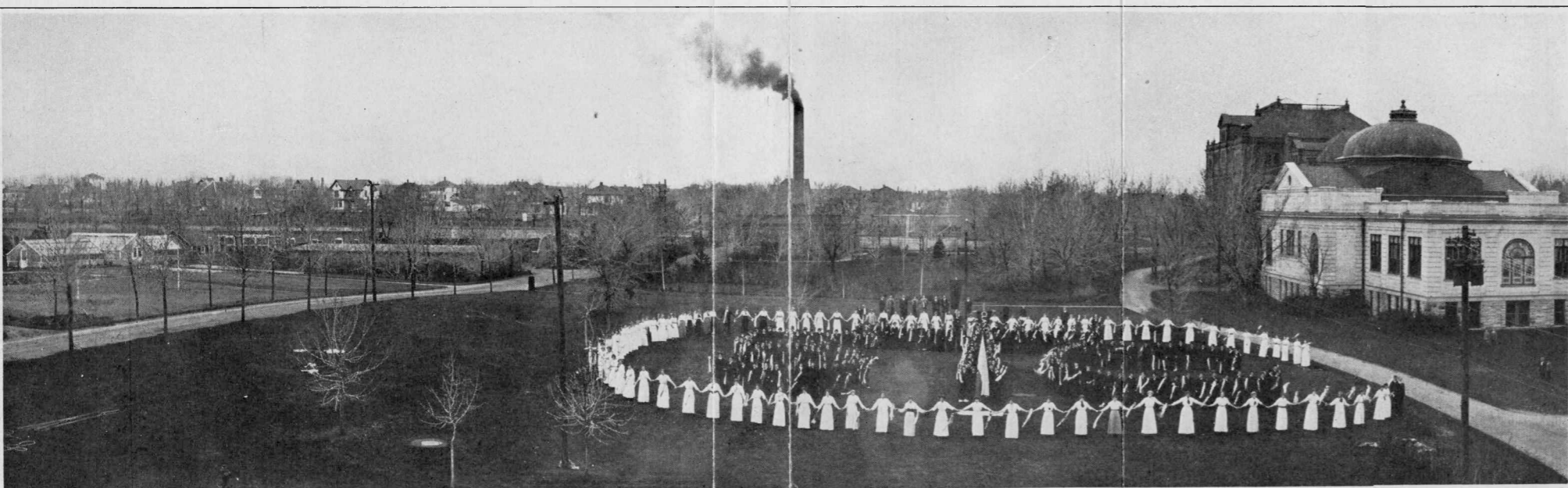
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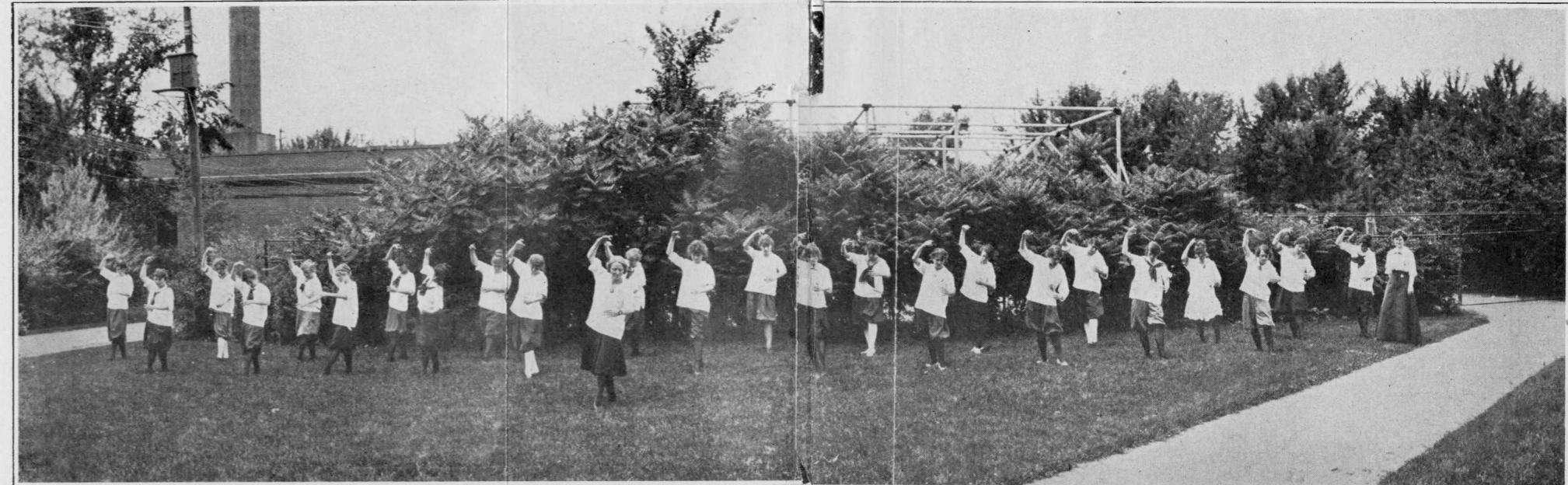
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THE OUTDOOR THEATER—SOUTH CAMPUS



AN INSIGNIA DAY SCENE "C. S. T. C."



GYMNASTIC DANCE ON THE GREEN



The Women's Club House



A Shaded Lawn



The Administration Building

The Library

A PANORAMIC VIEW OF A PORTION OF THE GROUNDS AND SOME OF THE BUILDINGS



AN AUTOMOBILE EXCURSION GIVEN BY GREELEY CITIZENS TO THE STUDENTS OF THE SUMMER SCHOOL—COLORADO STATE TEACHERS COLLEGE

