

The State Teachers College of Colorado

SPECIAL BULLETIN

COURSES FOR High School Principals and Teachers

THE SUMMER TERM, JUNE 16
TO JULY 25, 1913



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GREELEY, COLORADO



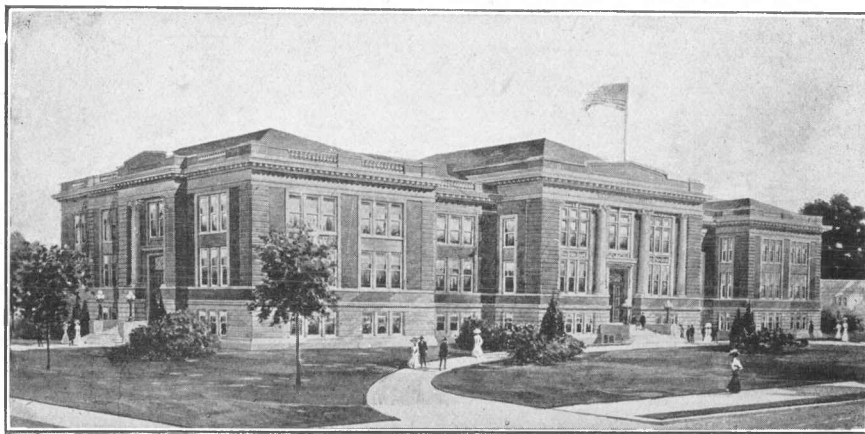
Administration Building.



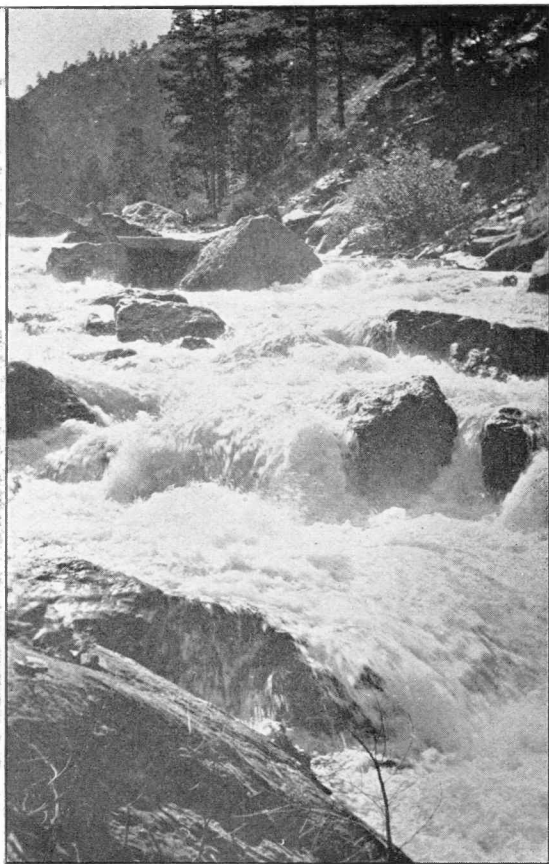
The President's Residence.



Guggenheim Hall of Industrial Arts.



TRAINING SCHOOL



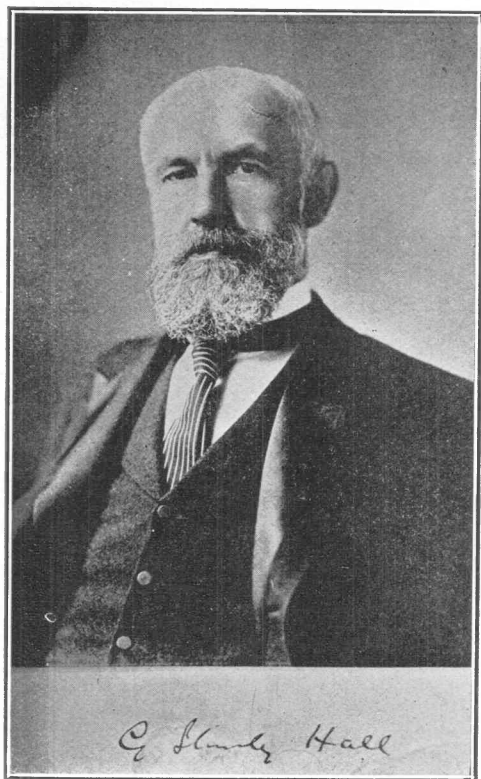
THE POUFRE RIVER.
Source of the Greeley Water Supply.



Lincoln Park—Greeley



The Library and Fountain.



PRESIDENT G. STANLEY HALL,
Clark University.

Bulletin of the State Teachers College of Colorado

SERIES XII

APRIL, 1913

No. 15

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A Bulletin of Information Concerning
Courses of Work for
**High School Principals
and Teachers**

During the Summer Term of Six Weeks
Commencing June 16 and
Ending July 25

— IN THE —
**STATE TEACHERS COLLEGE
OF COLORADO**



Greeley Colorado, April, 1913

Summer Term opens June 16, 1913, and continues six weeks.
Credit given toward graduation.

For further information address The State Teachers College of
Colorado, Greeley, Colorado.

SIMPLIFIED SPELLING

Members of the Faculty Offering Special Courses for High School Teachers.

THE SUMMER TERM, 1913.

Zachariah Xenophon Snyder, Ph. D., President, and Professor of
Biotics in Education.

Harry M. Barrett, A. M., Director, and Professor of Secondary
Education.

John Calvin Hanna, A. M., Principal of the Oak Park (Illinois)
High School. High School Organizations, and Activities, and
the Social Ends in Education.

Charles H. Brady, A. M., Principal of the Teachers College High
School, and Professor of Secondary Education.

Jacob Daniel Heilman, Ph. D., Professor of Psychology.

Arthur Eugene Beardsley, M. S., Professor of Biology.

G. W. Finley, B. S., Professor of Mathematics.

James Harvey Hays, A. M., Vice-President, Dean of the College,
and Professor of Latin and Mythology.

Franklin Lorenzo Abbott, A. M., Professor of Physical Science
and Physiography.

Gurdon Ransom Miller, A. M., Dean of the Senior College, and
Professor of Sociology.

Frank D. Slutz, Work in English.

Ralph S. Pitts, Latin.

Roscoe C. Hill, Work in Mathematics.

Samuel Milo Hadden, A. M., Dean of Industrial Arts, and Pro-
fessor of Manual Training.

Ethan Allen Cross, Ph. M., Registrar, and Professor of English
Literature and Language.

Frances Tobey, B. S., Professor of Reading and Interpretation.

J. R. Morgan, Superintendent of Schools, Trinidad, Colo., Spanish.

John T. Lister, A. M., Professor of Modern Languages.

Introduction

The work of the high school department last year was in some measure experimental. President Snyder believed that there was a place for such a department at the Summer Session, but he felt that it might take several seasons to develop any considerable demand for the work. The number who enrolled in this department at once was much larger than was expected and the steadily growing interest justified increasing the number of instructors and defining more exactly the lines of work for the coming season.

The needs of high school teachers are three fold: First, a thorough knowledge of the subject to be taught; second, a knowledge of the pupils, and skill in teaching; third, some comprehension of the particular business of the high school and a mind and spirit adapted to accomplish it.

With these three considerations in mind the course for the department this year has been planned and the instructors have been selected.

For the summer term of 1913 there will be three regular periods besides the conference hours, which proved so helpful last year. One period throughout the course will be devoted to the study of methods of teaching particular subjects: Mathematics, English, and History, Civics, Economics, and Sociology. Another course will deal with problems of teaching high school pupils to study, and with school management and administration. The third course will include the history of secondary education and the study of practical considerations in adolescent psychology.

The Problem of the High School

The problem of the public high school has not been solved; and it is going to take all the wisdom and skill and patience of its friends to solve it. In the first place, of course, the conditions must be clearly stated before much headway can be made.

The phase that first presents itself is that of attendance: Few pupils expect to graduate. A compulsory attendance law might solve this phase of the problem, but the prospect for such a law is not immediate. It is natural for those who believe in

the high school to lay the blame upon a perverse generation—or upon its parents. But there are others who say that the trouble is with the high school. And these others may be right—if this be treason, make the most of it. It will do no harm, at any rate, to examine the machine carefully and see if there is any flaw in its construction; to observe its operation closely and learn whether lost motion or unskilful operators account for the admitted fact that the machine is not doing the work. It seems a bit hasty to lay the blame to the material. Perhaps it was a mistake in the first place to limit the work of the high school to turning out leaders; maybe it ought to do something with what William Hawley Smith calls “All the Children of all the People.” This is not the traditional view, but there is coming to be a respectable company of thinking people who consider it the true view. There is more than a vague suspicion that an institution which costs the taxpayers so much money ought to handle more children of the taxpayers and ought to handle them successfully.

The machine has recently been improved in various ways in different parts of the country, and the results sometimes seem encouraging. Also those who have the running of the machine here and there have acquired some skill in manipulation. A thorough overhauling of the machine, the accurate understanding of its parts and of their purpose would seem to hold some promise of getting a larger and more satisfactory output. Books have been written on these subjects, but much of the improvement that has been made and most of the skill in manipulation that has been acquired is not easily available in print.

A course of study on the subjects of the high school, in the hands of students of the subject and teachers of practical and successful experience in handling the machine, would seem to offer an opportunity to gain a better understanding of what the work of the high schools really is and how it may be done with less waste and with greater efficiency. To organize such a course, and to make it practically valuable for those who are running the machine has been the purpose in establishing a high school department at the summer session of the Colorado State Teachers College. The course has been planned with care,

and able instructors have been secured to present it. The plans promise a summer term for high school officers and teachers in which they may find work suited to their needs, and an opportunity through discussion and association with earnest, progressive fellow-teachers to make a contribution of value toward the solution of the problem of the public high school.

H. M. BARRETT,
Director of the High School Section.

The Course of Work

The Course of Study will have three divisions:

A. Professional Work.

- I. The High School and Society.
- II. The High School and the Job.
- III. The Management of the High School.

B. Academic Work.

A. PROFESSIONAL WORK.

I. The High School and Society.

It is the business of the high school fundamentally to articulate the pupil with his place in the world after school, whatever that place may be. This task is not to provide him immediately with the tools to earn a living, but rather to inculcate in him an attitude of mind toward work, toward people, and toward ideas.

As elements contributing to the social education of the pupil, the following will be discussed:

The needs of the pupil and the selection of studies. The contribution of different studies to the symmetrical development and efficiency of the pupil. The high school and health: physical training, and activity in the high school—Play—Athletics. Teaching morality: honesty, purity. The Sex Problem. The fraternity and sorority. Athletic, literary, dramatic, debating, and musical organizations. The School paper. School and class socials. The school as a social center. Desirable and undesirable forms of social amusement. The teacher and the home. The teacher and the pupil—personal relations. The teacher's duty and the teacher's opportunity.

II. The School and the Job.

It is of fundamental importance to recognize that, as a rule, unless the pupil can make a living he cannot make a life. The task of the high school, therefore, after it has started the pupil in the development of a wholesome attitude of mind toward work, toward people, and toward ideals, is to give him a chance as early as possible to discover himself—to learn what his part is to be in the world's work, and to afford him an opportunity to take up those studies and to engage in those activities which will bring him to his work and give him skill in what he is to do.

Underlying this subject the following questions will be considered:

What job? Means for determination of the pupils' aptitudes and his opportunities. The book and the job. The awkward age and its relation to the job. The Manual Training High School; the Technical High School; the Trades High School; the Agricultural High School; the Old Fashioned High School; the Cosmopolitan High School. Progress in America in articulating the pupil with the job. Lessons from experience in foreign countries.

III. The Management of the School.

Along with and necessary to the articulation of the pupil with society and the articulation of the pupil with the job must go the everyday management of the high school machine with these ends in view. Matters to be considered in the management of the high school are: Pupil self-government; teacher government; cooperative government. The home as a factor in the government of the school. Discipline. The pupil's interests as obstacles and as means. Difference in methods of study, of teaching, and of discipline between grades and high school. Developing initiative. Inspiring to efficiency. Measuring efficiency. The practical value of ideals. The establishment of ideals.

Remarks on the Corps of Teachers

Mr. Harry M. Barnett, the director of the department, will give a course in management and administration. Mr. Barrett is principal of the East Side High School, Denver, and his work there keeps him constantly studying and dealing with the per-

sonal side of the problem. Knowledge and skill in planning and executing the general regime of high school work and policy is vital to any broad outlook, and to the successful conduct of the school. The personal relationship of principal and teachers together and with pupils and parents spells success or failure in high school work.

Mr. John Calvin Hanna.

The Teachers College and the Department of High School Study were highly gratified over the work done last summer by Mr. John Calvin Hanna, principal of the Oak Park, Illinois, High School. Mr. Hanna is rich in experience in every phase of high school work and he was an inspiring and vitalizing force. There is peculiar satisfaction, therefore, in announcing that Mr. Hanna will give a two weeks' course this summer devoted especially to the study of inducting first year high school pupils into the attitude and habits of efficient work and growing power. No high school principal in the United States is better qualified to vitalize such a course than Mr. Hanna.

Mr. Frank D. Slutz.

Superintendent Slutz of District Number One, Pueblo, is a man thoroughly trained and of well proved efficiency as a teacher of English in the High School. His work in this department in the Centennial High School may fairly be called remarkable. He will give a course in the High School department on the teaching of English Expression, oral and written, that will be of the greatest practical value to every teacher.

Mr. Roscoe C. Hill.

Principal Hill, of the Colorado Springs High School, has a reputation that is unique among high school principals, for knowing intimately about the character and progress of every one of the boys and girls in his large school. He will give a course in the teaching of mathematics which is the result of a thorough study as well as of a practical and successful experience in this particular branch of high school work.

Mr. Charles H. Brady.

Principal Brady, of the Normal High School, comes, after successful experience as a high school teacher, fresh from the

study of the high school historically and of the psychological principles underlying high school training, in Teachers College, Columbia University. The management believes that Mr. Brady will present in his course on The History of Secondary Education and the Psychology of the Adolescent a study that has peculiar worth in the training of high school teachers.

Dean G. R. Miller.

Dean Miller, of Teachers College, is known for the thoroughness of his instruction in History and kindred subjects. He will devote his period in the high school department to a systematic presentation of the essentials in teaching high school history, economics, and sociology. As a thoroughgoing study of the fundamentals in training for citizenship Dean Miller's course is of the utmost interest to high school teachers.

Other Instructors.

The other departments of the college will be richer than ever in opportunities for high school teachers. David Starr Jordan, G. Stanley Hall, Commissioner P. P. Claxton, and Superintendent Frank B. Cooper will all deal with problems directly affecting the high school. Maximilian P. E. Groszmann of Montclair, New Jersey; Henry H. Goddard, of Vineland, N. J.; Lightner Witmer, of Philadelphia; J. D. Heilman, of Teachers' College, will give courses dealing with the teaching of defective and delinquent children. Mr. C. A. Monahan, of the National Bureau of Education, is an authority on Rural Education; Meyer Bloomfield, of Boston, is eminent among those who speak with authority growing out of successful experience in Vocational Education.

Scheme of Work.

A general scheme of three formal periods a day for the High School Department is set forth as follows:

1. Administration and Management—1st week, Barrett; 2nd and 3rd weeks, Hanna; 4th, 5th and 6th weeks, Barrett.

2. Methods in High School Subjects—1st week, Hill, Mathematics; 2nd week, Burton, English Literature; 3rd week, Slutz, English Expression, oral and written; 4th, 5th and 6th weeks, Miller, History, Economics, Sociology.

3. History of Secondary Education and Adolescent Psychology and Pedagogy—6 weeks—Brady.

The Conference Round Table

A most useful feature of the session will be the Conference Round Table, held daily, at which will occur free discussion of matters suggested by the lectures of the day, or other subjects bearing upon the high school problem. There will be a question box where inquiries may be deposited to be answered or discussed at **The Conference Round Table** by members of the faculty and students, suggested by their experience in the particular line of inquiry. The Conference Round Table will serve as a clearing house for the day's work.

There will also be advanced courses in professional lines, conducted by Irving E. Miller; courses in advanced Psychology by Dr. J. D. Heilman and Mr. R. W. DeBusk, and courses in Biotics in Education by Pres. Z. X. Snyder. These courses are delineated below:

EDUCATION.

Irving E. Miller, Ph. D.

The courses in Education are designed to meet the needs of all classes of teachers and supervisors in the various grades from the kindergarten to the high school inclusive. The following courses are offered especially for high school teachers and officers.

21. **Training Adolescents for Social Efficiency**—Elective. (Senior College). It is designed in this course to assist superintendents, principals, and high school teachers to view comprehensively many of the great agencies which influence the lives of high school students, but which are not always incorporated in the recognized work of the schools. The main topics are: physical education; moral and ethical education; choosing and preparing for a vocation; and training for citizenship. The work of a great many institutions outside the school will be examined to determine their methods, aims, and results. The library contains a wealth of recent literature to illuminate these subjects.—Mr. Brady.

29. **Current Educational Thought**—Elective. (Primarily for Senior College students). The course this summer will be devoted almost exclusively to the discussion of the reconstructions

in methods, aim, curriculum, and administration that are involved in the growing tendency to apply the biological and functional concepts in psychology and education. In this connection the attempt will be made to put students in touch with all the available literature of the subject, so that they may acquire the power to interpret current educational literature for themselves. Special attention will be given to the application of current educational doctrine to the problems of the high school.—**Dr. Irving E. Miller.**

30. High School Principals and Teachers' Course—Elective. (Senior College). This course is under the general direction of Principal H. M. Barrett, of Pueblo, well known throughout Colorado as a leader in progressive high school education. Others participating in this course are Mr. Brady, Mr. Hanna, and Dr. Burton.

Other courses in Education recommended for the consideration of high school teachers, and for which credit is given toward graduation from the Senior College, are as follows: Numbers 10, 11, 12, 18, 24, 26, 31. For description of these courses see the regular Summer Term Bulletin.

BIOTICS IN EDUCATION.

President Snyder.

18-a. Biotics in Education. Required. (Senior College.)

I. The Meaning of Education.

From the Standpoint of the Individual—An evolution of possibilities; his education an evolution of the possibilities in relation to life; his expansion into health, strength, power, and skill to function in relation to his environment.

From the Standpoint of Society—His adjustment to society in efficiency; his obligation to society, and the obligation of society to him; his relation to the state, and the relation of the state to him.

II. The Importance of Heredity in Education.

Heredity and inheritance; facts and laws; growth and suppression of elements in inheritance in education.

Racial, national, parental and individual heredity elements as influencing education.

Hereditary and environmental variations in the education of the individual.

Theories of heredity—Lamark, Darwin, Weismann, DeVries, and their relation to education.

18-b. **Biotics in Education.** Required. (Senior College.) A continuation of Course 18-a.

I. Evolution as a Basis of Education.

Universal evolution as a working hypothesis. The evolution of life, mind, society, and the state, in its relation to civilization. Universal recapitulations. Recapitulation and the "culture epochs." Religious recapitulation. Its value to education.

II. Functional Education.

Education is functional—dynamic—pragmatic. All activities of the individual are the result of cell structure. Education is motorization—doing—realization. The maturation of truth.

III. The Evolution of Truth.

The potential value of a truth—anticipation. The actual value of a truth—realization. The efficient value of a truth—service. The making of truth—relation of facts. The genesis of truth.

IV. Life and its Evolution.

The creation of life values in relation to education. Relativity of life values in the process of education.

PSYCHOLOGY.

Jacob D. Heilman, Ph. D.

4. **Child Study**—Various phenomena of child life will be studied in this course. Those who are especially interested in the mental and physical lives of the children of high school age may devote their time to the study of those subjects.

B. ACADEMIC WORK.

Beside the foregoing professional work outlined for high school teachers and principals, the following academic work is offered for those who want to enlarge their vision of the subject matter in its relation to teaching. Higher Mathematics and Methods in Mathematics will be given by G. W. Finley, a man

well trained in his special domain of educational activity. Work in advanced English for high school teachers will be given by Mr. E. A. Cross of the department of English in the College. Mr. F. L. Abbott, head of the department of Physical Science, will give courses in Physics and Chemistry of college grade in line with the most approved and modern notions of teaching these sciences. Well equipped laboratories, modern in every respect, have been built up in this department. Courses in Latin, and how to teach Latin, by Mr. James H. Hays, Dean of the College, and head of the department of Latin, assisted by Mr. Ralph S. Pitts, teacher of Latin in East Denver High School, will be given to those who are interested in this work. Courses in Sociology and History will be given by Mr. G. R. Miller. Mr. Miller has gained an enviable reputation as a teacher of History and Sociology in this state and elsewhere. All teachers of History in high schools and all teachers who come in touch with young people should take advantage of the opportunity of getting advanced work under Mr. Miller. The subject of industrial and vocational education is emphasized in the institution. This department is in charge of Mr. S. M. Hadden, who has worked out unique notions in regard to it. Courses in Elementary Agriculture will be given by Mr. A. E. Beardsley. These are courses that every high school teacher should know about. He has developed here on the campus an arboretum, a school garden, school nursery, and formal garden and has developed a greenhouse for the purpose of teaching. The entire campus is a laboratory for the purpose of studying this subject. An advanced course in Mythology will be given by Mr. James H. Hays. This course should be universally taught in high schools. The work in Physiography will be under the direction of Mr. F. L. Abbott. Courses in Biology by Mr. A. E. Beardsley and Mr. L. A. Adams. These men are very strong, and have taken courses in the best schools of this country and have widened their ability with wide professional training. A strong course in Spanish will be given by Supt. J. R. Morgan.

Below will be found a delineation in regard to these subjects as taught by these professors:

PHYSICAL GEOGRAPHY.

Francis L. Abbott, A. M.

2. Physiography—The almost infinite variety of climatic con-

ditions of the earth are much more easily understood if one has a clear conception of the great atmospheric movements and a knowledge of the general configuration of the earth's surface. In this course most emphasis is laid on the studying and explaining of the fundamental principles which govern the movements of the air. The course seeks to unify all the various atmospheric movements, showing so far as possible a common cause, thus simplifying and unifying the subject of physical geography.

ENGLISH.

Ethan Allen Cross, Ph. M.

6. Materials and Methods for English in the High School—An elaboration of the theories and experiments of which Mr. Cross has been writing recently in the educational magazines.—**Mr. Cross.**

14. The Short Story—A consideration of the technic of the short story thru a study of twenty-five typical examples of the work of American, English, and foreign authors. The reorganization of high school work in literature and English upon the basis of the students' interest and immediate appreciation. An examination of fiction—the short story and the novel—to find out to what extent these forms of literature are suitable for high school study.—**Mr. Cross.**

19. American Literature—An extensive course of readings in American literature from the beginning to the present time. While the course takes up the development of American literature and involves the reading of a history of American Literature such as Wendell and Greenough's "A History of Literature in America," the chief interest is in the pieces themselves. The readings are taken largely from Page's "Chief American Poets," Long's "American Poems," Cairn's "Early American Writers," and Carpenter's "American Prose."—**Mr. Cross.**

READING AND LITERARY INTERPRETATION.

Frances Tobey, B. C.

1. The Evolution of Expression—This course involves careful analysis and oral interpretation of literary units of a varied range of imaginative and emotional appeal, to the end of growth in insight and in personal flexibility, power, and poise.

MYTHOLOGY.

James H. Hays, A. M.

7. **Advanst Mythology**—A course in Mythology is offerd to students in the summer scool. This course is especially adapted to such teachers as ar required to present the subject of literature in the high scools. It is based upon the belief that a knowledge of Mythology is necessary to the understanding of the most ordinary literature; and, since the body of ancient Mythology contains our most primitiv literature, the need of a knowledge of this and a mastery of the early myths and stories, must be apparent to all persons who undertake the teaching of literature. Practis for the purpose of development of power and skill in telling myths in an attractiv and pleasing manner is a part of the work of this course.—Mr. Hays.

HISTORY AND SOCIOLOGY.

History.

Gurdon Ransom Miller, A. M.

3. **European History**—The history of Europe from A. D. 1814 to the present time. This course is virtually a history of the Nineteenth Century. It treats of social and political changes in England, France, Germany, Italy, Austria, Turkey, and the Balkan States, Spain and Russia; the industrial and commercial relation of the world nations; the transformation of Africa; changes in the far East. In every possible related case American history is interpreted.

Sociology.

3. **Educational Sociology**—A course for teachers in applied sociology; modern social institutions; changing social ideals; social reforms, and their relation to scools, curricula, and teaching.

MANUAL TRAINING.

Samuel Milo Hadden, A. M.

2. **Advanst Woodwork**—This course is designd for those who wish to become proficient in the use of woodworking tools. It includes constructiv design, the principles of cabinet making and furniture construction, and wood finishing. The different

important constructiv joints are discust and applied wherever possible in the cabinet work done in class.

7. History of Industrial Education—The course includes the history and development of the manual training notion from economic and pedagogic standpoints, a study of the different European systems, and their influence upon the manual training movement in the United States; the four movements in the United States and their influence in the development of industrial education in different parts of the country.

ELEMENTARY AGRICULTURE.

A. E. Beardsley, A. M.

3. Elementary Agriculture—This course is designed to acquaint high scool teachers and principals with the fundamental principles of agriculture, the problems of our agricultural interests in this state and the best methods that make for a permanent system of agriculture. It takes on the nature of a seminar, since it is intended that the problems high scool people meet in introducing agriculture in the high scool, should be brought out by members of the class and reveiv full discussion.

The time is drawing near when agriculture will be taught in every country village, and small town high scool, for we ar slowly beginning to realize at last that since nearly fifty per cent of our people live in the country, and since the chief industry of the great mass of men is farming, that it is right that these people be traind in terms of their occupations; and that the high scool which only trains away from the farm and not towards the farm, is a misfit in our system of economic, social, and educational development. A scool which does not recognize that it bears a decided relation to the people of the community in the sense that it must better prepare them for making a living, one which does not teach in terms of the lives and occupations of the people that support it is out of place in that community and it works serious injury. Today, agriculture may be offerd as an entrance subject in preparation for college, and so one great barrier that has prevented the inclusion of agriculture in the curriculum of our high scools is removed. Principals and high scool teachers of science should realize the

importance of the new movement in education which is sweeping the country and take every advantage better to fit themselves to make their teaching an expression of the new ideals. One course in agriculture may not seem much, but it may be an opening wedge to a wider vision and a more useful school.

MUSIC.

Theophilus Emory Fitz.

14. **Music Appreciation**—Senior College. This course is especially designed for high school teachers and those who wish to acquaint themselves with the best musical literature and the influence of music upon the art-life of the child. The various forms of music, and masterpieces of musical art will be delightfully illustrated with the voice, violin, piano, and talking machine.

19. **Supervision of School Music**—Senior College. This course is designed for supervisors, principals, and professional students, and includes discussions on every phase of music teaching, both grades and high school.

PHYSICS.

Franklin Lorenzo Abbott, A. M.

3. **Advanced Physics**—The work is so arranged that students who desire to take a full course in Physics may have the opportunity to do so. The subjects treated in this summer of 1913 are:

Electrostatics.

- (a) Condensers and their fundamental formulae;
- (b) Oscillatory discharges and high frequency currents, etc.

The fundamental principles of direct and alternating current machinery and apparatus: e. g., dynamos, transformers, volt meters, ammeters, watt meters, etc. The fundamental formulae for D. C. and A. C. currents, etc.

The subjects treated for the Summer Terms of 1913 and 1914 will be Mechanics, Heat, Light, and Sound.

Pre-requisite—One complete year of High School Physics. Textbook used is Kimball's College Physics.

Considerable laboratory work will be done. Plans for con-

structing a modern laboratory, etc., will be made in the presence of the students while working in the course.

MATHEMATICS.

G. W. Finley, B. S.

Course 8. College Algebra.

Course 11. Analytical Geometry.

Course 14. Differential and Integral Calculus.

Course 16. Methods in Algebra and Geometry—the new American, German, and French contributions.

Because of the ease and facility given by the new methods, the high school, with less than the customary expenditure of time, can make accessible to everyone, algebra, that giant implement of modern practice, and enough of analytic geometry to provide the basis for graphics, now so universally used in biology, and in fact all the sciences; while the function idea, the particular domain of the calculus, is beginning to be advocated as an essential part of every education, an always available constituent of one's necessary equipment for high efficiency.

BIOLOGY.

Arthur Eugene Beardsley, M. S.

Leverett Allen Adams, A. M.

26. Bacteria, Prophylaxis, and Hygiene—Elective. The health of the students is an important and vital factor in school efficiency. This course aims to give specific instruction in the causes of disease and the methods of its prevention. Pains will be taken to throw the stress upon those things which it is possible for any intelligent person to do in the matter of prevention of disease without the aid of a physician. Some of the topics for special consideration are as follows: (1) Bacteria—what they are—how they live and grow, where found; bacteria of the air, of water and of soils; bacteria of foods; useful bacteria, injurious bacteria; parasites and saprophytes; bacteria which produce disease (pathogenic bacteria). (2). Prophylaxis—prevention of disease; how disease germs are carried; how they gain entrance to the body; means by which they may be avoided. (3). Personal Hygiene—Hygiene of the school room and of the home.—Mr. Beardsley.

2. Invertebrate Zoology—Morphology and life history of leading types of the invertebrates. Laboratory work. Special reference readings, lectures and conferences.—Textbook; Parker & Haswell, Vol. 1.—Mr. Beardsley.

ZOOLOGY.

Advanst Zoology—This course is intended to give a comprehensive view of the field of Zoology with special emphasis where there is economic value. It will take up the interesting members of each group from the protozoans to the higher mammalia. The forms will be chosen that have a direct relation to man. Economic and field work will be given special attention. The Morphology of important groups will be studied to give a basis for advanst work. The whole field will be covered always with the idea in mind of giving some definite reason for the study of the forms and the problems that are worth while in the animal world. Outlines of study will be taken up and investigations made as to the best ways of taking up certain subjects.

Outline of Work.

Study of the groups of animals.

Morphology of important forms.

Problems of animal life. Struggle for existence, etc.

Problems of class room.

Method of procedure in high school work in Zoology.

Outline for the order of presenting and correlating the work.

The time of the year when it should be given.—Mr. Adams.

SPANISH.

Mr. J. R. Morgan.

1. For Beginners—This course is based on practical exercises in conversation. The lessons are planned to give as large a speaking vocabulary as can be acquired in the time given the work. No textbook is used.

2. A Continuation of Course 1—Special stress upon conversation. Grammar, Sight Reading, and exercises in composition. Easy stories in Spanish. (Selected).

Textbook: Introduction to la Lengua Sastellana-Marion y Des Garennes.

Miscellaneous Items

I. 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. The well kept streets are lined with trees and shrubbery, affording beautiful drives in and about the city.

This is an ideal location for a summer school. The altitude of the city is near five thousand 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 four hundred thousand dollars.

II. HISTORY OF THE SCHOOL.

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

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

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

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.

III. 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. 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 thoroughly prohibition town. There are about 10,000 inhabitants.

IV. CAMPUS.

In front of the buildings is a beautiful campus of several 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 homes, 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 arc lights and Japanese lanterns.

V. 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 snowdrop 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.

VI. THE CONSERVATORY.

The greenhouse, a picture of which is given on another page, is one of the best equipt 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.

The building is of cement, iron and glass. It is one hundred and sixteen feet long by twenty feet wide, and has connected with it a servis room where the students of the Normal department and children of the Training department are taught to care for plants they may wish, now and in the future, to have in their homes.

VII. ADVANTAGES.

Some of the advantages of the scool ar: A strong faculty especially trained, both by education and experience; a library of 40,000 volumes; well equipt laboratories of biology, physics, chemistry, manual training, and physical education; a first-class athletic field, gymnasium, etc., all under the direction of specialists; a strong department of art; field and garden work in nature study; a model and training scool; a kindergarten; and all other departments belonging to an ideal scool.

VIII. EXPENSES.

1. Board and room costs from \$4.00 to \$5.00 a week, two students in a room. There ar oppertunities for students to board themselves or to earn a part or all of their expenses for board and room.

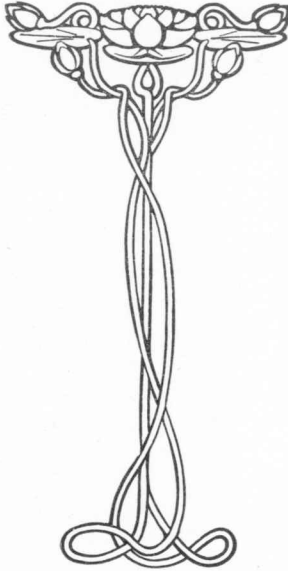
2. Tuition. There is no tuition charges for citizens of Colorado.

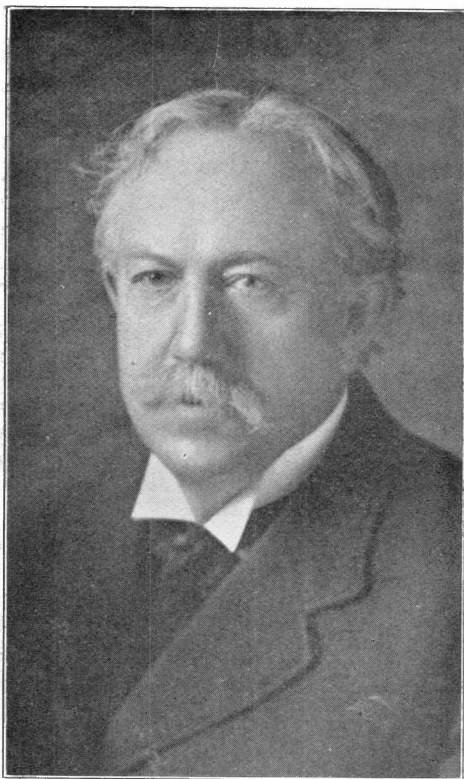
3. Incidental Fees. All students pay incidental fees as follows:

One course	\$10.00
Two courses	15.00
Three courses	20.00
Four courses	25.00
Five courses	30.00
Six courses	35.00

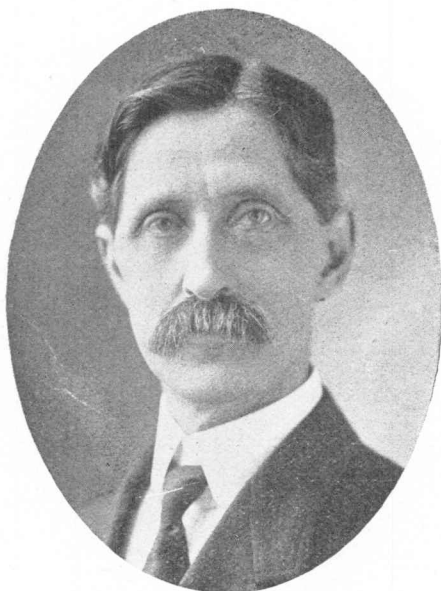
Students not citizens of Colorado in addition to the above fees, pay a fee of five dollars the summer term.

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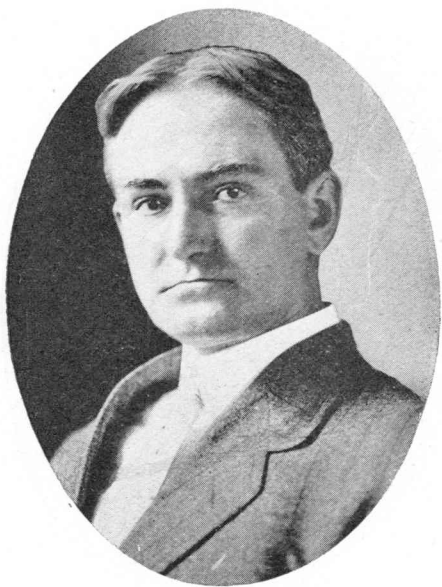




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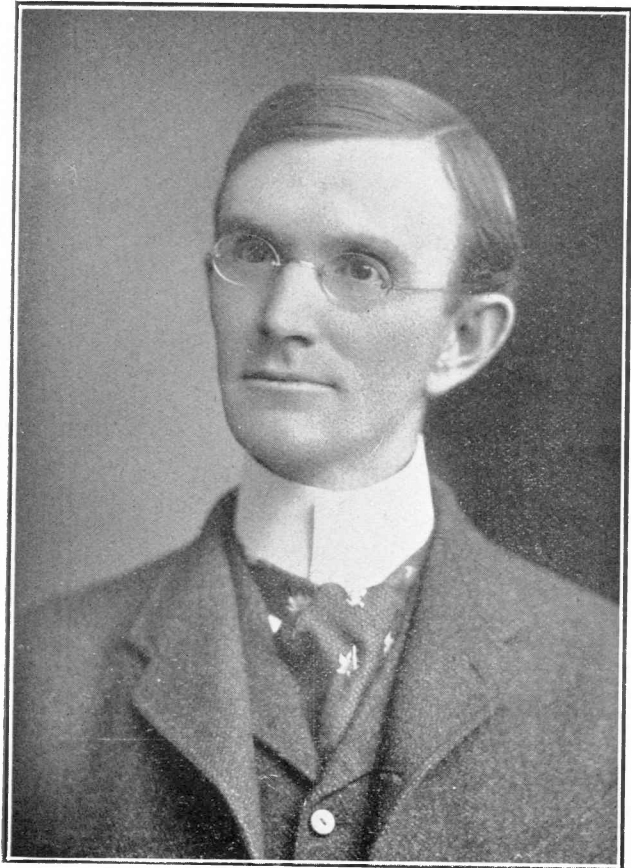
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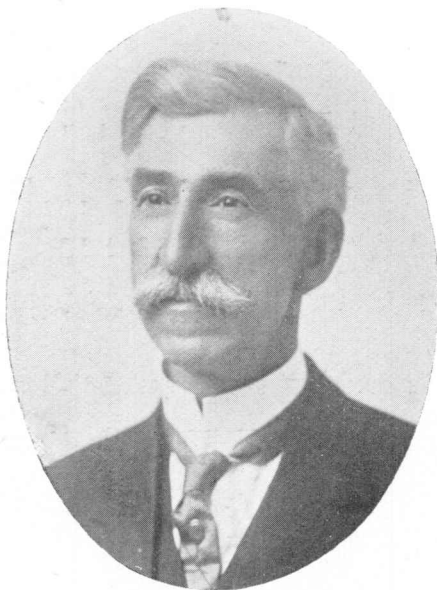
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Principal of East Denver High School.



SUPERINTENDENT PHILIP M. CONDIT
Delta, Colorado.

The State Teachers College of Colorado

THE SUMMER TERM, 1913

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The Fall Term Opens September 9, 1913

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