Second Annual Catalogue
WITH ANNOUNCEMENTS
FOR THE YEAR 1904-5

California Polytechnic School
A SECONDARY SCHOOL OF AGRICULTURE,
MECHANICS AND DOMESTIC SCIENCE

San Luis Obispo
April, 1904
CALENDAR, 1904–1905.

Entrance Examinations, Tuesday, September 13, 1904
Registration, Wednesday, September 14, 1904
Instruction begins, Thursday, September 15, 1904
Quarterly Meeting of Board of Trustees, Wednesday, November 9, 1904
Thanksgiving Recess, Thursday and Friday, November 24 and 25, 1904
First Term ends, Friday, December 16, 1904

Christmas Vacation.

Second Term begins, Tuesday, January 3, 1905
Quarterly Meeting of Board of Trustees, Wednesday, February 8, 1905
Washington's Birthday, Wednesday, February 22, 1905
Second Term ends, Friday, March 24, 1905

Spring Vacation.

Third Term begins, Monday, April 3, 1905
Annual Meeting of Board of Trustees, Wednesday, May 10, 1905
Memorial Day, Tuesday, May 30, 1905
Commencement and Exhibition Day, Thursday, June 15, 1905
Quarterly Meeting of Board of Trustees, Wednesday, August 9, 1905
A Secondary School of Agriculture, Mechanics, and Domestic Science

Second Annual Catalogue

of the

California Polytechnic School

With Announcements
for the Year 1904-5

Sacramento:

W. W. Shannon
- Superintendent of State Printing

1904
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOARD OF TRUSTEES</td>
<td>4</td>
</tr>
<tr>
<td>FACULTY</td>
<td>5</td>
</tr>
<tr>
<td>LOCATION AND PURPOSE</td>
<td>7</td>
</tr>
<tr>
<td>EQUIPMENT</td>
<td>10</td>
</tr>
<tr>
<td>- Buildings</td>
<td>10</td>
</tr>
<tr>
<td>- Mechanics</td>
<td>12</td>
</tr>
<tr>
<td>- The Farm</td>
<td>12</td>
</tr>
<tr>
<td>COURSES OF STUDY</td>
<td>14</td>
</tr>
<tr>
<td>- Description of Academic and Agricultural subjects</td>
<td>15</td>
</tr>
<tr>
<td>- Description of Mechanics subjects</td>
<td>17</td>
</tr>
<tr>
<td>Domestic Science</td>
<td>18</td>
</tr>
<tr>
<td>ADMISSION AND CLASSIFICATION OF STUDENTS</td>
<td>23</td>
</tr>
<tr>
<td>DISCIPLINE</td>
<td>24</td>
</tr>
<tr>
<td>EXPENSES</td>
<td>25</td>
</tr>
<tr>
<td>BOARD</td>
<td>25</td>
</tr>
<tr>
<td>OPPORTUNITY FOR SELF-SUPPORT</td>
<td>26</td>
</tr>
<tr>
<td>ATHLETICS</td>
<td>26</td>
</tr>
<tr>
<td>THE SCHOOL YEAR</td>
<td>27</td>
</tr>
<tr>
<td>LIST OF STUDENTS, 1903-4</td>
<td>29</td>
</tr>
<tr>
<td>DONATIONS</td>
<td>30</td>
</tr>
</tbody>
</table>
BOARD OF TRUSTEES.

Ex-Officio.

His Excellency, GEORGE C. PARDEE, - - - Sacramento.
Governor of California.

Hon. THOMAS J. KIRK, - - - - - - Sacramento.
Superintendent of Public Instruction.

Appointed Trustees.

Hon. WARREN M. JOHN, - - - - - San Luis Obispo.
Term expires, 1904.

F. A. Hihn, Esq., - - - - - - Santa Cruz.
Term expires, 1905.

Professor E. J. WICKSON, - - - - - Berkeley.
Term expires, 1906.

R. M. SHACKELFORD, - - - - - - Paso Robles.
Term expires, 1906.

Hon. S. C. SMITH, - - - - - - Bakersfield.
Term expires, 1907.

OFFICERS OF THE BOARD OF TRUSTEES.

S. C. SMITH, - - - - - - President.

F. A. Hihn, - - - - - - Vice-President.

LEROY ANDERSON, - - - - - - Secretary.
FACULTY.

LEROY ANDERSON, DIRECTOR, - Animal and Dairy Industry.
B.S., 1896; M.S.A., 1897; Ph.D., 1902, Cornell University; Fellow in Agriculture, Cornell University, 1896-7; Assistant in Dairy Husbandry, Cornell University, 1897-1900; Instructor in Animal and Dairy Industry, University of California, 1900-2.

SYDNEY S. TWOMBLY, Agriculture, Chemistry, and Veterinary Science.
Graduated Maine State Normal School, 1881; B.S., 1886, University of Maine, department of chemistry; Adjunct Professor of Chemistry and Agriculture, State University of Arkansas, 1887-9; D.V.S., 1891, McGill University; Professor of Chemistry and Veterinary Science, Agricultural College of Utah, 1891-6; Instructor in Science, Fullerton Union High School, Fullerton, California, 1896-1903.

GWENDOLYN STEWART, Domestic Science; Matron of the Dormitory.
A.B., 1900, Stanford University. Graduated Normal Course in Domestic Science, Pratt Institute, 1902; Instructor, School of Domestic Science, Pittsburg, Pa., 1902-3.

JAMES EDWARD ROADHOUSE,*
Academic Subjects, Plant Industry and Irrigation.
B.S., 1904, University of California; Special agent in charge of irrigation investigations, U. S. Department of Agriculture, during the summers of 1903 and 1904.

OSCAR LESLIE HEALD,
Drawing, Carpentry, Sloyd and Iron Work.
Graduated Normal Training Course, Throop Polytechnic Institute, 1903.

EDWIN WALTER YOUNT,† - - - - - - Carpentry.
Graduated Wilmerding School of Industrial Arts, San Francisco, 1903.

NAOMI M. LAKE, - Stenographer, Bookkeeper and Librarian.

*Appointment begins September, 1904. †Appointment begins April, 1904.
CALIFORNIA POLYTECHNIC SCHOOL.

LOCATION AND PURPOSE.

The California Polytechnic School is a State institution established at San Luis Obispo under an act of the Legislature of 1901. The government of the school is vested in a board of trustees, consisting of the Governor and Superintendent of Public Instruction as ex-officio members, and of five persons appointed by the Governor for a term of four years each. The school is located one and one half miles north of the center of the City of San Luis Obispo, on high ground commanding a beautiful view of town and valley.

"The purpose of the school is to furnish to young people of both sexes mental and manual training in the arts and sciences, including agriculture, mechanics, engineering, business methods, domestic economy, and such other branches as will fit the students for the non-professional walks of life."

The desire of the Board of Trustees regarding the school is set forth in the following resolution, adopted February 27, 1904: "Resolved, That it is the intention of this Board, so far as its present membership is concerned, to use every effort to make the California Polytechnic School a useful institution for the young people of California, to the end that it shall ultimately afford them instruction along mechanical lines and become, in every sense of the word, a thorough Polytechnic School. It is the intention of the Board to so conduct the school that it may produce educated farmers, stock-raisers, dairymen and orchardists, cultured matrons and homemakers, as well as skilled mechanics, all of whom may be an honor to California and the nation. As the school grows in years, we feel confident that its usefulness and popularity will become clearly apparent to the whole State and the Pacific slope. As the Legislature meets the demands for financial aid it is the intention of the Board to install a complete plant for instruction in blacksmithing, general iron work, plumbing and electrical construction."
The school aims to supply a need which is felt not only in California, but also in every other State in the Union. That need is an institution which will give boys and girls a training in the arts and sciences which deal peculiarly with country life—the life of the home, the farm, the orchard, the dairy, and the shop. In this present day, when science is doing so much to unravel the mysteries concerning plant and animal life, it is important that the State provide a school where the facts and principles unfolded by science can be demonstrated to the boy and girl, who will return to their home and make its life more attractive, more livable, and more remunerative.

The age of entrance to the school is placed at fifteen years, because it is believed that as a rule children younger than this can not do the serious kind of work which the school demands, and because students coming to the school must have had a previous training equivalent to that covered by the usual grammar school course. Moreover, the majority of children leave school when they have completed the grammar grades. The chief reason for so doing is that they either wish to, or must, do something to earn a living. This is particularly true in country communities where there are no schools that teach the things pertaining directly to farm life. It is the children of the country, therefore, who most need an institution of the kind here planned; and to accommodate them at the most opportune period they are admitted at the average age of finishing the grammar school.

This school does not occupy a place in the regular school system of the State. As that system is understood, it begins with the grammar school and extends through the high school to the State University; i.e., pupils are admitted to the high schools upon recommendation from the grammar grades, and to the university upon recommendation from accredited high schools. The California Polytechnic School is not an integral part of this system. It receives students who are recommended from the grammar schools, but it does not prepare its students for entrance to the university. Its course of study is arranged solely in view of the needs of the boy and girl who are going to earn a livelihood after completing its course. It does not seek to prepare them to enter a higher institution of learning, but its aim is to prepare them for an active industrial life. There will no doubt be students attending the school who will
find that they wish to climb higher in the ladder of learning. We will do all we can to help such to attend a university, but we cannot arrange our course of study to that end and to the disadvantage of the large majority who must go to work in the world as soon as they have left our doors.

It is not our purpose to establish a school of engineering or of architecture. As those terms are to-day understood, they refer to courses of study in a college or university which presuppose a high school training. Since this school is of like grade to a high school, it is apparent that we should not be expected to give a training equivalent to a university.
EQUIPMENT OF THE SCHOOL.

BUILDINGS.

Two buildings were completed in October, 1903, and have since been occupied by the school. Both are planned after a modified mission style of architecture, and are two stories in height, with a well-lighted basement. The buildings are heated by steam and lighted by electricity.

A CORNER IN THE CHEMICAL LABORATORY.

The Recitation and Administration Building is 47 by 100 feet, and has a concrete foundation with Los Berros stone from the grade line to the first floor. The remainder of the structure is of wood, covered with a metal lath and cement. The roofing is of metal tile. The basement contains a temporary dairy room, a temporary carpenter shop, storage rooms, and a general lavatory for boys. The first floor contains the Director's offices, library, lecture room and laboratory for chemistry and physics, lecture room and laboratory for botany and entomology, photographic dark room, and girls' cloak room and lavatory.
The second floor contains an assembly room, with dressing room, two drawing rooms, and two class rooms.

The chemical laboratory is a well lighted and ventilated room, 20 by 47 feet. It contains gas and water, and is well supplied with tables, hoods, storerooms, and other facilities of a modern laboratory.

The Dormitory is constructed in the same manner as the recitation building, except that the basement and foundation walls are entirely of concrete. Its dimensions are 40 by 100 feet. Its purpose is to provide a home on the school grounds for a few of the teaching staff and for as many students as can be accommodated. It contains thirty single rooms (each with a closet), a parlor, dining-room, kitchen, laundry, and five bathrooms. Provision is made for one student in a room. Each room is furnished with a single iron bedstead, woven-wire spring, sanitary mattress, pillow, white spread, study table, two chairs, dresser, and a rug covering most of the floor. The
dormitory furnishes an almost complete laboratory for household technical work in Domestic Science.

MECHANICS.

The present equipment consists of a 50 H. P. return-tubular boiler—oil burner; an 18 indicated H. P. Bailey upright engine; 6½ kilowatt generator, for electric lights; 5 H. P. portable gas engine; 14-inch circular saw, cut-off and rip, with running table; 14-inch swing wood lathe; hand forge; blacksmith's drill; and a 4 x 36-inch grindstone. Heat and light are furnished to the buildings direct from the power house.

The carpenter shop is fitted with four substantial quadruple benches, with four complete sets of tools and four rapid-acting vises each, thus furnishing working room for sixteen students in a class. There is an additional equipment of special tools.

Forges, wood-lathes and other machinery will be installed for the coming year in shops to be erected before September. It is the plan to have each shop run by an electric motor, the electricity being generated in the power-house.

THE FARM.

The farm consists of 280 acres of land, the most of which is rolling and typical of a large section of the land of the coast counties. The soil is varied in character, comprising rich, black bottoms, adobe, loams, and the rocky soil of the steep hillside. The farm is traversed by Brizzolero Creek, the full rights to which are deeded to the school, and from which water may be used for irrigation purposes. On the hillside a half mile to the east, and 350 feet above the school buildings, are two springs which furnish pure water for domestic use.

The farm is in a thermal belt, which is so free from frost that citrus fruits can be grown. A small orchard now on the farm contains bearing trees of apples, pears, quinces, peaches, almonds, plums, prunes, cherries, oranges, limes, and grapes. Though the number be few, they prove that all the fruits named will thrive on the school farm. The larger portion of the farm has been cultivated for many years in the production of hay and grain. Some portions are much depleted in fer-
tility and will furnish good experimental ground in demonstrating how such soil may be brought back to its former productiveness.

The equipment of livestock consists of two registered Percheron mares, six registered Ayrshire cattle, one registered Jersey, two grade cows, and four registered Poland-China swine. Some poultry will be purchased in a short time. It is expected that all dairy and poultry products used in the dormitory will be produced on the farm.

Two small cottages and a small barn now constitute the farm buildings. New buildings will be erected from time to time in a location convenient to the school buildings. Those contemplated during the next two years are a dairy barn, horse barn, storage barn, swine pens, poultry houses, and a silo. An equipment of tools and machinery is being added as occasion demands and money is available.
THE COURSES OF STUDY.

Three main lines of work are undertaken by the school, viz: Agriculture, Mechanics, and Domestic Science. The course of study for each of these lines covers a period of three years. In Agriculture and Mechanics, the work of the first two years is prescribed, while at least one half of the third year is elective. Under certain conditions, students may be allowed choice of subjects during the second year. In Domestic Science the entire course is prescribed, but some latitude of choice may be allowed, depending upon the qualifications of the student. A student entering upon a certain course of study at the beginning of the year will be expected to continue the same course throughout the year. Upon completion of the three years' course the student will be given a certificate indicating the work done and the student's proficiency therein. The first year's work is the same for students in Agriculture and Mechanics. It is in the nature of a general training and laying the foundation for the more technical industrial work to follow. The courses of study are subject to slight changes as further experience may dictate.

COURSE OF STUDY. (BOYS.)

First Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Periods per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>Botany</td>
<td>4</td>
</tr>
<tr>
<td>Bookkeeping</td>
<td>2</td>
</tr>
<tr>
<td>Physical Science</td>
<td>4</td>
</tr>
<tr>
<td>Algebra</td>
<td>3</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Carpentry</td>
<td>10</td>
</tr>
<tr>
<td>Freehand Drawing</td>
<td>2</td>
</tr>
<tr>
<td>Mechanical Drawing</td>
<td>4</td>
</tr>
</tbody>
</table>

Second Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Periods per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geometry and Trigonometry</td>
<td>5</td>
</tr>
<tr>
<td>Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Drawing design</td>
<td>4</td>
</tr>
<tr>
<td>Freehand Drawing</td>
<td>2</td>
</tr>
<tr>
<td>Carpentry</td>
<td>8</td>
</tr>
<tr>
<td>Iron Work</td>
<td>4</td>
</tr>
<tr>
<td>Animal Industry and Dairying</td>
<td>8</td>
</tr>
<tr>
<td>Horticulture and Forestry</td>
<td>4</td>
</tr>
</tbody>
</table>
## Third Year

### Required Work:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Periods per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics and Agricultural Physics</td>
<td>5</td>
</tr>
<tr>
<td>History and Government</td>
<td>5</td>
</tr>
</tbody>
</table>

### Elective Work:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Periods per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing,—building design</td>
<td>5</td>
</tr>
<tr>
<td>Agriculture; Horticulture, Irrigation, Forestry, Animal Industry, Dairying, etc.</td>
<td>15</td>
</tr>
<tr>
<td>Mechanics,—construction of buildings, plumbing, wiring, iron work, etc.</td>
<td>15</td>
</tr>
</tbody>
</table>

The following comments upon the principal subjects will be of value in indicating their scope:

### ACADEMIC AND AGRICULTURAL SUBJECTS.

**English.** Composition; daily written papers; preparation of outlines and abstracts; use of words in oral and written communication; oral discussion and debating.

**Mathematics.** Algebra, through quadratics as contained in Wentworth's Elementary Algebra. Plane Geometry, the first five books; Plane Trigonometry, development of the general formulæ; practice in using tables, triangulation and mensuration.

**Bookkeeping.** Principles of accounting, with special reference to accounts of the shop and farm; discussion of notes, deeds, mortgages and other commercial papers.

**Physics.** The general principles of physics in their bearing upon agriculture and mechanics.

**General Chemistry.** A discussion of the general principles of chemistry as outlined in modern text-books, special stress being laid on those topics bearing on everyday life.

**Agricultural Chemistry.** The chemical elements contained in the soil, air, crops, and manures; the chemistry of the plant and its relation to animal nutrition; commercial fertilizers, composition, and methods of computing commercial value; animal nutrition, including a discussion of feeding standards.
and the compounding of feeding rations and other topics bearing on the relation of chemistry to agriculture.

**Botany.** This subject is taught with special reference to its bearing on the everyday problems of the farmer and gardener. The lessons take up the seed and its germination; the study of roots, stems and leaves; structure and function; the influence of heat, cold, moisture, parasites and soil; the structure of the flower and the development of the fruit.

**Agriculture.** Lectures and recitations, including a discussion of soils, properties and methods of improvement, tillage and its effects, conservation of soil moisture; alkali soils; classification of farm crops according to constituents; suitable rotation for different soils and climates; systems of farming and farm management. A course designed to give a general survey of the field of agriculture and its importance in industrial development.

**Animal Industry.** A study of the various breeds of horses, cattle, sheep and swine as to their history, development and characteristics; principles of feeding, scoring and judging livestock.

**Dairying.** Testing milk and its products; pasteurizing and sterilizing; butter and cheese making; sanitary milk production.

**Poultry.** History and characteristics of the leading breeds of poultry; breeding, feeding and general management; planning, building and arranging poultry houses; managing incubators and brooders.

**Horticulture.** Principles and practice of fruit growing in California; propagation, planting and care of trees and vines; soil, temperature and moisture relations; fungous diseases and insects, and their treatment and control.

**Forestry.** Forest planting; varieties and methods; relative effects of forestation and denudation upon conservation of rainfall and upon stream flow; hillside and mountain planting and care of forests.

**Irrigation.** Principles and practice of irrigation; measure-
Agricultural Zoology and Veterinary Science. Anatomy and physiology of farm animals; common parasitic animals related to agriculture; care and handling of farm animals in health and disease; detection of the more common diseases and ailments of domestic animals, with methods of prevention and treatment of the same. This work will also cover a discussion of breeds of horses and their adaptability to environment; breeding and judging of horses and examinations for soundness.

MECHANICS.

Carpentry. First Year.—Care and proper manipulation of tools; practical joinery; cabinet-making, doors, sash, etc.; wood turning; occasional lectures. A certain amount of written work will be required.

Second Year.—Practice in house and barn construction from foundation up; inside finishing; stair building, etc.; occasional lectures.

Iron Work. Second Year.—Practical exercises in general blacksmithing; mechanism and care of forge and forging tools; piping; gasfitting. Lectures on carrying capacity of pipes, hydraulic pressure, etc.

(The third year an advanced course in connection with machine work and plumbing will be given.)

Mechanical Drawing. First Year.—Use of instruments; lettering; working drawings; shop drawings; projections, blue-printing.

Second and Third Years.—Intersection and development of surfaces; isometrics and perspective; building plans; machine, architectural and original design.

Freehand Drawing. For Boys—Perspective; representative working drawings; original design. For Girls—Perspective, group studies; color work; original design; menu cards. An advanced course will be given in home design and furnishings.
Sloyd for Girls.  First Year.—Use and care of tools; practical exercises in sawing, planing, chiseling, filing, boring, spokeshaving, etc.; constructing useful household articles; paper work and cardboard construction.

Second Year.—Exercises in chip carving; Florentine bent iron in combination with wood; pyrography. An original model will be required to complete the course.

DRAWING ROOM.

DOMESTIC SCIENCE.

The purpose of the course in Domestic Science is to give a technical and practical training in all the affairs of the household and home, together with such study and scientific training as will enable a student to become a strong and intelligent woman as well as a skilled home worker, and to fit students to fill positions as dietitians, matrons, and professional housekeepers.

The California Polytechnic School offers unusual advantages to students in Domestic Science, in that the dormitory of twenty-six rooms provides in itself an almost complete laboratory for all practical work. The cookery classes have a particular
advantage in being able to use and prepare materials in family quantities for actual consumption.

COURSE OF STUDY.

First Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Periods per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Economy</td>
<td>1</td>
</tr>
<tr>
<td>Cookery</td>
<td>8</td>
</tr>
<tr>
<td>Sewing</td>
<td>6</td>
</tr>
<tr>
<td>Housework</td>
<td>8</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Plant Study</td>
<td>4</td>
</tr>
<tr>
<td>Drawing</td>
<td>2</td>
</tr>
<tr>
<td>Physical Science</td>
<td>4</td>
</tr>
<tr>
<td>Sloyd</td>
<td>4</td>
</tr>
</tbody>
</table>

Second Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Periods per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Economy</td>
<td>1</td>
</tr>
<tr>
<td>Cookery</td>
<td>8</td>
</tr>
<tr>
<td>Sewing</td>
<td>6</td>
</tr>
<tr>
<td>Physiology and Bacteriology</td>
<td>6</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>6</td>
</tr>
<tr>
<td>Drawing</td>
<td>2</td>
</tr>
<tr>
<td>Dairying</td>
<td>4</td>
</tr>
<tr>
<td>Sloyd</td>
<td>4</td>
</tr>
</tbody>
</table>

Third Year.

<table>
<thead>
<tr>
<th>Course</th>
<th>Periods per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Economy</td>
<td>1</td>
</tr>
<tr>
<td>Dietetics</td>
<td>5</td>
</tr>
<tr>
<td>Dressmaking and Millinery</td>
<td>6</td>
</tr>
<tr>
<td>Catering</td>
<td>8</td>
</tr>
<tr>
<td>Psychology and Education</td>
<td>2</td>
</tr>
<tr>
<td>Entomology</td>
<td>6</td>
</tr>
<tr>
<td>Home Nursing and Sanitation</td>
<td>4</td>
</tr>
<tr>
<td>Horticulture and Gardening</td>
<td>4</td>
</tr>
<tr>
<td>House Construction and Furnishing</td>
<td></td>
</tr>
</tbody>
</table>

DESCRIPTION OF DOMESTIC SCIENCE COURSES.

Household Economy. Relative cost and value of household materials, construction, equipment, and furnishing; daily practice in the keeping of household accounts, preparation of monthly balance sheet, etc.

Cookery. Study of foods—composition, digestibility, nutritive value, dietetic value, preparation through cookery for general family use, for children, for invalids, and for special cases; careful and thorough use made of bulletins on foods issued by the Department of Agriculture, giving the results of food experiments and investigations.

Sewing. Hand and machine work; household sewing; drafting, cutting and making of undergarments, shirtwaist and unlined dress.

Dressmaking and Millinery. Entire making of outdoor cos-
tume; special drill and practice for those intending to enter the profession of dressmaking or of millinery.

Housework. Theory and practice in the care and maintenance of the home; dining-room and pantry service; laundry; bedroom, daily and weekly care; house in general, floors, wall and window covers; furniture.

Sanitation and Home-nursing. Personal hygiene; domestic hygiene; public sanitation; ventilation; heating; plumbing; first aid to the injured; sick-room nursing.

Physiology and Bacteriology. Study of the human body with special reference to the digestive system; study of bacteria as they affect the sanitary condition of the household.

Entomology. Study of insect life; habits of insects found in the household, house-fly, mosquito, moth, etc.

Psychology and Education. Principles and laws concerning the physical, mental, and moral development of the child; correlation and comparative value of activities and studies.

Studies required, but given in other departments. Sloyd, House Construction and Furnishing, Drawing, Dairying, Horticulture and Gardening, Plant Study, Physical Science, Chemistry, English.
ADMISSION AND CLASSIFICATION OF STUDENTS.

The school is open to any boy or girl upon the following conditions:

Applicants must be at least fifteen years of age, and must give satisfactory evidence of good moral character and of good behavior.

Applicants thus qualified will be admitted without examination upon presenting a Diploma of Graduation from any grammar school (eighth grade) of the State.

Applicants who do not hold a grammar school certificate, but who submit a recommendation from their last teacher or their Superintendent of Schools, will be admitted upon satisfactorily passing an examination in English, arithmetic and United States history. The examination in English will consist of a test of the applicant’s ability to read, write and spell; in arithmetic, it will include all subjects as far as fractions, decimals and percentage; in history, the leading facts as covered in the usual grammar school course. The examination for 1904 will be held in the school buildings on Tuesday, September 13, at 9 A.M.

Applicants should enclose their grammar school certificate when sending their application for admission to the school. If not possible to send the certificate at the same time, it should be sent before September 1, 1904. The certificate will be returned to the applicant after the opening of the school.

Applicants who expect to be admitted upon examination must send their recommendations at the same time with their application for admission.

Copies of the application form will be sent to any who request. All applications for admission to the school must be made on this form.

All applications should be sent to the Director of the school not later than September 1, 1904.

Regular Students. These are students who are admitted to full standing upon a Diploma of Graduation from a grammar
school or upon passing an equivalent entrance examination and who take one of the full courses of study as heretofore outlined. All students are advised to register as regular. The essential qualifications are easily obtained by all and the student will receive much more value from attendance upon the school if he or she follows the regular course of study which has been carefully planned by the faculty.

**Special Students.** These are students who do not take a regular course of study as outlined, but select such studies of each as may seem to best equip them for the work they plan to do after leaving school. A limited number of special students will be admitted in the fall of 1904. They will not be required to present Diplomas of Graduation from a grammar school, but should they not present such diploma they will be required to take the same entrance examination as is required for those who desire to become regular students. Their standing in this examination will decide whether or not they will be admitted to the school and the subjects they will be allowed to pursue if admitted. Special students may enter for the work of a year or more. Applicants sufficiently well qualified may be admitted for a term or more of special work. The choice of subjects by special students is subject to the approval of the faculty. In all other respects special students are subject to the same rules and regulations as regular students.

**High School Graduates.** Since this institution is of like grade to the high schools, it follows that our academic work is of a somewhat similar nature to that of the high school. Graduates of high schools will, therefore, be given credit for work done elsewhere, such as English and mathematics. Students who have not been graduated from a high school, but who have been in attendance therein for two years or more, may be given credit for academic work for which the proper credentials are presented. Any high school student who receives credit upon entrance for the academic work should complete our course in two years.

**DISCIPLINE.**

It is expected that all persons who attend this school have an earnest purpose to make the best use of their time while in
CALIFORNIA POLYTECHNIC SCHOOL.

attendance. It is expected, therefore, that their behavior will always be exemplary in school and in the town. Failure to do the work laid out by the school or neglect to conduct one's self as a lady or gentleman will result in the suspension or expulsion of the guilty student. The parent or guardian will be notified of any disobedience or misconduct on the part of the student.

EXPENSES.

There is no charge for tuition. The student is expected to pay for the materials used in the shops and laboratories. To cover these expenses the student is charged five dollars per term, regardless of his or her course of study. The payment of this sum is required at the beginning of each term. The materials supplied under such payment are chemicals, wood, iron, drawing materials and the like. Students are required to furnish their own books, drawing instruments, and special clothing, such as overalls, needed in the shops.

The total expense for books, drawing instruments and other supplies needed by each student at the beginning of the school year will be about ten dollars. The drawing instruments will last during the entire course. The expenses for additional books at the beginning of the second and third terms will not exceed five dollars. The total cost of books, supplies and fee for first year will, therefore, be about thirty-five dollars.

Arrangements are made whereby the books and other supplies may be purchased at reasonable prices in San Luis Obispo. A detailed list of these articles will be mailed to all prospective students upon request.

BOARD.

Board and room (including heat and light) are provided in the dormitory at actual cost for food and service. During the year 1903-4 the charge has been twenty dollars per month for each person. This sum has also included the laundering of bed linen and towels. Payments for accommodations in the dormitory are monthly in advance.

Boys only are admitted to the dormitory. All boys from
abroad are expected to live in the dormitory in so far as they can be accommodated. In case there are more applications than rooms, the rooms will be assigned in the order in which the applications are received. The occupant of a room is required to furnish bed linen, blankets, towels and soap for his personal use. He will need at least two pillowcases, three sheets and two pairs of blankets. It is desired that blankets be used rather than quilts.

Room and board may be secured in private families in San Luis Obispo at from twenty to twenty-five dollars per month. There is some opportunity for girls to rent furnished rooms for light housekeeping.

OPPORTUNITY FOR SELF-SUPPORT.

A limited amount of employment can be given to students who find it necessary to earn a portion of their expenses while attending the school. The farm, dairy, dormitory and grounds afford opportunity to employ a few students more or less regularly during the year. No remuneration will be made for manual work of any kind which carries instruction with it. Whenever the student has become so proficient in any branch that his services are of value to the school he will be paid for such service, so far as our means will permit, at a reasonable rate per hour.

No student should come to school expecting to pay his entire expenses by labor during the school year. The school work occupies the most of the day, and the evenings are required to prepare the lessons for the following day. Provision may be made, however, for students who need to do much work in order to pay their way, whereby they may take less than the full school curriculum and thus be a longer time completing the course.

ATHLETICS.

Encouragement is given in athletics, and a strong association is doing good work. Any student of good standing or officer of the school is eligible to membership. The association holds regular meetings every two weeks for purposes of business,
entertainment, discussion of live topics, general athletics, physical culture, etc. A good tennis court has been built, and a large plat of ground is being put into shape for athletic work as opportunity affords. The association has secured a good start in gymnasium apparatus.

THE SCHOOL YEAR.

The year 1904-5 will be divided into three terms of about twelve weeks each. As is seen by the calendar on page 2 of the cover, the first term begins September 14 and ends December 16; the second term begins January 3 and ends March 24;
the third term begins April 3 and ends June 15. All students will register at the office of the school on Tuesday, September 13, between 9 and 12 A.M. and 1 and 4 P.M. They will meet their instructors the following day.

School will be held five days a week—from Monday to Friday inclusive. If found necessary, Saturday may be used for excursions or field work. The daily hours for recitation and laboratory exercises are from 9 to 12 and 1 to 4. Each student is occupied at some school work the whole of this time.

Correspondence concerning the school should be addressed to the Director of the California Polytechnic School, San Luis Obispo, California. Write for an application form.
STUDENTS OF THE CALIFORNIA POLYTECHNIC SCHOOL, 1903-4.

NAME.

Bello, Mary A. Morro, San Luis Obispo Co.
Boswell, William H. Soledad, Monterey Co.
Buck, Francis D. Goleta, Santa Barbara Co.
Campbell, Stephen A. San Luis Obispo.
Cheda, Archie San Luis Obispo.
Coonradt, George S. Lotus, El Dorado Co.
Cox, Herbert H. Morgan Hill, Santa Clara Co.
Emmert, Allan V. Arroyo Grande, San Luis Obispo Co.
Flinn, Frank A. Descanso, San Diego Co.
Hollister, Owen E. Goleta, Santa Barbara Co.
James, Harry L. Santa Barbara.
Knowlton, Kent S. Fullerton, Orange Co.
Pezzoni, Henry E. Guadalupe, Santa Barbara Co.
Righetti, Laura San Luis Obispo.
Righetti, Irene San Luis Obispo.
Tout, H. Floyd Sultana, Tulare Co.
Wade, Henry Goleta, Santa Barbara Co.
Wade, Gustavus Goleta, Santa Barbara Co.
Weaver, Lila San Luis Obispo.
DONATIONS.

Names of Persons who have made Presents to the School
During the Past Year, and their Gifts.

Hon. Warren M. John, San Luis Obispo—Proceedings of
Constitutional Convention, 1878-79. 3 vols.
11 vols.
Mrs. Geo. Steele, San Luis Obispo—Agricultural books
and reports. 50 vols.
C. H. Sessions, Los Angeles—Registered Poland-China sow,
age 1½ years.
Guy H. Miller, Riverside—Registered Jersey bull, age 6
months.
University of California, Forestry Station—1700 eucalyptus
trees of seven varieties.
Southern Pacific Co.—Six framed photographs of Cali-
ifornia views.
Baker & Hamilton, San Francisco—Simplex hand separator
and eight-bottle Babcock milk-tester, with glassware.
THE PERCHERONS.
SAN LUIS OBISPO is a city of about 4,000 people, charmingly situated in a valley of the Coast Range Mountains, and ten miles in two directions from the Pacific. The ocean is reached at Port Harford to the southwest and at Morro Bay to the northwest. The climate is a pleasing combination of sea and mountain environment, which moderates both the summer and winter temperature.

San Luis Obispo has churches representing the following denominations: Presbyterian, Congregational, Baptist, Methodist, Episcopalian, and Catholic. The last-named congregation occupies the famous Mission San Luis Obispo de Toloso, which was established in 1772.

A free public library was established in 1897. It now contains 4,186 bound volumes and many unbound pamphlets and magazines. It will this year begin the construction of a $10,000 library building, which is the gift of Mr. Carnegie. Students in the Polytechnic School will be granted equal privileges in the library with the residents of the city.

San Luis Obispo is on the coast line of the Southern Pacific Railway, about midway between San Francisco and Los Angeles. Through trains leave each of these cities daily—one in the morning and one in the evening—and meet at San Luis Obispo in the middle of the afternoon and in the early morning. A local train service with San Francisco and Los Angeles is obtained by one train daily in either direction. The town may also be reached by water by the Pacific Coast Steamship Company's line of boats, connecting at Port Harford with the Pacific Coast Railway for San Luis Obispo and other towns in the interior.