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REPORT TO THE STATE BOARD OF EDUCATION
ON THE

PROGRESS OF THE CALIFORNIA POLYTECHNIC SCHOOL
SAN LUIS OBISPO, CALIFORNIA

January 16, 1936

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POLYTECHNIC SCHOOL, SAN LUIS OBISPO, CALIFORNIA - JANUARY 16, 1936.

FOREWORD: Last year at the January meeting of the State Board of Education, members were given a report on the progress of the California Polytechnic School. This year, the same index headings are being retained, so that any who care to compare the statistics and statements of the two years may easily do so.

I. HISTORY

There is little necessity to add to the rather complete statement made in the report last year. However, it is essential to keep in mind the financial and curricular "ups and downs" of the school prior to 1933, in considering the progress made since that time.

II. THE BUDGET

Budgetary provision for the support and maintenance of the California Polytechnic School by the legislative session of 1935, left the School in a vastly-improved position over the previous biennium.

A year ago at this time, the supplies and minor equipment for instruction were virtually exhausted. This was due to cutting the budget to the barest essentials during the previous fiscal period. At the present time, much progress has been made to replace the supplies, but equipment is still below the needs because of the previous extreme shortage.

The 1935 legislature re-created the possibility of a building program for the School by allocating them a one-third share of the State money received from pari-mutual race track operations, after money for State, County, and District fairs and other expenses are deducted. This will make possible the replacement of some of the obsolete buildings on the campus, and provide some much-needed new facilities. These will be discussed further under Section X, Improvement Plans.

Although the members of the California Polytechnic School faculty receive salaries considerably lower than men of comparable training, experience and responsibility in other institutions; no salary increases have been allowed for the past four years. All additional funds this year were budgeted to replacement of supplies and equipment, or new construction. Plans were made in the budget for some additions to the staff to divide excessive instruction and project load, but up to the present time it has not been possible to get the desired personnel.

III. ENROLLMENT

The fall semester enrollment was marked by an increase of 27.1 per cent over the previous year. At the same time, the spread of students from virtually every county in the State, was retained. While the School courses are still open to boys who have not completed high school work, virtually all entering students were high school graduates, and a number had previously been enrolled for a semester or more at junior or four-year colleges.

The spread of interest is shown by the fact that Humboldt and Tehama counties in the north, and Imperial and San Diego counties in the south, have contributed a total of 20 students. The complete registration by counties is shown, with a total of 265 students enrolled from California. In addition, one student is enrolled from Mexico, one from Alaska, one from Hawaii and nine from other states.

The current year's figures were taken as of December 30, 1935.

At the same date the previous year, 218 students were enrolled, showing an increase of 59 students over the previous year. The spring semester this year opens on January 27, and it is estimated the School will enroll an additional 75 students.

Comparable enrollment for both semesters of 1934-35, and the fall semester only of the current year, follow:

County

Number of Students

	Both Seme		1 Semester y - 1935-36
Alameda	3		3
Butte		ALSO METS WITH METS WITH ALSO METS METS METS METS METS METS	2
Colusa		-	1
Contra Costa			1
Fresno			17
Glenn			1
Humboldt			4
Imperial		-	2
Inyo			1
Kern	5		2
Kings			1
Lake			2
Lassen	2		1
Los Angeles			42
Madera			1
Mendocino	2		2
Merced		~~~~~~~~	10
Modoc	2		2
Monterey	1		9
Napa	2		2
Orange	2		2
Riverside	1		11
Sacramento	2		3
San Bernardino	6		8
San Diego			13
San Francisco	2		3
San Joaquin	6		3
San Luis Obispo	39		54
San Mateo			1
Santa Barbara			14
Santa Clara			8
Santa Cruz			3
Siskiyou	0		1
Solano			2
Sonoma			4
Stanislaus			8
Sutter			1
Tehama			1
Tulare			11
Ventura			6
Yolo			1
Yuba	- Approximation of the Contract of the Contrac		1
	228		265
Other Countries and States	8		12
TOTAL	236		277

IV. TYPE OF INSTRUCTION

No marked change has been made in the type of instruction. In every department, the courses are based on the needs of the commercial industry. The student is trained in the specific sciences and skills needed to become proficient in the vocational branch in which he is interested. Every class operation is supplemented by parallel project work which forms the practical laboratory for the class problem.

At the same time, it is necessary to recognize the fact that the entire structure of commerce, industry and agriculture throughout the nation is changing. While placement of California Polytechnic School recommended graduates has been exceptionally high, it is nationally recognized that young men are having difficulty in getting established, particularly in industrial fields. One survey of large industries shows that only 3 per cent of the employees are under 26 years of age.

This indicates that the average placement age is advancing, and that the educational foundation may be further expanded in order that the prospective employee be as highly developed as possible in science and skills, when the vocational field is ready to receive him. During the last few generations, this has been generally recognized: For many years, common-school education was sufficient, then high school graduation was required, and now a four-year degree course is a minimum in many fields.

The California Polytechnic School curricula had been set up primarily on a two-year basis for special training in particular fields. If the student wished to have more than one recommended major in related subjects, such as beef cattle husbandry and sheep husbandry, he could secure the additional work with a third year. If an aeronautics student wished to take Department of Commerce license examinations for both airplane mechanics and airplane engine mechanics, he could do so in three years.

In view of the diversification of agriculture, the breaking up of large holdings; and the changes in industry, it now seems desirable to extend the period of training to permit either more advanced instruction in a special field, more fundamental sciences, or greater opportunity to receive training in more than a single major field. For this reason, both the agriculture and the aeronautics departments were set up this year on a three-year basis for recommendation, although a certificate of completion for the two-year course will be given to students leaving the field at the end of that time. The electrical industries department still retains its two-year curricula as a base, with opportunity for a third year of work in power plant operation and certain other special fields.

The instruction at the California Polytechnic School is, and must continue to be, maintained closely in accordance with the placement needs. This leads to certain flexibility, and local autonomy. Nothing could be more disastrous than submission to a categorical and inflexible curricula based upon general academic standards.

On the other hand, there is a growing need to classify all courses offered at the Polytechnic School on a unit basis comparable with other institutions, for the sole purpose of clarification in the minds of other educators and of parents of students. Taught to deal in academic units, these individuals cannot evaluate the terminal and vocational courses in any other manner. It seems probable that in the future, there will be an increasing number of students from junior colleges and other institutions, desiring to enter the California Polytechnic School for the practical value of its curricula. This trend is already being noticed, and will probably require a classification this year of the vocational course offerings on that basis.

1See samples in Appendix.

As an example of the necessity of elasticity in the methods of instruction, there has been a considerable change noted in the dairy division. For several years, students were encouraged to carry selfownership projects, raising one or more dairy animals to maturity for the experience, and to start a foundation herd. However, it was found that every recommended student could find employment in the production or manufacturing of dairy commodities, while very few had the necessary capital to enter directly into the production field for themselves. Accordingly, this year little emphasis was placed on the self-owned project, while the supervised practice in connection with the School herd was increased. This has not reduced to any degree the efficiency of the training -- in fact the student responsibility has been increased from one or two to perhaps ten or twelve animals. At the same time, it has kept the instruction in line with the demand. If at any time in the future, placement of these students on large dairy enterprises or in creameries becomes difficult, or if conditions are more favorable for the graduate to start a small, well-bred herd, it would be very easy to again emphasize the self-owned project.

V. EQUIPMENT

No material changes have been made in the flocks, herds, buildings or laboratory equipment for instruction, since the report of last year. Some expansion has been found desirable in the numbers of livestock and poultry, due to increased enrollment.

The school maintains some of the finest foundation animals in its livestock herds, to be found anywhere in the west. Three of the steer calves shown at the Great Western Livestock Show at Los Angeles this fall-all bred on the School farm and raised by boys in projects, placed ahead of animals that won blue ribbons in the famous American Royal Livestock

show at Kansas City. Seven White Leghorn hens in the poultry flock topped the 300-egg mark this last year. Boys from the School had the reserve grand champion pen of lambs and pen of market hogs at the Great Western Livestock show. The herd average in butterfat production is fifth high among all institutions in the United States and a cow which may make a world record this year is in her third month of lactation at the School.

The object of keeping this livestock is not for experimental purposes, but to teach boys how to care for them, and to provide project animals both for the California Polytechnic School boys and for the high school agriculture students throughout the State.

VI. PROJECT OPERATION

The laboratory work at the California Polytechnic School is a combination of learning and earning. Since the objective of the courses is to train young men for productive vocations, the principle of commercial operation on all projects is emphasized from the start. Through the use of a cooperative loan fund, students borrow money to finance many of the projects, and receive a share of the profits from their labor. Where animals are exhibited in a livestock show and sold at auction, their returns may be quite high. The extent of these activities is shown below, by departments:

Meat Animals Department

Approximately 45 boys carried meat animals projects during the calendar year ending December 31, 1935. The production follows:

86 Beef cattle raised in projects, with a total value of \$9,446.38. 323 Swine raised in projects, with a total value of \$6,009.90. 137 Sheep raised in projects, with a total value of \$1,305.50.

Dairy Department

Twenty-five to thirty dairy students did all routine work in connection with a pure-bred dairy herd of 110 animals. They were paid for this work partly on a share basis. The dairy unit paid all herd expenses last year. The herd produces products

and surplus cattle valued annually at approximately \$10,000. The student pay-roll totaled around \$3,400 last year. Four students still own ten pure-bred dairy cattle valued at \$1,500, which they are raising as foundations for future herds. Last year the entire herd averaged 419 pounds of butterfat per cow.

Poultry Department

22 Student projects in laying hens, brooding and incubating.
230,000 Commercial eggs produced by students in projects.
35,000 Hatching eggs produced by students in projects.
3,200 Chicks hatched, brooded and raised. Of these, 2,300 were individually pedigreed.

2,000 Laying hens in projects, 850 in trapnest projects.

5,000 Hatching eggs and 3,000 baby chicks provided for high school Smith-Hughes agriculture projects for the current school year.

75 Pedigreed breeding cockerels produced and sold.

Horticulture Department

1 Acre Young berries.
3 Acres beans.
1 Acre corn.
20,000 Annuals sold.
35,000 Annuals for Campus use.
4,000 Shrubs for Campus use.

\$15.00 per month for cut flowers. \$30.00 per month for vegetables.

85 Acres of Campus landscaping attended by students.

Aeronautics Department

5 Aeroplanes completely rebuilt or overhauled by student labor. These included two planes which were completely wrecked and after being rebuilt were valued at \$1,000 and \$1,200 each; and three jobs of less value. The value of work done totaled approximately \$3,000.

Electrical Industries Department

Repair and rewinding of motors and control equipment, and wiring jobs about the Campus, totaling 21 jobs, with a labor value of ----- \$375.00

Operation of Campus power plant with a monthly value of \$20.00.

VII. STUDENT LABOR

No work is performed by adults on the California Polytechnic School campus, which can be efficiently done by students without interfering with class work. All groundswork, cafeteria, dormitory and janitor employment; livestock feeding, milking, poultry plant management, and much of the general farm work, is done by students. More than 85 per cent of the students earn some part of their school expenses in this fashion—a few earn their entire way.

The following table shows the division of student labor for the current school year, and indicates the extent to which self-reliant students can assist themselves in getting an education.

	Number Employed	Yearly Earnings
Cafeteria	13	\$2,735.00
Dormitories	10	1,525,00
Project: Dairy	18	3,120.00
Meat Animals	30	3,562.00
Poultry	15	930.00
State: Office	5	420.00
Grounds	20	2,500.00
Industry	6	500.00
Janitors	12	1,800.00
Auto Shop	3	800.00
General Farm - Meat Animals, Poultry, Dairy	45	6,350.00
Federal Funds	35	3,750.00
TOTALS	212	\$27,992.00

VIII. STUDENT PLACEMENT

The policy of the California Polytechnic School has been that a part of its educational service should be placement of recommended graduates if humanly possible. This program is followed as much as time will allow by constant contact with the agricultural and industrial employer. Young men not placed immediately are closely followed, and may be brought to the attention of employers a year or more after graduation.

In the case of agriculture students, a number of them have a fulltime operation ready for them on the home farm and do not care for employment. The following list shows the placement or present status of every one of the 1935 agriculture graduates: Albert Adams ----- Employee, Golden State Creamery, San Luis Obispo Charles Ball ----- Assistant manager, Millbrae Dairy, Millbrae. Edward Bartlome ----- Fruit production, home, Saratoga. Clifford Bjork ----- Western Dairy Products Company, Los Angeles. Edward Christensen --- Cow-testing, San Luis Obispo County. Ernest Curren ----- Sheep production, Russ Investment Company, Eureka. J. Russell Davis ---- Poultry assistant, Hearst Ranch, San Simeon. Burley Dooley ----- Returned to School. Dan Galatro ----- Dairy herdsman, Pellissier & Sons, Whittier. Charles Hagemeister -- Student assistant, School poultry plant. Jack Hamilton ----- Foreign cattle exporter, Millbrae Dairy, Millbrae. Jay Hart ----- Middlecamp livestock ranch, Colusa. Lawrence Jespersen --- Manager Tier 10,000 bird poultry farm, Napa. J. Rollin Lander ---- Swine herdsman, C. Don Huff, Woodland. Harry LaBaw ----- Assistant, Hogsett Poultry Farm, Pomona. Barry Leach ----- Landscape business, San Luis Obispo.

Elmer Lindquist ----- Herdsman, Rocky Hills Dairy Farm, Exeter.

Shih Ying Li ----- Iowa State College, Ames.

Nicholas Marquart ---- Livestock production, home, Templeton.

Lennis Norman ----- Livestock manager, Gilmore Ranch, Wasco.

Frank Olgiati ----- Nursery business, San Luis Obispo.

Robert Pearl ----- Unknown.

George Richl ----- General farming, Carmel valley.

* Elwyn Righetti ----- Livestock production, home, San Luis Obispo.

Harold Righetti ----- Poultry production, home, San Luis Obispo.

Leslie Rios ----- San Jose State College.

Robert Rogers ----- University Farm, Davis.

Frank Stennett ----- Swine herdsman, Fryer Land Company, Willows.

Harry Sturz ----- Home, San Diego.

Lewis Tennant ----- Manager, Tennant livestock farm, Colusa.

Donald White ----- Attending school elsewhere.

Harry Whitesides ---- Aggeler & Musser Seed Company, Brawley.

The following industrial students graduated prior to 1935, but were placed during the past year:

Pat Brown ----- Bookkeeper, Cline's Electric Shop, San Luis Obispo.

John Hurtt ----- Factory apprentice, Square "D" Electrical Mfg. Company, Los Angeles.

Fred Perozzi ----- Factory apprentice, Square "D" Electrical Mfg. Company, Los Angeles.

O. Thompson ----- Electrician, Columbia Steel Company, Pittsburg, Calif.

Walter Whittier ----- Airplane mechanic, Consolidated Aircraft Corporation, San Diego.

Of the 8 electrical industry students graduating in 1935, three are working in service stations and the following five were placed on electrical jobs:

William Burns ----- Motor repair department, Cline's Electric Shop, San Luis Obispo.

Robert Doscher ----- Electrician, Standard Oil Company, Richmond, Calif.

Charles Duncan ----- Electrician's helper, Pacific Gas & Electric Company, Stockton.

Guy Jones ----- Assistant, Allied Refrigeration Company, Long Beach.

Francis Saladin ----- Factory worker, Wessix Electric Heater Company, San Francisco.

Of the three aeronautical students graduating in 1935, one is going on to school and the other two were placed as follows:

Burton Chase ----- Airplane mechanic, Consolidated Aircraft Corporation, San Diego.

Kenneth Bailey ----- Airplane mechanic, Consolidated Aircraft Corporation, San Diego.

IX. SERVICE TO THE STATE

As the service institution for the Bureau of Agricultural Education, engaged in the administration of Smith-Hughes Vocational agriculture to more than 7,000 high school students in 138 schools throughout California, the California Polytechnic School continues to render most valuable aid.

Every member of the agriculture faculty of the School is an advisor to the high school agriculture teachers and students, in the particular field in which the faculty member specializes. In this capacity, he answers hundreds of questions a year concerning better farming practices in every district of the State.

Through the staff of the School, 50 radio programs annually are carried on over the major networks. These include a 35-lesson series reaching every high school in the State each Tuesday morning during the school year from 10:15 to 10:30; and a monthly program the first Saturday of each month at the noon hour. In addition, there is participation in several national and special programs.

As an example of the type of agricultural service recognized as potentially available from this School, two stations have recently asked for additional weekly time devoted to farming information. One station requested 30 minutes each week, and another 15 minutes each week. It was necessary to refuse this service because every staff member is already loaded with work beyond his capacity.

In addition to the Tuesday morning radio agriculture lessons, the staff of the School contributes to an educational publication, the California Future Farmer, which has a monthly circulation this year of more than 8,000. Six columns of agricultural information are prepared each month for the high school student's use.

Increasing use is being made of the Polytechnic School by the high school students for better foundation stock. Sale of hatching eggs from the high-quality flock of the School supplies only a fraction of the domand. Feeder pigs, calves and lambs; and purebred dairy animals, are frequently sold to the high school boys for project work.

Use of the School is made annually for State-wide meetings of the high school agriculture students, and the agriculture teachers. Last year the School was also the meeting place for the California Vocational Federation. A number of meetings are held at the School each year by dairy and livestock Associations. The annual student agriculture show has performed for several years the functions of a district fair for residents throughout the coast area.

The operation of projects on the School farm performs another service to the student enrollment by providing the campus dining hall with a large amount of fresh meat, eggs, milk, fruit and vegetables. In this manner, the students actually cooperate with one another—part of them benefiting from the education and profit of the agricultural enterprise and all benefiting from the availability of fresh products at a low price.

X. BUILDING AND IMPROVEMENT PROGRAM

The program for expenditures for permanent improvements is still under discussion. Before any money was spent, it was felt desirable to map out a long-time expansion program. This will prevent any haphazard erection of buildings which encroach upon expansion of some other department later.

Most of the attention thus far has been devoted to the allocation of certain campus areas for the exclusive development by the various departments. The horticulture department will have a unified acreage, with all plots and buildings in the single area. The same will be true of the meat animals department, poultry, and dairying. In addition, other buildings such as the farm mechanics shop will be moved in relation to the other re-locations for most efficient practice, such as would be necessary on a well-planned farm.

The new program will include a swimming pool, hog, sheep and beef cattle feeding units, a lath-house, new roads, and landscaping of about 12 more acres of campus; as well as other permanent improvements.

XI. TEACHER TRAINING

The California Polytechnic School continues to be the most important link in the agricultural teacher training program. This function is primarily devoted to those preparing to teach, rather than those already in the profession.

California Polytechnic School, where they have an opportunity both to get practice teaching and to participate in the agricultural operations carried on on a commercial scale on the School farm. The other half of the year is spent by the trainees in selected high schools doing supervised teaching and working with the Future Farmers of America chapters.

The Polytechnic School set-up, with its diversity of operations and

its staff of agricultural experts, gives these young college graduates the most valuable possible training for their future jobs. For the last two years, the number of trainees has been far below the number needed for replacement and for new high school agriculture departments.

A teacher-trainer from the Bureau of Agricultural Education spends
part of his time supervising the cadets in high schools and part in supervising those at the California Polytechnic School. In addition, each trainee
at the latter institution is placed directly under an instructor in whose
field the cadet desires special training.

XII. CHARACTER BUILDING

In a vocational institution, it may be expected that character training becomes an integral part of the instruction; that is, if the young man learns how to work, how to accept responsibility and how to maintain proper contact with fellow-employees, he is getting many of the fundamentals of character building.

Nevertheless, this problem has merited considerable attention at the California Polytechnic School during the last year. It has been found that the students were devoting so much time to the acquisition of skills and knowledge that they were in danger of becoming solf-centered. There was a definite lack of leadership in the student body. Limited free time made it difficult to schedule many activities of a character-building nature such as meetings and programs, dramatics, and outside contacts.

There seems to be a definite need to increase to some degree the opportunities of students for these activities. The problem is one of developing leadership and polish, rather than moral fibre. There is virtually no problem of disciplinary nature at the present time, due to the high quality of the students who are enrolling.

XIII. GENERAL NEEDS

A year ago, the needs of the California Polytechnic School were primarily in finances, and secondly in recognition as an advanced training institution for the vocationally-minded high school graduate.

The last legislative session recognized the financial need and provided for it. The second need still continues. Earlier in this report, statements were made showing that the placement age in all fields has advanced several years due to universal unemployment, and the need for employers to keep heads of families, for the most part, on the payrolls.

This has resulted in a necessity and an opportunity for longer vocational training—a higher vocational education, if such it may be called. We must begin to discern the fact that many very intelligent young men and women have talents which can be best expressed through the vocations rather than the professions; and lack talents which are required to complete the academic curricula.

In chosing an institution beyond high school, the graduate will naturally turn to his class adviser, counselor or guidance man or woman. For many years, there has been great tendency on the part of these counselors to give greatest attention to the student with recommending grades. This student, irrespective of his talents, is always pointed toward a university career. Lately, this has been expanded to include those students who have gone through the college preparatory courses, but who either do not have recommending grades, or do not know what field to choose. The latter have, for the most part, been directed toward local junior colleges or regional colleges.

In the meantime, the student with vocational objectives has been largely overlooked. The few who have shown vocational ability, with recommending grades, have been guided toward a professional and scientific career. The

growth of vocational education in the high school has been accepted by these counselors as perhaps a necessary evil, to "take care" of the students unable to make satisfactory grades in academic subjects.

This attitude is undoubtedly slowly changing, and the time is approaching when the vocational work of the high school will be placed more nearly on a par with the general subjects. The present need of the California Polytechnic School is that recognition also be given to the need for, and possibilities of, a continuation of this vocational training beyond high school.

Unless such recognition is eventually given, the California Polytechnic School cannot continue. At the present time, it is apparently at cross-purposes with the reasoning of a great proportion of the high school graduate counselors. With the exception of a few vocational agriculture teachers and shop teachers in an exceedingly limited number of high schools, it is safe to say that less than a dozen school counselors in California are recommending graduates with vocational talents, to continue training at the State's only vocational institution.

Such a situation is difficult to explain—that is, two branches of the State's educational system at very evident tangents. Either this type of training is sound, or it is unsound. Either there should be none of it, or a lot more of it. Either statistics showing placement opportunity for ten vocationally—trained persons to one professionally—trained, must be given far greater credence and attention than at present, or they must be entirely disregarded.

It is just as wrong to say that everyone else is out of step but you, or that recognition must be forced; a gradual evolution must be followed.

Nevertheless, every other institution beyond high school level with the exception of the junior college, has found it necessary to put up the "bait" of an academic degree, in order to hurdle this hereditary barrier. Now, does vocational training have to follow this trend before it is accepted at par?

* * * * *

YOUR VOCATIONAL OPPORTUNITY

The School and the Product

A Bulletin of the California Polytechnic School at San Luis Obispo, Calif.

BULLETIN OF

THE CALIFORNIA POLYTECHNIC SCHOOL

SAN LUIS OBISPO, CALIF.

The state vocational institute for agriculture, trade and industry.

ADMINISTERED BY

The State Department of Education.

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THE NEED FOR VOCATIONAL TRAINING

California's own state school for vocational training in agricultural and industrial fields is conducted for the sole and specific purpose of training young men for employment. This employment may be in the management

and operation of the graduate's own enterprise.

The California Polytechnic school is not a preparatory school in the sense of preparing the student for higher education. It is preparatory for life work. Labor statistics and years of experience in education have shown a definite and continuing need for the type of training which coordinates the mind and the hand-the combination of knowledge with the skills to make that knowledge effective.

The fact that there has been a growing demand for graduates of the California Polytechnic school, continuing through the low employment period, is sufficient proof in itself. In the spring and summer of 1935, when millions of persons were without jobs and on relief, there was such a call for Polytechnic school graduates, that twice the number of recommended students available could have been placed on certain specialized jobs.

One employer said: "Your graduates know what to do, how to do it, why they are doing it-and they are not afraid to work. I can get any number of theoretically-trained young men, but they don't know how to use their hands. Every time I have an opening in my plant, you can send

me one of your graduates."

In short, the purpose of the California Polytechnic school is to fill the employment gap between the common laborer, who knows how but not why; and the theorist, who knows why but not how. Foremen and plant managers are coming in increasing numbers from the graduates of this state school.

A DIFFERENT SCHOOL

Since the aim of the California Polytechnic school differs in many respects from that of the conventional college, its routine and curricula are likewise different.

Advancement through the stages of training from enrollment to graduation is based upon ability to assimilate knowledge and learn skills, rather than upon hours of matriculation or units of credit. Each major course has definite goals which its graduates must reach-both in breadth of knowledge and evidence of skills. When the student has fulfilled these objectives, steps are immediately taken to place him in permanent employment if he desires, or to assist him in launching his own business venture.

THE GRADUATE IN BEEF CATTLE PRODUCTION



CONDUCTING OWN ENTERPRISE, COLUSA. Lewis Tennant, '35, established in farming after raising purebred herd at school.

Attendance at the California Polytechnic school may be compared with apprenticeship in a large commercial enterprise. The apprentice, however, only learns the routine operations—the student under systematic instruction learns why as well as how. The technical skills are built upon the broad foundation of general knowledge.

Accordingly, it is not possible to consider this school in relationship with any other. All subjects taught are directly related to the major goal—not as divisible units. English is not taught as a unit of English, but as an ability to write business letters, to meet a prospective buyer or seller, to express one's self in public. Mathematics is taught as an ability to compute necessary formulas, master accounting, measure land, haystacks or the stress and strain on a steel girder.

The California Polytechnic school is located on the coast highway and the Southern Pacific main line, almost exactly half-way between San Francisco and Los Angeles. It is in the population center of the state, making it more accessible for students from every portion, than any other state institution. Students are in attendance from 40 of the 58 counties of California, about equally from the northern and southern counties.

The climate is typical of the coast area, and is mild throughout the year. Frost or hot weather are equally almost unknown. Rainfall is normal for crop production on the school farm. The campus is beautifully landscaped and is an attractive home for the student. There are about 85 acres in the campus, besides the farm area. More than 40 buildings make up the dormitory, classroom and laboratory structures.

In level of instruction, the California Polytechnic school approximates that of the Junior College, or the first two or three years of college or uni-

THE GRADUATE IN SWINE HERDSMANSHIP



EMPLOYED BY C. DON HUFF, WOODLAND. Rollin Lander, '35, placed by the school upon graduation.

THE GRADUATE IN SHEEP PRODUCTION



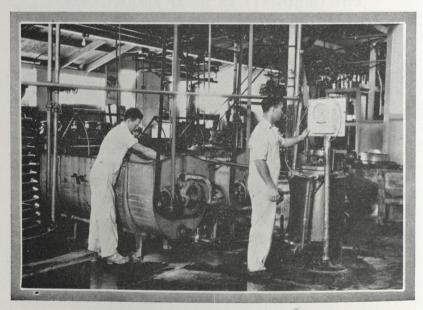
EMPLOYED BY HOWARD VAUGHN, DIXON. James Bogert, '34, placed by the school on graduation. Charles Stone, '34, also employed by same firm.

THE GRADUATE IN DAIRY PRODUCTION



EMPLOYED BY MILLBRAE DAIRY, MILLBRAE. Charles Ball, '35, placed by the school during final year. Jack Hamilton, '35, employed by same firm.

THE GRADUATE IN DAIRY MANUFACTURING



EMPLOYED BY THE GOLDEN STATE CO., SAN LUIS OBISPO. (Right)
Albert Adams, '34. (Left) Orville Spear, '34, employed as U. S. Army dairy
inspector.

(4)

THE GRADUATE IN LANDSCAPING



EMPLOYED BY THE BOARD OF EDUCATION, SAN LUIS OBISPO. Fred Righetti, '34, placed by the school upon graduation.

versity. Approximately 95 per cent of its entering students are high school graduates, and the length of instruction varies from two years in some of the electrical industry majors to three years in the agricultural and aeronautics fields.

THE MAJOR COURSES

There are two main divisions of the curricula—agricultural and industrial. Departments in the agricultural division are dairy, poultry, meat animals and horticulture. Those in the industrial field are electrical industries and aeronautics.

Under each department are grouped major fields based upon the various

needs in employment.

The Dairy department trains for specific employment as commercial dairy herdsmen, market milk producers, cow-testers, dairy show herdsmen, and creamery plant employes.

The Poultry department trains commercial egg producers, pedigreed flock men, hatchery and brooding plant employes, employes in egg-handling

concerns, producers of meat birds.

The Meat Animals department trains for commercial production in beef cattle, sheep and swine, the first two both under range and feed lot conditions; markets feeders, commercial herdsmen and show herdsmen in all the fields.

The Horticulture department majors are in landscaping, plant and tree propagation and other greenhouse work, deciduous fruit production, fruit inspectors, and truck and field crop production.

THE GRADUATE IN POULTRY PLANT MANAGEMENT



EMPLOYED BY THE JOHN KIMBER PEDIGREE FARMS, NILES. Donne Schneider, '34, placed by the school upon graduation.

munications technicians, industrial plant control men, powerhouse and substation workers, motor and equipment servicemen, wiremen and linemen, and electrical equipment manufacturing.

The Aeronautics department trains airplane mechanics, airplane engine

mechanics and aeronautical draftsmen.

The time required to complete a single major varies with the individual. Many students wish to receive recommendations in more than one field. For the average student, two full years are required in the electrical industries field, three years in the agricultural branches and three years in the aeronautics majors for both airplane mechanics and engine mechanics licenses.

THE COURSE OF STUDY

Courses in the various branches vary with the type of training. In the industrial fields, many courses are set up on a six-weeks' basis, so that the

student covers as many as twenty different fields in two years.

Unless the student attends for an additional period, it is difficult to carry more than one major course. Schedules make it possible to get a variety of related subject work, and in some of the departments, several electives are provided. This permits the student to get additional specialized training in fields which he expects to follow.

In general, the schedules provide for classroom instruction and recitation during the morning and laboratory work and practice during the afternoon. This is not followed in all schedules, but the division of time between in-

struction and practice is divided about equally.

THE GRADUATE IN AGRICULTURAL SELLING



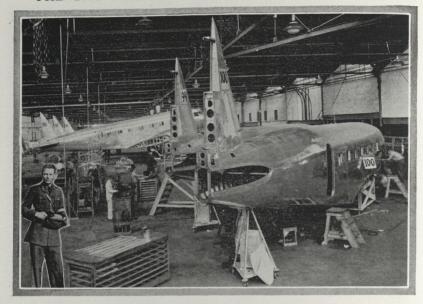
EMPLOYED BY SPERRY FLOUR CO., SANTA CRUZ. C. Don Waller, '32, placed by the school upon graduation, advanced to sales managership.

THE GRADUATE IN AIRPLANE ENGINE MECHANICS



EMPLOYED BY NORTHRUP AIRCRAFT COMPANY, INGLEWOOD. William Diener, '33. Employed during final year,

THE GRADUATE IN AIRPLANE CONSTRUCTION



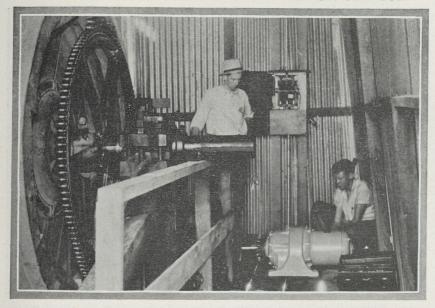
EMPLOYED BY DOUGLAS AIRCRAFT COMPANY, SANTA MONICA. Boyce Phillips, '32, employed two years after graduation.

THE GRADUATE IN AIRPLANE MECHANICS



EMPLOYED BY HAWKE CROP DUSTERS, MODESTO, Kent Miller, '33, Army Air Corps Training After Graduation.

THE GRADUATE IN ELECTRIC MOTOR SERVICE



EMPLOYED BY THE U. S. ELECTRICAL CO., LOS ANGELES. Eli Gregory, '33, and Carl Johnson, '34, both placed by the school during final year.

EXPENSES

The California Polytechnic school is a state institution. There is no tuition.

There are few fees and textbooks, or shop deposits. Students living on the campus in one of the four modern dormitories and eating at the campus dining hall average approximately \$300 per year for board, room, laundry, textbooks and supplies and registration expenses.

No student should attempt to enroll at the school who does not have regular income amounting to this amount from home or other sources, spread through the year. While it is possible to earn a portion of the expenses, or to keep them down by careful living, such factors cannot be relied upon for support.

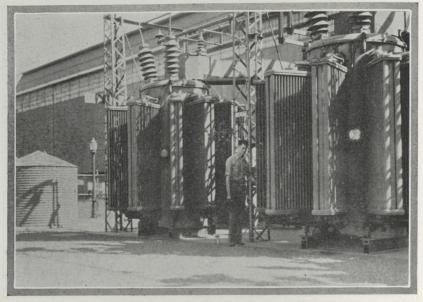
The student who "gets behind" or is forced to work long hours in addition to his class and laboratory work, is frequently discouraged and fails to attain the training of which he is capable.

To pay the necessary fees and deposits, and board and room in advance, the entering student should have at least \$75. The exact amount may be determined by writing to the Registrar.

EMPLOYMENT DURING SCHOOL

A considerable amount of employment is made available to the students at the California Polytechnic school. This is done with two purposes—to assist worthy students who do not have sufficient finances from other sources, and to supplement the regular training. This is particularly true

THE GRADUATE IN INDUSTRIAL PLANT CONTROL



EMPLOYED BY THE U. S. STEEL CORPORATION, PITTSBURGH. Oswald Thompson, '34, placed by the school during final year.

of the farm and campus employment, a great deal of which is as valuable in training as the scheduled classes.

The need of the student is the first consideration in giving him work. Schedules provide for employment for as many as possible to give income which supplements other funds, rather than providing a large part of the expenses of a few.

Campus employment on the state pay-roll is under civil service regulations. This includes janitor work, general farm labor, campus maintenance and similar occupations. Students must take state civil service examinations to be eligible for these jobs. The examinations are given at definite intervals, starting immediately after the opening of the school year, and those registering late must wait for another test date before being eligible for work.

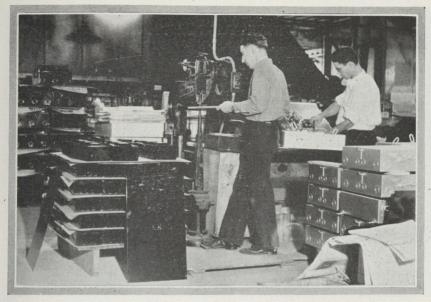
As much of the work involves responsibility, more employment is available for advanced students than the incoming classes. When a student has completed a year or more of work, his capabilities and trustworthiness are established.

No new student can be definitely promised employment which will return him a specific figure, but every effort is made to see that those who really need work are able to obtain it. The young man who has already become proficient in various jobs, such as farm work, milking, landscaping, janitor work and dining hall service, has much better chance of employment than those without any particular skills.

REQUIREMENTS FOR ENROLLMENT

Only male students are enrolled at the California Polytechnic school.

THE GRADUATE IN ELECTRICAL MANUFACTURING



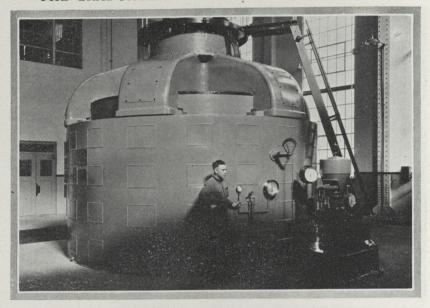
EMPLOYED BY THE SQUARE "D" ELECTRIC CO., LOS ANGELES. John Hurtt, '33, and Fred Perozzi, '33, placed by school within year after graduation.

THE GRADUATE IN ELECTRICAL COMMUNICATIONS



EMPLOYED BY THE PACIFIC TELEPHONE CO., SAN LUIS OBISPO. Edward Vermazen, '34. Placed by the school during final year.

THE GRADUATE IN POWER PLANT OPERATION



EMPLOYED BY THE SOUTHERN CALIFORNIA EDISON COMPANY, BIG CREEK. C. Earl Miller, '26, placed by the school upon graduation.

High school graduation is desirable in order to enter upon a level comparable with the general student body. However, applications will also be received from any student who has reached his 17th birthday anniversary by September 1, and who has had at least two years of high school.

Creditable scholarship records on the part of the applicant is recognized as aptitude for learning. A well-balanced range of preparatory courses also indicates good foundation for general knowledge. On the other hand, it is equally recognized that in the vocations, some of the most successful trainees do not have interest in, or capabilities for, some of the more academic and theoretical high school courses. As a result, they avoid these courses, or do not show high scholarship in them. Since these courses are not fundamentally necessary for success in the major fields of work at this state technical school, no rigid requirements are set up for general scholarship or units of preparatory work. It is only required that the applicant have the sincere desire to learn, and the average mental facilities and education background, with greatest emphasis placed on those vocational courses and sciences most closely related to the type of work in which the student plans to major.

Students enrolling in the industrial courses will progress more repidly if they have had good preparation in sciences and mathematics, in addition to such trade and industrial courses as are available in high school. Those enrolling in the agricultural courses will profit by the amount of work previously done in sciences and vocational agriculture.

FACILITIES

Living Accommodations. Students living on the campus are housed in

THE SCHOOL FACILITIES IN BEEF CATTLE PRODUCTION



A GROUP OF PROJECT MARKET STEERS. Students raise from one to ten steers each year as part of training.

one of four modern dormitories. These buildings hold about 60 students each. A resident dormitory superintendent lives in each one of these halls. Rooms accommodate two students each, with ample room for study and sleep. The quarters are clean, cheerful and comfortably furnished.

Dormitory students eat at the dining hall, which accommodates about 300 persons at a time. The meals are prepared under the direction of an experienced chef, and menus are planned to provide the proper balance of wholesome food, Eggs, dairy products and some of the meat and vegetables are produced right on the campus, insuring a fresh diet of highest quality.

Students are expected to live on the campus unless they have relatives or family friends living close by with whom they prefer to reside. Those

living on the campus are given preference in employment.

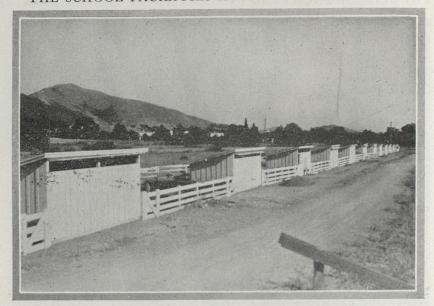
Classrooms and Study. Classrooms for lecture and recitation are provided in the many campus buildings. Often the classroom is adjacent to the laboratory in the same field. A well-stocked library is available for research and study, as well as relaxation in the fields of fiction. Dormitory regulations provide evening time for study without interruption.

Laboratories. These form one of the most important features of the California Polytechnic school method of training, and greatest attention

is paid to their completeness.

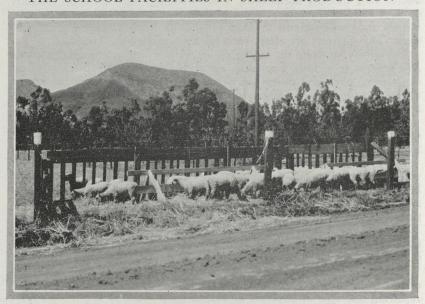
The Aeronautics department has a large structure with many hundreds of square feet of floor space. Complete facilities are in use for building or repairing any type of airplane, as well as for practice in the various operations of construction. From one to four planes are constantly on the floor undergoing construction or repair. In addition, there is a large engine room

THE SCHOOL FACILITIES IN SWINE PRODUCTION



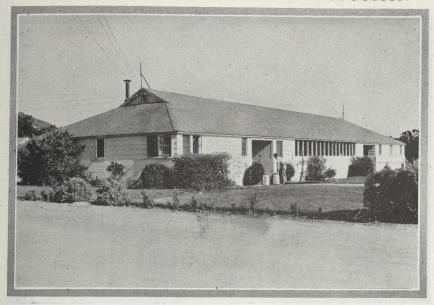
ROW OF COLONY HOUSES. Individual student projects cared for in practical buildings typical of commercial plant.

THE SCHOOL FACILITIES IN SHEEP PRODUCTION



CREEP-FEEDING OF MARKET LAMBS. This basic California industry is taught under typical conditions.

THE SCHOOL FACILITIES IN DAIRY PRODUCTION



THE MILKING BARN AND BOTTLING UNIT. Each step in market milk production is followed on commercial basis.

with complete series of airplane engines from the early types to the most modern designs, and an aeronautics drafting room.

Facilities for welding and other shop work are in separate buildings.

The course of study in the aeronautics fields are based upon the federal requirements for licenses under the department of commerce division. The shop is accredited by the department, as are the staff of instructors.. Student time is accepted toward a license, and the final examination for students consists of the regular department of commerce license tests.

The Electrical Industries department has a large laboratory equipped with all types of motors, switchboards and control apparatus, in addition to the school power plant in which students receive additional training. All of the equipment, tools and devices are for constant use and practice—not just for observation.

The Agriculuture students have the 1400-acre farm and 85-acre campus for laboratory work in addition to the particular facilities in the various

departments.

The Meat Animals students have feeding sheds and other buildings for the livestock, as well as range, pasture and crops land. They have the management and contact with the herds and flocks of purebred beef cattle, sheep and swine; facilities for treatments of disease, shearing, and the general farm work.

The Dairy students have a modern milking barn, buildings for raising calves and caring for mature cows, silos, and a chemical laboratory for dairy bacteriology and milk testing. More than 100 head of purebred dairy cows are in the school herd, cared for and milked almost entirely by the students.

THE SCHOOL FACILITIES IN FARM MANAGEMENT



THE STOCK BARN with silos and feed-grinding equipment has practical educational uses.

Those majoring in dairy manufacturing have the training aids of two modern creamery plants in San Luis Obispo, as well as practice laboratories on the school campus. Boys work several hours a day during the fall and winter months in the creamery plants. They are under the supervision of both the plant manager and the instructor in dairy manufacturing.

The Poultry students have buildings of various types for a 3000-bird commercial plant, for pedigree and trapnesting work, and for incubating and brooding young stock; as well as for mixing feeds and growing green feed.

The Horticulture students have two glass-houses, several lath-houses and the entire campus area for landscaping practice, as well as several plots for propagating shrubs, acres of field and truck crops and a considerable acreage of new orchard.

These are only the highlights of the laboratory facilities on the campus, but it will show the well-rounded practice opportunities available.

Athletics. A modern gymnasium, athletic field and track are some of the aids to physical education. The gymnasium is provided with all of the equipment for bodily development, with showers and locker rooms. A standard basketball floor is included.

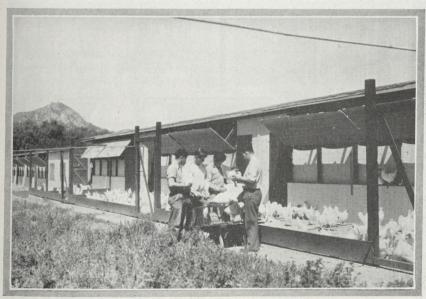
The California Polytechnic school maintains a year-around schedule of interscholastic athletic competition. Its opponents are leading junior colleges, four-year-colleges and university freshman teams. Interstate competition in football with Arizona State Teachers at Tempe provides an out-of-state trip. The school is in the Central Coast Counties Junior College conference, where it has dominated in football and track and held its own in basketball and baseball for several seasons.

THE SCHOOL FACILITIES IN HORTICULTURE



PART OF THE PLANT PROPAGATION UNIT. Students raise thousands of plants for campus and commercial use.

THE SCHOOL FACILITIES IN POULTRY PRODUCTION



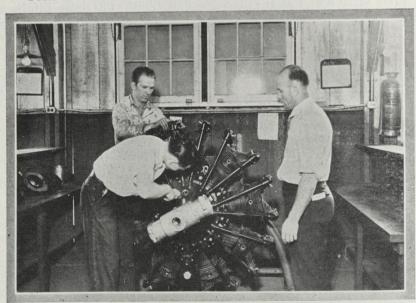
PORTION OF THE LAYING HOUSE UNITS. Different types of structures give wide range of experience.

THE SCHOOL FACILITIES IN AERONAUTICS



STUDENTS REBUILDING PLANE. One of scores of jobs turned out in projects as part of training.

THE SCHOOL FACILITIES IN AIRPLANE ENGINES



CHECKING AN AIRPLANE MOTOR. One of the many types of engines found in this department.

THE SCHOOL FACILITIES IN ELECTRICAL INDUSTRIES



A PORTION OF THE LABORATORY. Students learn by performing the technical operations.

Only students enrolled in a major department of the school and meeting the conference scholastic requirements, are permitted to represent the institution in interscholastic athletics.

Recreation. In addition to the group athletics, facilities are available for other sports recreation. Tennis courts are available with more under construction. Handball courts are provided, and a swimming tank is in the building schedule. Pacific Ocean beaches are within 15 minutes' drive of the campus, and mountains abound for hiking. Two well-kept golf courses are within a half-hour drive. The dormitories have pool tables, and in the gymnasium are mats and gloves for boxing and wrestling.

A number of formal and informal dances, picnics and field days are held during the year. Radios in the dormitories, both in the lounge rooms and in student rooms, bring the popular programs.

Financial. In addition to the student labor income, those in the agricultural field have opportunity for income as well as training through

their own projects.

Meat animals students raise market swine, lambs or steers, or breeding stock in these classes. Dairy students raise calves and care for their own mature animals. Poultry students lease portions of the school flock, or hatch and brood birds in their own projects. Horticulture students raise various crops, as well as ornamentals and fruit, in their projects.

Each project is operated under a contract with the school. Loan funds are available for the purchase of market or breeding stock, feed, eggs, fertilizer or other things needed for the care of the project. The student carries through the entire operation of raising and marketing his product.

Students are permitted to bring project animals from their homes, but

THE SCHOOL FACILITIES FOR ADMINISTRATON



THE ADMINISTRATION BUILDING houses the offices and the faculty conference rooms.

must consult the head of the meat animals or dairy departments before doing so. This is to insure that they are free from disease, that adequate housing will be available, and because limits must be placed on the numbers brought.

Health. A campus physician is in daily attendance. Each student pays a fixed fee which guarantees him prompt and skilled medical attention. Hospitalization is provided when necessary at a low rate. The medical fee covers treatment for all diseases, operations, injuries and health lectures. The physician is in attendance at all athletics contests. Each entering student is required to undergo a physical examination; physical education is required unless the student is specifically excused. Those in the band are exempt from physical education.

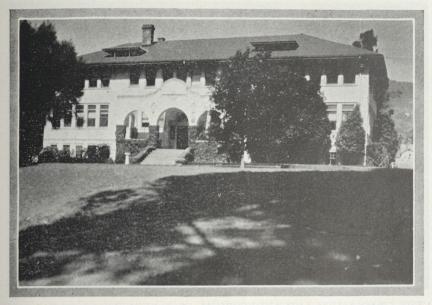
STUDENT GOVERNMENT AND ACTIVITIES

The students of the California Polytechnic school are of sufficient maturity to manage their own affairs. All student functions are controlled through a self-government organization.

Officers are elected each fall for the entire year. The students have charge of all campus activities and events, including athletics, social functions, Open House days and Homecoming. They publish the El Rodeo, student annual.

Student committees are in charge of the cooperative store, the regulations governing campus conduct, the dormitories and dining hall. Assemblies are held twice each month, with entertainment programs and speakers of note.

THE SCHOOL FACILITIES FOR CLASS INSTRUCTION



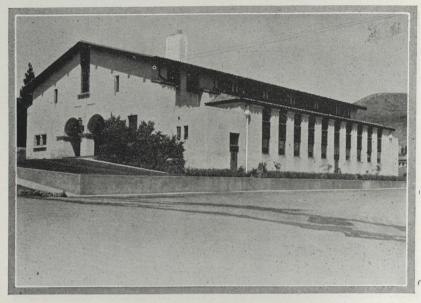
AGRICULTURAL EDUCATION BUILDING. One of several structures for recitation and lecture.

THE SCHOOL FACILITIES IN LIVING ACCOMMODATIONS



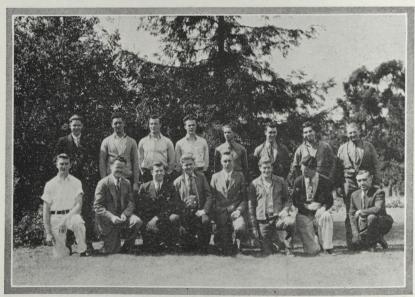
ONE OF FOUR MODERN DORMITORIES. Wide expanses of green lawn and artistic landscaping make pleasant quarters.

THE SCHOOL FACILITIES IN PHYSICAL EDUCATION



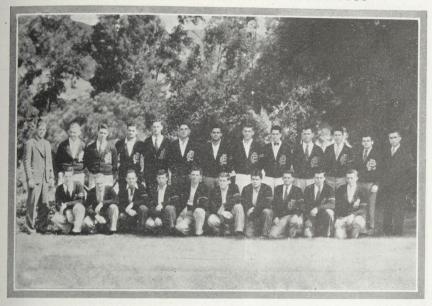
THE GYMNASIUM AND AUDITORIUM. A modern building centrally located and adequately equipped.

THE SCHOOL FACILITIES IN LEADERSHIP TRAINING



THE STUDENT AFFAIRS COUNCIL. This representative group has the administration of general campus activities.

THE SCHOOL FACILITIES IN ATHLETICS



THE BLOCK "P" SOCIETY. Men representing all branches of interscholastic sports form this organization.

CAMPUS ORGANIZATIONS

In addition to the general student body, several organizations function on the California Polytechnic school campus.

The Agriculture students have a chapter of the state and national organization, the Future Farmers of America. Many of its members have been affiliated with the organization during high school, and carry on the leadership and character training functions in the advanced chapter.

The Aeronautics students have a long-established club—the Poly Aero club. This organization sponsors various activities among the students in the department, including an annual trip through airplane factories and airports during the spring vacation.

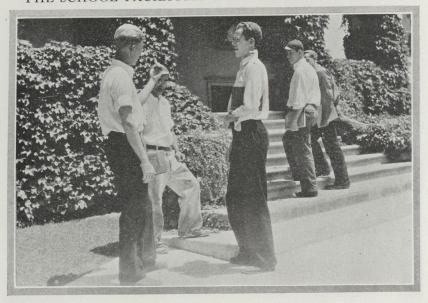
The Electrical Industries students form the Polyphase club, similar to the others. The club does considerable work each year for the annual open house, brings to the campus motion pictures of the industry as well as numerous speakers.

Lettermen of the school have one of the cldest organizations, the Block "P" society. Musicians who make up the school band and orchestra have separate organizations. Each residence hall has its own organization, the students who make up the staff of the El Rodeo annual have a club, and members of the Faculty also have a separate organization.

CAMPUS EVENTS AND ACTIVITIES

In addition to the athletics schedule, there are many traditional events during the year. Early in the fall the Freshman Reception is held, During

THE SCHOOL FACILITIES IN CHARACTER TRAINING



FRESHMEN BLOSSOM OUT IN "LIDS." "Come here, Frosh," says the upper-classman. "Give us a school yell."

the football season, Homecoming Day is scheduled, with hundreds of "old

grads" and friends attending from all parts of the state.

The Christmas party just before the holidays frequently takes the form of a student body dance. During the winter or early spring, the students in the industrial division have open house, sometimes as a part of Public Schools week.

A major spring event which brings several thousand visitors to the campus is the Poly Royal agricultural show, in which project and school animals and birds are exhibited in competition, and many contests are scheduled for the visitors.

The Block "P' society holds its initiation trip to some mountain retreat in the spring, and on May Day the entire student body goes to the beach or other beauty spot for the annual picnic. Commencement exercises with

numerous social functions takes place at the close of school.

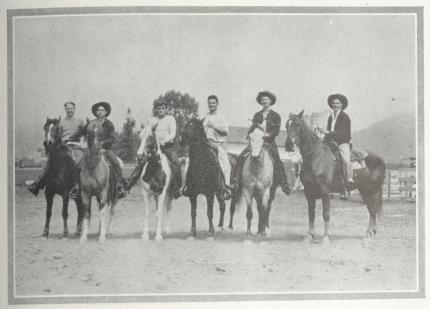
In addition to the events spensored by the students, the campus is the locale of other meetings. Future Farmers of America in 140 high schools of the state meet at the California Polytechnic school each spring for their annual convention and judging contests. Many interesting events take place during this meeting.

During the summer, high school vocational agriculture teachers from the entire state meet for a week's conference, as well as for summer session

work lasting two or three weeks.

In connection with the teacher training program of the state bureau of agricultural education, a group of cadet teachers are at the California Polytechnic school from five to nine months each year, making use of the facilities at the school to perfect themselves for high school agriculture teaching

THE SCHOOL FACILITIES IN SPORTSMANSHIP



EQUESTRIAN PARTICIPANTS IN POLY ROYAL. Students show their prowess in horsemanship during annual event.

THE SCHOOL FACILITIES IN RECREATION



PISMO BEACH ON A HOLIDAY. Pacific Ocean beaches are within a few minutes' drive of the school,

(25)

THE SCHOOL FACILITIES IN STUDENT QUARTERS



A DORMITORY ROOM completely furnished for student comfort and convenience in studying.

positions. The cadets mingle with the life of the campus and add to the student advisory group.

UPON GRADUATION

When the student of the California Polytechnic school reaches the goal toward which he started upon enrollment, he does not receive an academic degree.

Every student who satisfactorily completes the prescribed courses receives a Certificate of Completion, showing that he has matriculated in all the

required subjects.

Students who show superior skill and abilities receive in addition a Certificate of Accomplishment. This is the most valuable document a young man in vocational training can achieve, for it is the endorsement and recommendation of the entire staff for the graduate as an employe. Because young men unsuited to this training do not ordinarily remain to complete the course, because of careful selection of the applicants for enrollment, and because of intensive methods of training through small classes, it is possible to give this recommendation to a great percentage of the graduates.

PLACEMENT AFTER GRADUATION

The California Polytechnic school does not feel that its obligation to the graduate is completed until the young man is placed in employment, if he so desires. Two men are employed part-time for this purpose, and to coordinate the teaching at the school in conformity with the constantly-changing needs of the agricultural and industrial world.

No student is at any time guaranteed employment upon graduation, yet every effort is made to accomplish this end. The school becomes a clearing house between employer and employe. Even in the times of slack employment, the graduate has a far better chance of placement, with employers and personnel men coming to the school for prospects and with a placement man in each division in the field to further this aim.

Frequently the salaries are not large at first, but advancement has been rapid. Most young men placed upon graduation have made material progress in six months to a year, frequently outstripping older men who have had experience but no education. Often, too, the first job is a stepping

stone to a higher position in another concern.

THE STAFF AND FACULTY

The California Polytechnic school is administered by the state department of education, through the bureau of agricultural education. The chief of the latter bureau is the director of the school, in charge of all the ad-

ministrative and teaching functions.

The teaching staff of the school has been selected for practical experience in commercial enterprises, in addition to university training and teaching ability. The goal of each student is training for commercial production and plant operation, and the projects and farm are conducted on a commercial basis as educational units. This requires instruction from the practical standpoint.

This viewpoint is maintained in the related subjects as well as the major courses, so that all instruction blends into the objective of turning out a graduate who is valued as an employe or capable of operating his own

enterprise.

SCHOLARSHIPS AND LOANS

Scholarships in the agriculture department of the California Polytechnic school are open to seven students annually, with additional scholarships

being added from time to time.

In the southern counties, the Union Pacific Railroad offers four scholarships, one to the outstanding high school vocational agriculture student each in Los Angeles, San Bernardino, Riverside and Orange counties. Scholarships are awarded to applicants each spring by a committee selected by the chief of the bureau of agricultural education.

The Washburn and Condon Livestock commission firm offers an annual scholarship to the outstanding market livestock student in high schools of

the eight southern counties.

The Adohr Milk Farms of Los Angeles offer an annual scholarship in dairying to the owner of the outstanding dairy production, breeding or

calf-raising project in the eight southern counties.

The Pacific Bonecoal and Fertilizer company of San Francisco offers an annual scholarship to the high school agriculture student making the outstanding record in showing at the Interstate Junior Livestock show at South San Francisco each spring. In various years, this scholarship is designated to a producer of beef cattle, lambs or market hogs.

Each of the above seven scholarships is for \$100 annually. The usual procedure is to pay \$50 upon enrollment of the student, and \$50 after

completion of a semester of satisfactory work.

There are also two Student Loan Funds to temporarily assist worthy stu-

dents. Loans from these funds are made for short periods of time, and are passed upon by a campus committee. The funds are made up from two sources, a donation of the San Luis Obispo Rotary Club, and from the Faculty Women's Club. Students are eligible to loans from these funds after one semester of enrollment.

HOW TO ENROLL

If you plan to attend the California Polytechnic school, write to the Registrar for an application form, or visit the school in person. The latter gives you an opportunity to see the personal discuss your course of study

with department heads, but is not necessary.

With your application form will be a schedule showing the fees and deposits necessary for enrollment. You should also provide yourself with a transcript of record from your high school or other institution last attended. References will be asked from three adults in your home community who can recommend you as a student at the Polytechnic school.

Supplements are available in addition to this general catalog. These give additional information concerning the course of study, the calendar for the year and the schedule of fees and deposits. If you desire further information, write for any of the following supplements: Meat Animals, Dairy, Poultry, Horticulture, Electrical Industries, or Aeronautics.

Address your inquiries to the Registrar, California Polytechnic School,

San Luis Obispo.

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Vol. V

SAN LUIS OBISPO, CALIF., JANUARY, 1936

No. 5



William R. Shaffer, Maurertown, Va., national president of the Future Farmers of America. Bill is a real farmer, financially interested with his father in the hatchery and cannery business. He has four years of Future Farmer work in high school and two in continuation classes. He has been an athletics manager, editor, actor, president of local and state F. F. A. organizations as well as a fistfull of local fairs and other groups; judge at egg and grain shows, and a general allaround handy man. With each succeeding year it takes a man with bigger capabilities at the helm of this organization—and Bill seems to have them.

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PLANS FOR DISTRICT FAIR AT SAN FRANCISCO ARE ANNOUNCED

Newspaper and magazine articles and radio addresses during the fall months have announced the plans for a new agricultural district fair, slated to be held some time in October each year at a site on the Bayshore highway at the southeastern edge of San Francisco.

Early in December, bids were called for on the construction of a huge exhibit building expected to cover more than fourteen acres. None of the bids were within the amount of money available, and the next move has not been made

public.

The state authorized the organization of this agricultural district in 1930, designating it as District I-A. The late Governor James Rolph, Jr., appointed the board of trustees, and five of his appointees are on the present board. The personnel now includes C. H. Sooy as president and Ernest Drury, George J. Giannini, R. B. Henderson, Robert P. Holliday, C. S. Howard and R. B. Krobritzsch, all of San Francisco; and Thomas L. Hickey of San Mateo.

The trustees had many disappointments in attempting to secure finances, both in city and state appropriations. At the present time, the district has funds from both the city and

state and a federal public works grant.

Plans announced call for a half-mile race track, a covered horse show arena, stalls for 600 head of horses and pens for two thousand head of cattle, a thousand head of sheep and a thousand head of hogs. The main arena will hold 12,000 persons.

Plans as announced in magazines, newspapers and on the air call for a permanent dormitory to house 800 junior exhibitors. The dormitory, it is said, will have many accommodations such as showers, beds, dresser and toilet facilities.

Among the plans are to have this structure serve as the agricultural section for the 1938 World Fair celebrating the completion of the Golden Gate and Oakland Bay bridges. An agricultural exhibit in connection with the 1915 Exposition was one of the principal attractions, bringing some of the most famous horses and cattle of the world.

Whether San Francisco people can be made "livestock minded" by the presence of such a gigantic structure, is a matter of conjecture. While the bay area shows enthusiasm over horse shows and horse-racing, it has never exhibited particular interest in livestock or agricultural products.

Several attempts have been made since the 1915 Exposition to hold a show, and two of them were actually held under canvas on Market street, in the heart of the city. Attendance was declared to be only nominal. The explanation is that San Francisco is primarily a commercial and industrial city, and that few of its residents have ever been farmers or had any direct interest in agriculture.

Proof of this is seen in the South San Francisco Junior show—one of the best market stock shows in the United States. Judges have declared that top animals at this junior event would be champions or close to the top in any show—adult or junior—in the United States. No admission is charged to this event, and it is well-advertised; but few San Francisco people attend.

The San Francisco District fair would be held at a time between the Pacific International at Portland and the Great Western Livestock show at Los Angeles. Thus herds on the show circuit would be able to come from Portland to San Francisco, and continue on to Los Angeles.

It is planned to have an Industrial building suitable for showing manufactured articles, and to have a flower show in connection with the other events.

Bakersfield chapter recently held its Tenth Annual Father and Son banquet, with more than 250 guests present. Boys representing each branch of the agricultural industry in Kern county told of their project operation and profits. Howard K. Dickson, director of agriculture, awarded a number of trophies won by the boys in outside competition. Harry Holmes of the agriculture staff presented five useful prizes to boys, based on points earned in school and chapter activities. A number of music selections were provided by chapter members, and yells were given for the various members of the teaching staff and the principal, Herman Spindt. J. I. Thompson was a guest speaker for the evening. President Fred Frick was toastmaster.

WHAT OTHER STATES ARE DOING

UTAH—Strange coincidences in connection with the Toyack chapter have the members guessing. This Future Farmer group won the national chapter contest in 1934. Two days before Will Rogers left California on his fatal trip into Alaska, he had by letter, signified his willingness to stop of at Roosevelt, Utah, to take part in the dedication of the Toyack chapter house. Two days before Huey Long was assassinated, he wrote a letter to the Toyack chapter, announcing the mailing of a book he was donating to the chapter library.

IDAHO—The Inland Empire Fat Stock show at Spokane, Wash., is being changed to a Junior Fat Stock show, with separate Future Farmers of America premium lists for Eastern Oregon, Eastern Washington, Northern Idaho and Western Montana. A total of \$1000 in prize money is open to each state, provided enough entries are made. A feature of the swine show is a special prize for four barrows who are litter-mates, fed over a four-months' period. The show will

be held in March.

OHIO—A Future Farmer chorus of 54 voices sang four numbers on the program of the Ohio Farm Bureau convention at Columbus. Two boys each were selected from 27 schools in 14 central Ohio counties. The boys practiced as a chorus twice in one day under the direction of an Ohio state university music instructor, and performed in the evening. The group sang "Hail! The F. F. A.," "The American Farm Bureau Spirit," "Blow the Man Down," and "The Thanksgiving Prayer."

GEORGIA—More than 1500 members took part in the annual Future Farmer convention this fall in connection with the Georgia State Exposition. Senator Walter F. George, senior solon from Georgia and one of the sponsors of national legislation making the vocational agriculture program possible, was a principal convention speaker. More than 600 took part in livestock judging, plant and grain judging, and

identification contests.

OREGON—The first state convention for out-of-school Future Farmers of America has been called for January 24-25 at Silverton. State Alumni President Kenneth Pettibone, former national president, has requested from chapter advisers a list of those eligible to participate in the state meeting. The alumni group is sponsoring an alumni public speaking contest and a Master Future Farmer contest.

WEST VIRGINIA—A joint committee of agriculture

WEST VIRGINIA—A joint committee of agriculture teachers and Future Farmers is busy investigating possible sites for a state F. F. A. camp. Two locations in each of two counties were investigated, and the state adviser, R. A. Olney, is asking for other potential sites. The camp would be a permanent meeting place for the Future Farmers, especially during vacations.

pecially during vacations.

WISCONSIN—One point in the Ithaca chapter program of work is the control of bots in horses, and many farmers

of work is the control of bots in horses, and many farmers in the district are very much interested in the plan. The Oregon chapter of Wisconsin had a cooperative that produced 120 gallons of sorghum, the product of six projects of less than one-half acre each. The Lancaster chapter includes tanning of hides as a part of their conservation program.

HAWAII—The Andrew Cox chapter has cleared an acre of land on the plantation near the school for a chapter fruit orchard. They have planted citrus, limes, figs, soursop, cashew nuts, macadamia nuts, star-apple, rose-apple and strawberry guavas. In addition, grafted avocado and mango seedlings will be set out as soon as they are ready.

ARKANSAS—Ira Bentz, Future Farmer from Bearden high school, won a contest embracing four southwestern states and sponsored by the Fisher Body Company of Detroit. The prizes amounted to \$155 in cash and a scholarship to a technical college. Young Bentz has made a good record

with dairy and swine projects.

IOWA—The Bridgewater chapter held a corn-husking contest this fall, with Wayne Pote taking the championship by husking 959 pounds in the 80 minutes allowed. Clarence Pfundheller took second with 909 pounds. Deductions were made for corn left in the field and husks left on the ears. Pfundheller was timed throwing 25 ears per minute.

MASSACHUSETTS—The Norfolk county chapter won both the fruit judging and vegetable judging contests held this fall at the state college. Smith's school chapter won poul-

Continued to page 12

This Month in Poultry Projects

Several applications for entry in the Future Farmer Egg Production efficiency contest are now in. We have not, however, received as many entries as we should when you consider that there are over 500 laying projects in California. Most of these projects could meet the small requirements set up, and I believe each one would profit materially by finding out how his work compares to others in various parts of the state.

Some of you may have felt that you had no chance of winning or placing high, so you did not compete. This is the wrong attitude since the entire purpose of the contest is to measure the efficiency by which you are producing eggs, and to determine as much as possible how you can improve your practices. Next month in this column I will give you the first month's results and tell you more about the

progress of the contest.

It is almost chick and brooding time again. Many of you probably have your orders already placed with the hatchery or breeder for your chicks. Last year, according to the report, more than 100 projects were listed as breeding projects. I would like to hear from some of you boys who have this type of project. What breed or strain do you have? Where do you get your male stock? Has the project been more profitable to you than egg production, and do you use all of the eggs yourself or sell hatching eggs? Get your pencil out and write me the details of your project.

If you have not yet ordered your chicks, it will save you disappointment to do so in the next week or two. I would suggest that you consider the following factors before you

make your selection:

1. Are the chicks from healthy, strong parent stock?

2. Is the parent stock pullorum tested?

3. Are the breeder's management methods sound?

4. Does the hatcheryman have a reputation of producing good stock?

5. Does the hatcheryman set only eggs of good color, quality, and weighing standard weight or more?

6. Is the parent stock mature (hens over 18 months) and of good breed, size, and type?

7. Are the hatcheryman's claims made in advertising com-

parable to the price he asks?

There have been several attempts through various breeding and hatchery organizations to standardize the baby chick offered for sale. The fundamental weakness in each of these has been that poultry breeding is an art and a science, and few men attempting the work are either qualified or have the necessary experience. In the final analysis we will always have to depend on the integrity, and quality of work of each man in the field.

Let us consider some of the above factors more in detail. As a rule it is preferable to select chicks from old hens. They have finished their first year of lay and should have been continually culled all through the year so that the late maturing, broody, and early molting individuals were removed. Also all of the weaker and small as well as coarse, off-type birds should have been taken out. All birds should be pullorum tested by one of the approved methods by a man competent to do the work. All reactors should be sold from the premises. If the percentage of reactors is more than one per cent, they should be retested before the eggs are used for hatching. All males used should be individually pedigreed or from dams the first generation from individually pedigreed breeding. High production on the dam's side is not enough to insure satisfactory results. In producing males, emphasis should be placed on such factors as family performance, livability, hatchability, and egg size and quality.

Quite often we find someone offering stock for a very low

figure and making claims that the stock is from very high record parents. Your own good judgment should caution you not to expect to get a great deal of value without paying at least somewhere near the cost of production. As a rule no one can offer stock below cost of production and stay in business very long. Buy from the man who delivers quality and pay him what it is worth to him. You will make more money Richard I. Leach. in the long run.

EDUCATION IS KEYNOTE IN PRODUCTION CREDIT LOANS

Future Farmers who apply for loans through the Production Credit Administration should bear in mind that one reason that these loans are available is the interest in finan-

cing an educational project.

This announcement followed disclosure that two boys had applied for loans in partnership with their fathers, in enterprises of such a large scale that they were clearly commercial rather than educational. In both cases the boys' fathers needed the money rather than the boys. The agricultural teacher felt that this would be a misuse of the credit facilities, and this was agreed by the local and state agents for the loan agency.

While no limit is placed on the size of a boy's project loan, provided it has reasonable chance of success, it has been agreed upon that such loans must have an educational necessity as well as a production need. No set rules have been adopted, and each case will be considered on its merits with

this factor in mind.

Use of Production Credit Administration loans has been growing throughout the state, and thus far all reports show

that the loans are being promptly repaid.

Use of these funds is being encouraged for two reasons: Ready credit is permitting scores of boys to have productive projects where none would have been possible, or larger projects than would have been possible; while the transactions necessary to establish credit are excellent training for future life.

An article recently appeared in a newspaper indicating that the loans were not of interest to a certain agricultural group because they did not need them. It is true that credit may be obtained from a local bank or other agency with equally satisfactory results. It is likewise true that every person must learn something about credit, since both industry and agriculture are primarily operated on this basis.

The gigantic corporations which have been active in attacking all agencies designed to provide capital for farming operations, are run almost entirely on credit. They sell shares of stock, bonds and mortgage notes which are simply

another form of credit.

The fact that the Production Credit Administration is a federal agency does not change the picture, for the money to finance farming operations is obtained by sale of bonds to the public. The government only stands behind the bonds-it does not furnish the money.

Thus you Future Farmers who have borrowed \$50 to feed out some barrows for the market should not feel that you are using Uncle Sam's money. The actual cash which financed your project may have been furnished by a retired schoolteacher in Vermont who bought a government farm credit

Madera chapter held its seventh annual alumni Get-Together shortly before Christmas, with some 200 former agriculture students, active Future Farmers and a sprinkling of fathers in attendance. The program consisted of a full evening of music numbers, vaudeville acts and talks, with much talent being shown in the various music combinations. The latter ranged from an eight-piece dance orchestra to a mouth-organ solo. Adviser Byron J. McMahon proved an able jokester in starting off the meeting. President Shirley Jones took charge of part of the meeting, and also gave his talk which almost won him the state public speaking title for 1936. Speakers included a local banker, the president of the high school board, Principal L. C. Thompson, Regional Adviser B. R. Denbigh, Henry Doddridge of Fresno, and J. I. Thompson, livestock expert for the state bureau of agricultural education. Presidents of the Future Farmer chapters since the beginning of the organization in 1928 were called upon, and most of them were present. A supper completed the evening.

Newman livestock projects have been increased by the introduction of seven purebred bull calves from high-producing strains, and four purebred heifer calves have also been purchased recently. A new venture in the chapter projects is the start of $2\frac{1}{2}$ acres of early potatoes. The Future Farmer launching the potato enterprise purchased his certified seed from the Fortuna chapter in Humboldt county.

THE CALIFORNIA FUTURE FARMER

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The state organization of students of high school vocational agriculture.

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"Learning to Do, Doing to Learn; Earning to Live, Living to Serve."

A joint initiation ceremony at Puente put on by the degree team from the Excelsior Union high school chapter at Norwalk presented the Greenhand degree to 36 Puente members and 10 Excelsior members. Visitors from the Bonita Union high at La Verne, Valencia Union at Placentia and Downey, attended the ceremony. The Excelsior degree team included Bob Henderson, Shoerd Lanting, Leon and Alex Benjestorf, Bob Fowler, Emil Wolfsberger, Ben Broersma and Carl Nuzum. Bob Brackensick and Bill Martin of Excelsior furnished music numbers, and at the completion of the ceremony everyone who desired played basketball. Refreshments of sandwitches, cocoa, cookies and ice cream were served by the Puente boys. Principal S. C. McIntosh of Puente gave the group an inspiring address in which he pledged his full cooperation to help further the activities and organization of the Future Farmers of America, according to Reporter Emil Wolfsberger of Excelsior.

Some 80 members of the San Juan Capistrano chapter and their fathers consumed quantities of chicken as the piece de resistence of their first annual banquet recently. Tables were decorated in Future Farmer colors, and the home economics girls assisted in serving. Speakers were Fred Hunn as master of ceremonies, Earl Reeder, chapter president; Harlow Halladay on "Vocational Agriculture as a Dad Sees It,"
Carl H. Hankey on "The Value of the Future Farmers to
the Community"; Linton Simmons, principal of the Laguna
Beach high school and a former agriculture teacher, on "The Inside Facts of Vocational Agriculture," and C. C. McCary, director of agriculture at Capistrano. The Future Farmer quartet sang several numbers and Ramon Yorba gave the benediction.

Agriculture students at Ripon are blood-testing 700 birds for Judge A. Roberts, according to the high school paper.

Arcata Future Farmers held their Parents and Sons banquet early in December, with State Senator Harry Perry as the principal speaker of the evening. Joe Ramos gave a re-sume of the activities of the Arcata chapter. The group have a 100 per cent record for project participation in poultry, dairying, sheep and swine. Ramos indicated that the activities of the chapter are limited in a statewide nature because of the distance to the state fair and other centers, but that next year more of these functions would be joined by Arcata. The assistant farm adviser, Harry Tucker, showed some motion pictures of Humboldt county agriculture. Guests were introduced by the chapter adviser, O. E. Jacobs; and President Jack Fickel was toastmaster.

When the Salinas chapter members completed their project record summaries for the year, they celebrated with a beef-steak barbecue attended by 35 boys. Recently the chapter moved into its new quarters, consisting of two new class rooms, laboratory, tool room, chapter office and locker room. All equipment is up-to-date and the move was necessitated because of growing enrollment and activities. One of the first events under the new set-up was a Penny Carnival held in connection with a program given by the Home Economics club. Twenty concessions with candy and trinkets for prizes cleared some \$5 for the treasury.

Biggs Greenhands were initiated recently by the Gridley team consisting of Jack Foard, Roy Thomsen, William Mc-Murtry, Warren Richins, Verle Little, and Adviser W. A. Taylor. The same team initiated the Live Oak freshmen shortly after New Year's Day. The Gridley Greenhands were previously initiated by the Marysville team.

The following notice was inserted in a farm weekly: "Any one found near my chicken house at night will be found there next morning."

Ted: How come you go steady with Betty? Fred: She's different from the other girls.

Ted: How different?

Fred: She's the only girl that will go with me.

HIAWATHA FROM THE WANT ADS

By the shores of Cuticura; By the sparkling Pluto water, Lived the prophylactic Chiclet-Danderine, fair Buick's daughter, She was loved by Instant Postum Son of Sunkist and Victrola; Heir-apparent to the Mazda, Of the tribe of Coca-Cola. Through the Tanlac strolled the lovers-Through the shredded wheat they wandered-"Lovely little Wriggley Chiclet," Were the Fairy words of Postum, "No Pyrene can quench the fire, Nor any Aspirin still the heartache Oh, my Prestolite desire, Let us marry, little Djer-Kiss." -Modesto Future Farmer Filibuster.

IMPORTANT NOTICE

For the four months of January, February, March and April, the monthly program of Future Farmers on Western Agriculture will be heard from 2:30 to 3:15 in the afternoon of the first Saturday of each month. This change was made to permit use of the entire western network on this program. Ordinarily during the winter period, the program has been only on a San Francisco

station because of network conflict.

Remember that this is for the four months only, and that it concerns the monthly program only. No change is made in the Tuesday morning Vocational Agriculture program. The chapter secretary of each school should see that this notice is put on the bulletin board.

Milkstool Suggestions for January

DAIRY SANITATION

During the rainy season it is most important that every dairy producer pay particular attention to sanitation. At this time the corrals are muddy; the cows have long hair and the light is often not too good for washing the cattle or the equipment. All the operations about the dairy must be done thoroughly if a good quality product is produced.

If some of the present consumers could see how some milk is produced, they would be likely to lose their appetites for dairy products. Furthermore, it has been demonstrated many times that consumption can be materially increased by improving the flavor and other qualities of dairy products. The dairy industry needs to increase consumption and one of the

best ways to do it is to improve the quality.

High-quality products can be produced only by healthy cattle. Healthy cattle should be provided with sanitary corrals and barns. It is a problem to keep cows out of the mud in many sections of California when there is lots of rain and the drainage is poor. However, there is usually a way to provide reasonably sanitary corrals. In many instances it is possible to enlarge the corrals to take in a slope that provides a well-drained area on which the cows can lie down. Movable feed racks that can be changed to firm ground are often of assistance. For some conditions it is advisable to have a small paved corral where the cows can be confined during heavy rains. If dirt corrals are not trampled too deeply while muddy they will soon dry off. It is desirable from a sanitary and human standpoint to provide shelter sheds for milk cows in most sections of California—even though they may not increase the production. Floors of shelter sheds should have a slope to the outside and be covered with clean, dry bedding. The sheds should be enclosed on three sides in order that they will not be drafty. Some sheds that are open on two sides are almost worthless as shelter.

The milk cow should be clipped about the udder, flanks and tail every six or eight weeks. This is necessary in order that she can be easily and thoroughly washed and groomed. Electric clippers can now be purchased for less than \$20.00

that are excellent for this purpose.

It is a good plan to turn the water hose on the rear quarters and udder of cows as soon as they are brought into the barn for milking. Then each cow should be gone over carefully using the running water and the hand or brush to dislodge the dirt. Some milkers have the mistaken belief that turning the hose on the cow's udder provides a thorough washing. After the cows have been washed, the teats should be wiped dry with a clean cloth.

The first two or three strips from each teat should be discarded. This milk is usually high in bacteria content and the practice is a good opportunity to check the cow for gargety

or otherwise abnormal milk.

Pails and other milk receptacles should be kept off the floor in order to guard against manure or dirt being splashed into them. It is a good plan to run the water pipe behind the cows about a foot from the wall so that milk containers can be hung from it by means of hooks.

Milk should be thoroughly strained while warm and then immediately cooled to below 50 degrees Fahrenheit. The milk room should be very clean, well ventilated and dry. Many are poorly ventilated and often have water dripping from the ceiling. All milk equipment should be thoroughly washed and sterilized for at least twenty minutes at a temperature of 210 degrees Fahrenheit. The sterilizer doors should be opened immediately after the sterilization in order that the utensils will dry while hot. Dry, sterile utensils do not har-bor bacteria and such a method is easier on the equipment.

There is not sufficient space to enumerate all the points to keep in mind in maintaining proper dairy sanitation. However, in many instances there is plenty of room for improvement in the work that has been discussed.

G. M. Drumm.

CONVENTION DATES SET

The dates of May 7-8-9 were agreed upon for the 1936 state Future Farmer convention and judging contests on the campus of the California Polytechnic school at San Luis Obispo, at the mid-winter meeting of the governing board of the California Agriculture Teachers' association last

At the same time, many items of interest in the Future Farmer program were discussed, although no suggestions for

any particular changes were made.

Greatest attention was given to the report of the enterprise improvement committee. It was agreed that if the first goal of the agriculture teachers and Future Farmers is the improvement of agriculture in the district, the details of working out improvements becomes less difficult.

One suggestion which definitely concerns the chapters, was that an "idea show" be held in connection with the summer conference for the agriculture teachers. Tables would be provided in the assembly hall for the display of handy devices used in the improvement of the Future Farmer chapter and of agriculture teaching. Such ideas might include a chapter scrap-book, method of keeping follow-up cards on graduates, project chart or map, unique and clever shop devices, methods of visual education, and similar helpful suggestions.

The governing board members listened during the noon hour to the program of Future Farmers on Western Agri-culture, in which the Marysville chapter reproduced a por-tion of their annual Alumni Christmas party for under-

privileged children.

Salinas chapter members will have a lot of steers at the Interstate Junior show at South San Francisco this year. The boys this fall bought every available Angus calf at the Del Monte Ranch at Carmel, and after doing some sifting, kept 16 of them for show projects.

STAR AMERICAN FARMER



Paul Leck, Washington, Kansas; the 1935 Star American Farmer. Paul's projects during five years have included dairy cows, sheep, hogs, horses, poultry, beef cattle, kafir and corn, from which he has earned \$2920. He now has an investment of more than \$2000 in farming, is a member of the Farm Bureau and is in permanent farming in partner-ship with his parents. He has been active in judging and athletics, a local and state president of the Future Farmers and a first-class showman.

This Month in Orchard and Garden

HOME LANDSCAPING

January is the best month in the year to do pruning on much of the shrubbery. This applies to both evergreen and deciduous material. All shrubbery should not be pruned alike, any more than all fruit trees should be pruned alike, yet there is no set rule for pruning any shrub. A good plan to follow, however, is to thin out the upper branches of the deciduous shrubs to promote new growth up among the branches and to thin out most of the evergreen shrubs from the bottom to encourage new growth there. Especially is this true with the cotoneasters and oleanders.

Roses should be pruned now. As with shrubbery, each rose bush is an individual case. It is well to remember that roses bear flowers on wood that has just formed and that too much old wood will interfere with the growth of good, long-stemmed flowers. Prune all rose bushes to bear flowers, not

foliage.

All shrubbery that is affected with scale insects should be sprayed after the pruning operations are over. Use a light oil emulsion spray on all shrubs, but on the evergreens use the lightest oil possible and after it has been on several hours take a hose and wash it off or it will burn the foliage.

Cuttings of almost all deciduous shrubs may be started now. Make the cuttings about eight inches long and not over a foot long and place them in a sheltered place in the garden, leave two-thirds under the ground and one-third above ground, keep them moist, but not wet and they will grow easily. Some of the shrubs that will grow now are, abelia, barberry, boxwood, cestrum, hawthorne, plumbago and roses.

Some of the seeds that may be planted in the open now are, nemesia, gilia, godetia, cornflower, lupin and candytuft. All the garden should be well-fertilized in January, especially with barnyard manure which will act as a mulch. Comemrcial fertilizers should be used very sparingly this early as their effect is liable to be toxic rather than beneficial.

TRUCK CROPS

In the warmer sections of the state the cold frame and hot bed are being inspected and unlimbered for use. Now is the time to get some of the earliest pepper and tomato plants started. These plants should be started under glass, but a good hot bed with electric heat will prove just as effective. Both of these plants should be planted in seed flats and then transferred to growing flats. A soil containing not too much nitrogen should be used at this time of the year or the plants will become too leggy before they are ready to plant out. These directions should only be used in sections where there is seldom any frost after the fifteenth of February. We will take up the planting of these crops for the other sections later on. Chinese Giant peppers seem to be the best bet now and First Early in the tomato line.

Cauliflower, cabbage, Brussels sprouts and mustard may still be planted. Mustard for greens and winter spinach will have a better price this year than for several years. The prolonged cold with little rain has held back the planting of many crops, but at the same time it has put the soil in excellent shape. When things do start to grow they will move fast. Truck crop prices have been exceedingly good so far this year and the outlook for better prices this coming season are better than they have been for several years.

It would be well for the truck crop student and grower to study the new standardization laws. While many of the growers complain about these laws, they have been enacted at the request of the producers themselves and in every case

have proved a benefit to the growers.

We have talked quality for many years. Fruit and vegetable standardization, which is nothing but the marketing of quality fruit and vegetables, has proved that quality speaks over quantity all the time.

January is a good month to plant onions, and Crystal White and Sweet Spanish seem to be the favorites. They may be either planted as seed or sets. Sets will produce the best onions this early.

Peas of the bush type may still be planted. Laxton Prog-

CONDENSED REPORT GIVEN ON NATIONAL CONVENTION

Highlights of activities of the national Future Farmer convention are released in a recent news letter from the office of agricultural education at Washington, D. C.

The "girl question" is summed up in the following resolution, unanimously adopted by the delegates present:

"Resolved: That when officially found that any state association in the Future Farmers of America has girl members on its rolls, such state associations shall be denied participation in all national Future Farmers of America contests and national awards. And no funds from the national treasury shall be available to such state associations for the purpose of transporting delegates to the national conventions until such time as the names of the girl members are removed from the official rolls of the state association and local chapters in accordance with the constitution."

By unanimous action, the delegates definitely disapproved of outside concerns being allowed to offer prizes which would influence the contestants to select and speak on subjects prescribed or urged by said outside concerns in order to win prizes on special subjects. This means that in all Future Farmer public speaking contests the subjects should be selected in accordance with the general rules, without pressure

or prejudice.

Because of increase in membership, national dues remain at 10 cents. Delegates voted to do away with oral state reports at the 1936 convention, but for each state to have a 500-word mimeographed copy for each delegate. Michigan was given first choice in furnishing a band for the 1936 convention, with an increased budget for travel.

Discussion concerning use of the official emblem resolved into a decision that the emblem must be used as a whole, and not split up or defaced or changed in any way. When used on products sold, it should only appear on the highestgrade products, at least equal to government standard.

It was agreed by the delegates that the Future Farmers of America should not accept the sponsorship of any one group or organization, but that local chapters and state associations should be left free to cooperate with and accept assistance from any civic, fraternal or agricultural organization it desired. It was also agreed that the chapters, state and national association should avoid espousing any controversial cause which might cause friction within the organizaiton.

Delegates decided that the term "Star Farmer" should be confined as far as possible to national awards. This means that the California association should take action in May to designate the statewide award at Sacramento by some other

Attention was called to the fact that the Tenth Annual convention year will be 1937, and an effort should be made to have every state association and every chapter represented. A second and more reasonably priced uniform was accepted by the delegates. Alumni organizations were encouraged on a state and local basis, but no national group will be attempted as yet.

California extended an invitation for the national convention to be held at Los Angeles in 1936, and the matter was taken under advisement by the national board of trustees. It was announced that a secretary's notebook will be avail-

able from the national office early this year.

Turlock agriculture students now have a portable scale for weighing pigs, calves, sheep and feed. A beam extending from the top of the department truck supports an old cotton stilliard scale, rebuilt and donated by the county sealer of weights and measures. A weighing crate completes the outfit, which will accurately weigh stock or feed up to 700 pounds.

Santa Ynez members in farm mechanics are adding money to the chapter loan fund by taking the contract to sharpen the picks and crowbars for the contractor who is building the new Santa Ynez Valley high school.

ress is still the favorite. Care must be taken in planting peas for in certain sections the pea blight and pea wilt are particularly bad. Be sure that the seed you buy is good and clean and produced in an area free from these diseases.

W. B. Howes.

Barnyard Activities for January

For a considerable number of years various associations and agencies have been interested in the production of "More and Better Hogs" in California. Years ago the complaint of the producers was that they did not receive any more for good ones than their neighbors did for ordinary ones. The processors agreed that the criticism was partly justified because they could not secure a constant supply of high-class hogs, sufficient in volume to establish a higher price. But gradually, as better sires were used, the supply of good hogs increased until now there is a reasonable differential according to grade. However, quite a percentage of the hogs grown in this state are so indifferently bred or fed that much of the product is far from choice.

This would not be so bad if only the producers of such hogs were affected, but the fact is that many housewives still believe that a hog must be an "easterner" or have had corn as the principal part of his diet, if the bacon, hams and chops are to be found choice in flavor and texture. Many people know that Denmark has the reputation of producing the world's best bacon, or at least bacon good enough to have crowded us out of much of our former trade with Great Britain. But few people know that barley is the principal grain ration for most of the Danish hogs and sometimes part of that barley is imported from California. Since we have an abundance of that same good barley, and we can grow pasture crops for nine or ten months of the year which helps to balance the ration and often reduce the cost of gains as much as 20 per cent compared to dry-lot feeding; and since, so long as the numbers we produce are less than our own state demand, we generally receive a good differential above Missouri River markets. The business looks sound. It is true that barley prices sometimes get too high in comparison to hog prices, but the rancher who raises his own barley and markets it by the hog-trough route, receives more for it over a period of years, if he is a good feeder, than if he sells it as grain. Just now we are producing perhaps little more than 25 per cent of the pork we are consuming. Surely here is one business that can be expanded, if the right kind of hogs are grown and if they are fed the correct feeds at the right time and in the proper amounts.

In order to get some definite data on how satisfactory good California hogs are, with the cooperation of the packers, a cutting and curing test has recently been conducted. For the purpose, 114 hogs were bought at the 1935 Interstate Junior Livestock show at South San Francisco. These were not the top hogs, but averaged about the same as the third prize ones in the show. The reason for selecting these was because all of the rations fed to them were definitely known and in all cases were feeds or combination of feeds that are generally considered satisfactory. In addition to that, all of the hogs were well bred, all were sired by purebred boars. Their average age was between six and seven months and their average weight was 197 pounds, the lightest weighing 170 pounds and the heaviest 225 pounds. They yielded better than average Eastern hogs, and when graded on the killing floor, 96 per cent were marked "Good to Choice" and 4 per cent "Medium." One was condemned for T. B. Of the 113 head, the bacon from 111 made "Fancy" and from two head or four sides, made second or third grade. The hams ranked almost as high, those from 107 grading "Fancy," those from 6 head second, 5 partly on over-weight, and one light and lacking finish. The average percentage of "Fancy" hams and bacon from the regular market run is considerably less than this.

In addition to this, a cooking test was run, both with fresh and cured product in comparison with average hogs from the corn belt. In neither case was there any discrimination against the California product; in fact, over 90 per cent of the votes favored it.

The percentage of "Fancy" hams and bacon is higher from these 113 head than is generally expected or secured from average shipments brought in from the east.

From this one test, one definite conclusion seems reasonable: 1. If hogs are well bred as most of the barrows shown by

REGARDING RADIO QUESTIONS

The Vocational Agriculture radio program was so successful in drumming up business in questions about the middle of December that the question department is quite overwhelmed temporarily.

Every question will be answered, however. Those most timely, such as inquiries concerning rations for animals being grown for the spring show, or those relating to starting a project, will be answered first. Those which will be just as helpful later will take their turns.

The response has been very gratifying, and with further cooperation, the Vocational Agriculture program will be

amply supplied for the rest of the year.

Occasionally a question comes in which is almost impossible to answer in the limited time on the air. These will be answered by mail. If you have sent in a query, just "keep listenin'" and you'll hear the answer.

Laton and Riverdale Future Farmers held a joint initiation of Future Farmers at Riverdale recently, says Bill Hart, Riverdale reporter. The Riverdale chapter officers opened the meeting with the opening ceremony, then turned it over to the Laton chapter officers, who performed the initiation ceremony. Candles at the respective stations provided the only light. Faye Fuller, Riverdale member, played a saxophone solo, accompanied by Verne Harrison, Riverdale music teacher. Riverdale officers closed the meeting with the official closing ceremony. After the meeting there were a few games played and some music was furnished by both chapters. There were relays, three-legged and sack races. Laton entertained with their Cowboy Band. Among the guests present were L. O. Jensen, past adviser of the Riverdale chapter, and numerous graduates. Sandwiches, cake and chocolate were served by the Riverdale chapter. The Riverdale initiates were Manuel Brindeiro, Ernest Blackwell, Jerome Harlan, Donald Loeffel, Gordon Hunter, Alva Ipsen and Calvin Kendall.

The first Parents and Sons banquet was held by the Susanville chapter recently at the high school. The chapter furnished a veal calf for the meat course, and members donated the rest of the food. A high point of the evening was the presentation of the perpetual trophy given by the Twenty-Thirty club, inscribed annually with the name of the outstanding member for the year. This year Donald Nett's name was added to the previous list of Milton Coffin, Jess Dooley and James Moore. The trophy was presented by Murray Doyle of the service club. Talks were given by Edward Garja, Fred Summers and Chester Tyler. Plans and activities of the chapter were outlined by Adviser E. F. McCarthy and Vice-Principal Collier.

A chapter black widow spider hunt is under way at Gonzales at the present time and will continue until late spring. Many rare specimens have already been captured. A discussion of life habits and methods of capture was presented by H. A. Hill, the science instructor, before the boys entered upon this dangerous mission. Suitable awards will be given to the boys who capture the greatest number of Latrodectus Mactans. The boys in charge are Harry Poirier, Billy Bondiette, James Shiramizu and Paul Lamen.

The Girls League and the Future Farmer chapter at Turlock cooperated in co' ecting food and clothing for the needy during the Christma season. The commodities were turned over to the Red Cro s and the Faith Home for orphans.

Junior Division exhibitors are;

2. If they are correct in type, and to get anywhere in the South San Francisco Junior show they must be, or the sifting committee will get them;

3. If they go to market in a reasonable time, less than eight months of age, weighing around 200 pounds and not

over 225 pounds; and

4. If they are fed a ration that is balanced, not too bulky, contains nothing such as acorns that may produce an undesirable product, and is composed principally of such feeds as barley, tankage or skim milk and a small amount of alfalfa;-then the resulting product is as good as the best from anywhere in flavor, quality and all other desirable attributes.

J. I. Thompson.

This Month with Project Record Books

We're going to start a new feature this month. Whether it will be continued will depend upon your response to it. Farther down in this column you will find three problems in project record keeping, any one of which you might meet in keeping records on your own project. Probably you have

met problems quite like these already.

We would like to have you try your hand at answering them. Send your answers to these three problems to the Editor, California Future Farmer Magazine, California Polytechnic School, San Luis Obispo. We'll check over your answers to the second of the control of swers and starting next month, we will publish an honor roll of the names of those of you who send in the best solutions. There will be three new "Brain Twisters" each month for you to work on, and we will also publish the correct answers to these problems so that you can check up on yourself.

You may get help from anyone in solving these, but you should be able to do it alone. Here are the first three:

PROJECT BRAIN TWISTER NO. I

"A boy with a 4-acre market potato project got a total vield of 800 sacks of marketable potatoes and 25 sacks of culls. 790 sacks of the marketable potatoes were sold, 10 sacks kept for home use, and the 25 sacks of culls sold to his father for hog feed. In making his project summary, should he figure his cost of production on 790 sacks, 800 sacks or 825 sacks of potatoes? Give good reasons for your answer."

PROJECT BRAIN TWISTER NO. II

"If your total labor income from your project happened to be \$24.60 and you put in 180 hours of your own labor on this project, would your record show a net loss of \$11.40 or a net profit of \$70.60? Why?"

PROJECT BRAIN TWISTER NO. III

"Suppose you had a poultry project in which you were brooding baby chicks. After you finished with your electric brooder you rented it to a neighbor for two months at the rate of \$1.00 per month. What entries should you make in your record book for this transaction? Why?

Nothing difficult about those problems, is there? Just send in your answers, and each month we'll publish your batting average. There will be fifteen problems in all. How many

of you can bat 1000 per cent on all fifteen?

Watch for the correct answers to the first three "Brain Twisters" in this column next month, and remember that we'll continue this only if you show by your response that you want it. If we get no answers, we'll conclude that you don't want it or that the problems are too hard for you, and I'm sure that these problems aren't too much for any of you. S. S. Sutherland.

Modesto chapter members with barrow projects are heading for the Interstate Junior show at South San Francisco next spring, loaded for bear. Ten boys will show in the Future Farmer division and three in the Advanced division. In the F. F. A. division, E. Stewart, L. Lambert, O. Flory and L. Donker will show Polands, M. Bowman and S. Ichord have Hampshires, B. Ichord and M. Goodman some Durocs and L. Felton and W. Bauman some Berkshires. Stewart and Bowman also have crossbreds. In the advanced division, H. Schmidt will enter Hampshires, Paul Couture Berkshires and C. Bauman Polands. Modesto entries have had a grand championship or two every year since 1930, except in 1935 when they showed a reserve grand champion pen. The boys are out to keep up the purple ribbon record in 1936. R. Johnson and J. Velthoen will represent Modesto in the sheep classes.

The Gonzales chapter has purchased an incubator for hatching eggs for chick projects. It is of 500-egg capacity and the boys hope to make enough money through hatching for local customers to cut the expense of their own hatches. The eggs for hatching will be taken from project flocks of last year. All birds have been carefully culled and the boys are busy testing the flocks for pullorum.

PROJECT PIG SEES COUNTY

Robert Hultman, Turlock freshman hog raiser, has a valuable Berkshire gilt back home again after giving up the roaming animal for lost.

He purchased the animal from Paul Couture, Modesto Future Farmer, and brought her home. Curiosity or homesickness caused the animal to wander out, and a searching party was organized of the agriculture teacher, Weir Fet-

ters, fellow students and neighbors.

The trail was lost at nightfall four miles away, but next morning it was found where the "Roamer" had spent the night and gone on. The pursuit kept up, reaching a point 22 miles away where the trail was again lost along the Merced river flats where sheep were ranging.

Most of the county had joined in the search by this time, but when tracks showed that dogs had been chasing the gilt, she was given up for lost. Some 18 days later, the Turlock chapter executive committee was meeting to discuss helping Robert finance another project, and had drawn up

and signed the agreement, when the telephone rang.

It was a farmer from Hilmar, reporting that Robert's pig was at his place, healthy, safe and sound! Hultman now has her back home, and keeps an eagle eye for the smallest opening in the pen. He expects to start a breed of pigs known as "The Roamers."

As one of the nine "baby chapters" for 1935-36, the Reedly boys are getting into action rapidly. Officers elected are Walter Friesen, president; Elmer Friesen, vice-president; Chester Sasashima, secretary; Susumi Sasaki, treasurer; and Alfred Barsoom, reporter. The chapter entered a float in the annual Harvest Festival, winning honorable mention. The chapter recently inspected a \$25,000 grape dehydrator near Reedly, after studying about grape drying in class. Recently the chapter has organized a basketball team. On the first squad are Captain Manuel Eisner, Jake Boyajian, Masa Morishima, Alfred Barsoom and Susumi Sasaki. The rest of the chapter form the reserves. The hoop team has met all the other school organization teams and has a full schedule of outside games, including some with other Future Farmer

The Hamilton City chapter has launched an extensive dairy program, some of it in connection with the Golden State company. Between 35 and 40 purebred and grade calves have been purchased by chapter members, all from cows producing 300 pounds or more of butterfat a year. Loans have been made for project financing, to be paid back in from one to three years. Four purebred bulls have been purchased from the Golden State farms, to be placed on the ranches of the chapter members. Records will be kept on all calves, cows and bulls, to establish lines of improved production. A calf show will be held by the Future Farmers at the school in the spring.

A former prominent farmer of the Wheatland community has given his flock of fourteen purebred Shropshire sheep to the Wheatland chapter for management. The farmer in question, A. Phillips, is much interested in the Future Farmer activities of the community and hopes for the development of greater interest in good stock. The animals are cared for by two freshmen town boys, Raymond Harrison and Lorraine Verschoor, who are greatly interested in agriculture. At present they are enlarging the shelter barn for the sheep in readiness for lambing. The best lambs will be selected for show purposes and some trials in use of different feeds will be carried on.

The Gonzales chapter is sponsoring an evening class for Monterey county dairymen to be held during the months of January and February. The Extension Service, and Dairy Association of Monterey county are cooperating with the chapter. A meeting of the executives was held last month in order to determine the topics to be discussed and also to select the leaders for the topics.

Boonville chapter held its Father and Son banquet recently, with sixteen fathers present. The chapter president was toastmaster, and the program of work was explained to the parents by the secretary, Jack Smith.

This Month in Farm Mechanics

CONSTRUCTION OF HOG FEEDERS

The first thing to take into consideration in the construction of hog feeders is the number of hogs that you will feed. It is more economical to build one large feeder than two small ones. The design of the feeder will also be determined by the size of the animal; that is whether you are feeding small pigs, half-grown pigs or sows. The kind of feed will, of course, determine whether you want a trough or a dry grain feeder.

If you are going to build a trough for wet food you will have the choice of two different kinds. Either a V-type or rectangular one will do a good job, but in the construction several things are necessary. One trouble that most of us have had with these troughs is that the ends pull off. This can be remedied by placing a two-by-two block the width of the side pieces, between the end and side of the trough. Through this piece bolts are fastened both to the side and

end.

A convenient size for these troughs is approximately six feet long. In case of the V-type, the sides should be ten inches high with ends of two-by-twelve two and a half feet long. The rectangular trough can have about eight-inch sides and the same length ends that are found suitable on the V-type.

If material is used that is two inches thick, surfaced on

two sides, the trough will last several seasons.

Troughs made of cement are also used for wet feeds and work very well, but they are quite heavy to move. Most of these are made with the trough of rectangular shape and should be reinforced with mild steel. A 1-2-3 mix will prob-

ably make the most durable job.

A good feeder for dry feed to be used with hogs weighing a hundred pounds or more should have the following: Enough storage capacity to hold feed for several days' consumption, dividers across the feed trough to prevent wastage, an adjustable lip on the throat of the feeder to permit regulating the amount of the grain that drops into the trough, and a "V" in the center of the feeder to divert the grain to each side. It should be of a rain-tight construction and should be mounted on skids.

A feeder that contains all of these features can be con-structed as follows: The feed storage bin should be approximately three feet high, two and one-half feet wide and six feet long. This part as well as the "V" in the bottom should be made of flooring. The outsides of the troughs, which are located on both sides of the feeder, should have a two-byeight piece set on a slight angle away from the feeder. Iron dividers of five-eighths inch round mild steel should be placed across the feeding space, about twelve inches apart. One side of the top, which may be covered with roofing paper, can be made solid and the other half movable for filling the feeder.

A one-by-six piece of board should be placed at the throat of the feeder and on the inside to regulate the flow of grain. Slots are cut into this piece to allow the board to be moved up or down and are held in place by bolts with wing nuts.

This size will handle the feeding of about 15 hogs.

A. H. Hollenberg.

With every seat filled, the Third Annual Father and Son banquet was held last month by the Chowchilla chapter. A general report on the project activities was given by the director of agriculture, Paul J. Christoffersen. Principal G. H. Moseley was a speaker, and introduced the feature of the evening, an illustrated talk on the Grand Canyon, by a member of the Coalinga high school faculty. A music number was played by a chapter member, and Regional Adviser B. R. Denbigh told of the growth of Future Farmer work in the valley and at Chowchilla.

Roy Thomsen of Gridley and James Eager of Live Oak, the latter state Future Farmer president, have purchased a boar from C. A. Sample of Fresno. The boys paid \$50 for the animal.

CONTINUATION GROUP ACTIVE

The Turlock continuation group of Future Farmers is holding meetings every two weeks in the chapter library, and reports progress in its program. Each boy is keeping accounts on his farming enterprise, and each has a commer-

The boys recently took a one-day trip to Contra Costa county, visiting the Golden State company's thousand-cow dairy, the Burroughs Certified dairy and the SERA itinerant farm. Most of the members are interested in and actively en-

gaged in dairying.

A Christmas party was held and attended by the continuation boys and their girl friends. The regular meetings are

followed by games and refreshments. Wallace Lindskoog, former state vice-president, is chairman of the group. Carl Viera is secretary and official delegate to the state alumni convention to be held next May.

The Calistoga chapter has just completed the seeding of a 20-acre tract to oats and vetch for hay, as a cooperative project. The boys rented a good piece of land on a share basis from the Calistoga Fair association, which has a horseracing track on the property. The chapter borrowed money for seed and other expenses from the North Bay Production Credit association, and expect to realize from \$100 to \$150 as the cooperative's share. The boys had a lot of good experience. Each drove the tractor, and since there were several breakdowns, got a lot of good farm mechanics training. The tractor and equipment were loaned by farmers in the

Newman chapter members are fattening about 125 head of hogs for the market. Several boys who have feeding projects will exhibit at the South San Francisco show, with some good animals. The boys have also purchased several purebred Southdown ewes as foundation stock for future flocks; and have several purebred Hampshire gilts for sale, good for Future Farmer breeding projects.

The San Juan Union high school chapter at Fair Oaks recently presented a program for the local Farm Center. One of the numbers on the program was a talk on the Agricultural Adjustment Act. given by Frederick Edgett, San Juan entry in the regional public speaking semi-finals. He was complimented on his excellent talk.

HEADED FOR THE SHOW-RING



With hundreds of top-notch barrows on feed all over the state in preparation for the spring markets and the Interstate Junior show at South San Francisco, attention once again turns to excellence of product. Paul Couture, Modesto, still banking on Berkshires, will be back gunning for another purple ribbon, after taking reserve grand championship last spring with this smooth-looking pen.

GROUP PRIZES OFFERED FOR BEST FIVE STEERS AT SHOW

Indications point to a marked increase in both steers and barrows for the Future Farmers of America division of the Interstate Junior Livestock show at South San Francisco this

With pork prices up and feed prices reasonable, a large number of high school boys are raising market hogs as practice work in animal husbandry. Indications are that the number of entries will be only limited by the number of good weanling pigs available for sale as feeders during the last few months.

Boys with breeding projects are finding themselves in the most fortunate position this year of having about the only available stock, or of being able to sell feeders to other Future Farmers at a profit. Almost every purebred swine breeder was sold out long ago of pigs which had a chance of placing in the stiff competition at the Interstate.

The same is true of the steers, although the increase will not be nearly as great in numbers. Several schools which have had only one or two entries in the past have five to eight this year. With all the competition, it will take some excellent feeding to come out on top in the prize money.

The only change in the premium list this year is an additional prize for the best group of five steers shown by a Future Farmer chapter. For the club boys and girls, the group may be made up by all the entries from a county.

There are five prizes for each department, the only requirement being that the school or county have five entries. No information has been given out yet as to the educational program which annually accompanies this show, but Manager E. W. "Wick" Stephens is working on the program and will undoubtedly come out with an interesting series of evening entertainment as well as a worth-while trip.

A survey made by the Washington union chapter of Fresno indicated that 46.5 per cent of the source of income of farmers in the district is obtained from raisins. With that situation in mind, Easton chapter of Washington union sponsored a vine-pruning demonstration recently. The assistant Fresno county farm bureau adviser, John Quail, gave a lecture and demonstrated pruning, giving valuable facts to seventy-five chapter members. Quail pruned Thompson vines that were tied on one and two wires; and also he pruned some one- and two-year-old vines.

Bill Russell, Visalia, has 51 hogs in his project this year. Eleven head are registered, purebred Hampshire foundation stock and 40 head are feeders, some of which will be taken to the Interstate show at South San Francisco next spring. Russell started with one sow purchased from H. C. Smith, adding others from this same herd. This fall he bought a purebred boar from Ed Schoenauer, a Future Farmer of Tulare. The boar is a grandson of a national champion boar.

Thirty-nine members of the Sutter chapter were conducted through the Greenhand initiation by members of the East Nicolaus chapter recently. The initiation took place in the agriculture room at Sutter. The East Nicolaus initiation team put on the entire official Greenhand initiation with the F. F. A. opening and closing ceremony. All but one member of the Sutter chapter are Greenhands. This boy will receive his Future Farmer degree this year. The meeting was closed by a short program and a bean feed.

A Santa Ynez chapter member has an opportunity to double his investment in beef cattle at no cost. Tom Edelblute, Vernon Bebernes and John Carricaburu each bought a Shorthorn calf from Dibblee Poett of the Rancho San Julian. The seller has offered a prize of another calf to any one of the three boys who wins a first place with his steer at any one of the four 1936 livestock shows at South San Francisco, Pomona, Los Angeles or Sacramento.

Chapter members at Downey have embarked on a citrus pruning cooperative project. Forrest Boerner, a chapter member, recently came into possession of the orange grove, which had had very little previous care. The chapter work is proving educational as well as helpful.

FUN NIGHT ORGANIZED

Ceres high school will be the scene of a "fun night" program January 16 for Future Farmers in the ten surrounding schools. Boys will be from Hilmar, Los Banos, Patterson, Newman, Turlock, Denair, Hughson, Oakdale, Modesto and the host chapter.

Each chapter is to furnish from 5 to 10 minutes of entertainment on the program, while group games, stunts and demonstrations will also be seen. A committe of teachers has been selected to check the entertainment for duplication.

All Future Farmers from these schools are being invited, and a big crowd is being expected. The event replaces the semi-annual formal meeting formerly held by the group.

Members of the Sutter Future Farmer chapter recently came home from a field trip with an old skull as a trophy of the chase. The boys had been out dehorning cattle and found the skull. They are planning on mounting it on the wall of the agriculture room. Forty cows have been dehorned by the chapter during the last two weeks by the use of the clippers for farmers of the community. In addition to being a community service it has enabled practically all members in the chapter to try his hand at the job.

The Santa Cruz chapter has an extensive program in school beautification, not only at the high school but on the grounds of the grade schools in the city. The boys have made many cuttings of shrubs, vines and hedge plants for the landscaping work, and have gotten valuable practice in pruning trees and shrubs. Advanced students have been busy pruning apples, pears, plums, peaches, apricots and grape vines in the district.

The Sacramento region of F. F. A. held a meeting at Chico State college in November Officers were elected and the nine-point program of work was worked out. Melvin Herrick of Live Oak was elected president, James McGowan, Marysville, vice-president; Wilbur Hunt, Marysville, secretary, and Willis Haines, Wheatland, reporter. An excellent motion picture, "Master Farmers," was shown after the meeting.

Hanford chapter has their own Rodeo arena. The boys constructed the corral at the home of Luis Lindley. Two shows have already been held, with the Kingsburg chapter joining in the last one. Events include calf riding, musical chairs, horse racing and calf roping. At the last event, the chapter president, Arthur Machado, had a public address system working to announce events and to broadcast the music of the "cowboy band."

Garden Grove chapter has started a thrift bank as part of the program of work. The thrift committee is headed by Paul McGuire. The account was opened November 8, and at the end of the first month showed 15 members participating with savings of more than \$10. The chapter president, Nick Vincinch, was the first depositor and his name heads the thrift account book.

Hollister chapter is holding turkey raffles to finance a new radio, purchased to hear agricultural programs at the school. The first raffle netted \$13.70 just prior to Thanksgiving, and another was planned for the Christmas period.

Four purebred Hampshire gilts were recently purchased by three members of the Redding chapter. The chapter recently initiated 25 Greenhand members.

Little Mary was home after her first day at school. "Well, darling," asked her mother, "what did they teach you?"

"Not much," was the reply. "I've got to go again."

He (out of a job): Well, anyway, your father wouldn't see us starve, would he?

She: No, poor father, he won't. His eyesight is failing rapidly.

"It's raining cats and dogs outside."
"Yep, I know. I just stepped into a poodle."

NATIONAL PROGRAM OF WORK FOR 1935-36 IS ANNOUNCED

The program of work of the national association of Future Farmers of America has been made public, following its adoption at the national convention at Kansas City. While most of the local chapters made up their programs of work at the start of the school year, many of the items can be added as additional activities.

The following is a summary of the activities adopted. The first is the continued increase in membership, with 125,000 members as a goal for next November. This is not highly important in California where most of the active vocational agriculture students are Future Farmers, but is highly important in some of the mid-western states where only 10 to 25 per cent are members.

Chapters are urged to encourage use of official opening and closing ceremonies in the more important chapter meetings and state association meetings; use of the official manual by every member, and development of parliamentary

procedure meetings.

Organization of thrift banks and long-time project programs, encouragement of participation in public speaking contests and of home improvement such as landscaping and farm and home conveniences, are other points urged.

Future Farmer chapters are urged to encourage rural fire prevention programs, soil and forest conservation, pest eradication, and publicity programs. State associations are encouraged to plan Future Farmer camps, leadership-training conferences, state Future Farmer bands and other music groups. States are encouraged to exchange publications, and to have state radio broadcasts.

It is again planned to have a national radio program at noon with as many chapters as possible holding Father and Son banquets that evening. No date has been announced, and many California chapters have already held their banquets. The last item in the national program of work is one which seems highly essential, and which California has been at the front in obtaining as a state association. That is to have "all vocational agricultural contests" sponsored by the Future Farmers of America. It was the proposal of this state that they should not only be sponsored by the Future Farmers, but held in their name.

For example, at the American Royal Livestock show—scene of the national convention for the last seven or eight years and supposedly the city which should be best acquainted with Future Farmers of America activities—there is not even a separate premium list for Future Farmer livestock

entries!

California delegates expressed themselves as astonished in walking through the entire show, to find absolutely no mention made of the Future Farmers, except where their convention activities coincided with the show. Not an animal, a stall or a section bore any indication that the stock therein was shown by a Future Farmer.

This is incredible in California, where every fair down to the small county exhibits has a separate premium list for Future Farmers, and in the larger shows has sections or

buildings set aside for the Future Farmers.

California obtained this recognition by several methods: First by proving that the Future Farmers of America is a permanent, able and powerful organization for the improvement of agriculture; second, that it was unfair for a boy to receive his agricultural training under the high school system but perform in public under another banner which indicated that he had received his training in some other fashion; third, that it was unfair for high school boys receiving systematic, daily training under a skilled instructo compete with those not having the benefit of such training; and fourth, that the Future Farmer label meant a quality product.

In connection with the state association items in the national program of work, California is now doing several of them, but is lacking in others. We do not yet have a state camp except in connection with some other activity; nor a leadership training conference except during the state convention. No set-up has been devised for a state Future Farmer band, although with the major expositions of 1938 coming closer, it would seem a good move to get such a

program under way.

Official report of the convention was made by State President James C. Eager and State Adviser Julian A. McPhee.

ALUMNI CHAIRMAN WORKING HARD

Henry Doddridge of Fresno, appointed to work during the year on the formation of alumni organizations in each local chapter, has been making some noted accomplishments. Late in December, he reported that letters had been sent to each chapter, and that about 60 per cent had responded.

In the February issue, Doddridge will have a summary of the chapters already sponsoring an active alumni organization, and of those which plan to have one in operation

by the date of the 1936 state convention.

If you have not yet answered the letter sent to you, please help the alumni chairman by replying within the next two weeks.

J. I. Thompson, livestock specialist for the state bureau of agricultural education, visited the Washington union chapter at Fresno recently. He spoke and answered questions about hogs for the students having hog projects. He also visited the hog projects of Otis Freeman, Marvin Dunkle and Paul Mehrton. There are twenty boys raising hogs for their projects.

Ten members of the Ferndale chapter, with the assistance of their farm mechanics teacher, helped erect the Christmas decorations on the city light posts. The chapter was congratulated for this good community turn. A recent chapter speaker was Dr. McCapes, veterinarian in charge of the federal testers in the Humboldt county area.

Several practice pruning jobs have been lined up by the Napa members. One is on a four-acre ranch of Merle Green, a member; and another is a two-acre tract of apples. Both are follow-up jobs which the boys have been doing for several years. A two-and-one-half acre prune orchard, badly neglected, will be renovated by the chapter as another phase of pruning practice.

Members of the Downey chapter are having difficulty in finding some good registered Guernsey heifer calves for projects. Any dairyman or chapter member who has any suggestions will be doing a big favor by communicating with Elmer C. Kaiser, chapter reporter, High School, Downey, Calif.

The Patterson chapter purchased a radio for use in the school, particularly for the agricultural programs. The first program "tuned in" on the new radio was heard December 17. The chapter also enjoyed the Christmas party, according to President Don Kettler.

WHEN EAST MEETS WEST



Gilbert Williams, delegate to the national Future Farmer convention from Maine, greets Winslow Ledson (right) a member of the Santa Rosa high school dairy cattle judging team from California. These boys, living 3500 miles apart, are telling each other thta a lot of good Future Farmers live between them.

APPLE-SAUCE FOR THE BANOUET

At the annual convention banquet at Kansas City last fall, the various states contributed several food delicacies which aroused considerable comment. The Midway chapter of Idaho furnished the big potatoes for baking, and extra-fancy peas came from the Montana state association. Yakima, Washington, furnished large Delicious apples, shelled roasted peanuts came from Virginia and maple sugar from Vermont.

With California one of the chief food-producing states of the nation, some chapter or district should discuss the possibility of putting this state on the convention banquet menu. Among the products for which the state is noted are lettuce, carrots, peas, citrus, avocados, figs and artichokes. There are also almonds, walnuts, dates and grapes.

Now it's up to someone to figure out what could be done, what is in season, and what to do about it.

An adult speaker at a gathering of farmers, high school agriculture students and alumni, gave the Future Farmer graduates an excellent compliment when he stated that they were getting better preparation for rural leadership and farm organization participation, than the older generation ever had. This man, member of an adult farm organization for many years, pointed out that the many activities of the Future Farmers, including chairmanship at meetings, public speaking and the opportunity to see many parts of the state and meet many boys from other sections, were not available to those who are fathers of high school boys today. He urged the formation of a strong and active Future Farmer alumni group for the sake of better farming and better rural life.

Turkey raising is a new venture in the Easton chapter at Washington Union, Fresno. A recent field trip to the Reiman Turkey Farms resulted in the buying of foundation stock for project work by Bernal Hutt, Kenneth Parks, Paul Stanton, Louis McKnight, Harry Waite and Eddie Sittner. Twenty-five hundred meat bird baby chicks have been received by the chapter members to fatten for the spring market. according to Edward Zirkelbach, reporter.

The Sutter chapter is conducting a girls' popularity contest as a means of raising some money for chapter needs. At press time, they still had two days remaining of the contest and had made \$9.00. Votes are sold for one cent each during mornings and noon with contest results being posted every day. Money secured from the contest will be used to buy F. F. A. materials.

Adin chapter had a duck dinner for its annual Father and Son banquet. Approximately 40 persons were present. Regional Adviser A. G. Rinn told those present about the activities of the Future Farmers throughout the state. Principal U. B. Marr also gave a short talk. Rinn presented several chapter members with their pins.

An evening devoted to initiation and athletic events is an annual event of the Santa Cruz chapter, held in the high school gymnasium. After initiation, four captains previously appointed by the chapter president divided the members into four basketball squads. After a "round robin" tournament, refreshments are served and music numbers presented.

Fallbrook Future Farmers are planning to cooperate with the local Chamber of Commerce in holding a Farmers' Day late in April. The program will include demonstrations of Future Farmer and club work, a livestock show, judging contests for adults, parade, baseball game, dance and boxing matches.

Warren Schneider, a Turlock chapter Greenhand, reports losing only 9 chicks from his fall brood of 310 sexed Single-comb White Leghorns. He got only 12 roosters in the lot. The birds are now 4 months old and are doing well.

Susanville chapter recently sponsored a motion picture show at the local theater, adding \$13.46 to its treasury.

The Sebastopol chapter is reported to be in line for a new agriculture building.

MAY TRADE PRESIDENTS

In case the national Future Farmer president, William Schaffer of Virginia, is not able to attend the 1936 California state convention, it has been proposed that Oregon and California "trade" presidents for the two conventions. Since the meetings are held at different times, it would be possible for President James Eager of California to go to Corvallis for the Oregon session, and President Raymond Kootch to come to San Luis Obispo for the state meeting here. The plan was advocated by the Oregon association.

Julian chapter members are doing agricultural mechanics jobs to build up the project loan fund. Jobs include repair and new construction. One of the recent jobs was sharpening and "gumming" a 30-inch circular saw.

George Macedo of Gridley bought 300 baby chicks from the Vantress hatchery in Marysville, and at the end of several days had lost only one chick.

The Future Farmer chapter at Susanville recently cooperated with the Homemaking club of girls in serving a buffet supper for the all-school Fathers' night.

The Turlock chapter is planning a snow trip to Long Barn in January. Max Hecox, chairman of the recreation committee, is in charge of arrangements.

Live Oak chapter is contemplating another extended vacation trip in the summer of 1937, following the succes of the 5000-mile jaunt this year.

Annual dues of the newly-installed chapter at The Dalles, Oregon, are \$1.50 per year.

The head never begins to swell until the mind stops growing.

He: Hello, darling, would you like to have dinner with me tonight?

She: I'd love to, dear.

He: Well, tell your mother I'll be over at seven.

Continued from page 2

try judging, and Norfolk county came back to win the live-stock competition.

MONTANA—Recognizing the need for a district organization which permits several chapters to work together, seven regions have been designated covering the entire state. One of the objectives is to have at least four of these districts actively functioning by next June.

COLORADO—In order that chapters may have an opportunity to get good samples of potatoes and forage grasses, the former either for judging or seed, several chapters are announcing specially selected samples for sale. The potatoes, individually wrapped, sell for five cents each and the forage grasses for 10 cents a bunch.

VIRGINIA—By the last of November, 4622 boys had paid up their Future Farmer membership, from 169 chapters. This is an average of 27 boys per chapter. The state is proud of the fact that it has a national president from its membership this year.

NORTH CAROLINA—The Central Young Tar Heel chapter of Future Farmers is renting potato storage space at five cents per bushel. A total of 1800 bushels of potatoes have been stored thus far.

have been stored thus far.

OKLAHOMA—Vernon Howell, Guymon, Okla., national Future Farmer president in 1932-33, has just completed a session as a state legislator, and is now director of the Youth Administration work in the state.

Youth Administration work in the state.

CONNECTICUT—William Pearl, who was awarded the American Farmer degree at the last national convention, won this honor and a wife at practically the same time. He made the trip to Kansas City with Mrs. Pearl as a honey-

TEXAS—One-eighth of all the Greenhand memberships awarded in the nation last year went to Texas, with 6245 boys in the first degree of the Future Farmer organization.

"GOOD MORNING, CALIFORNIA HIGH SCHOOL STUDENTS---

"The National Broadcasting Company, cooperating with the California Polytechnic School, presents a second series of agriculture lessons, coming to you each Tuesday morning at 9:30 over stations KPO, KFI and KFSD. The thirty-five lessons are packed with timely suggestions and sound advice for the improvement of your farming program. Here they are:



DATE	TODIC	
	TOPIC	TITLE
October 9	Determining Prices	What Am I Bid.
October 15	Bringing Pullets Into Production	Without Dowry.
October 15	Cover Crops	Planting Greenbacks.
October 22	Finishing Calves for Market	T-Bones, Tough or Tender.
November 5	Selecting Dairy Projects	You Must Be Choosy.
November 5	Growing Fall Pigs	Hams and Racon
November 12	Pest Control	Rural Enemy No. 1.
November 19	Feeding and Fitting Show Stock	Porter on the Barnyard Pullman.
November 26	Putting Machinery Under Cover	The Sky_A Leaky Roof
December 3	Care at Lambing Time	A Shenherd at Work
December 10	Responsibility of Citizenship	I'm Not Interested.
December 17	Propagating Nursery Stock	Tall Trees from Tiny Twice
1900—January 7		When the Gragg is Croon
January 14	Incubating and Selecting Chicks	The Family Album.
January 21	Tractor Repair	Doctoring the Iron Horge
January 28	Feeding Out Lambs	Market-Tonning Lamba
repruary 4	Feeding Calves	Look in the Lunch Rocket
repruary II	Brooding and Care of Chicks	From Fluff to Foothers
reoruary 18	Farrowing and Weaning	Seven to One
repruary 25		Ancient Pottery and Modern Dumna
March 3	Care and Management of Dairy Heifers	S The Barnvard Debutante
March 10	Starting the Calves	Ronin' and Tvin'
March 17	Care and Growing of Young Stock	Little Rird What Now
March 24	Feeding Young Pigs	Money-Makers
March 31	Showmanship and Judging	Just a Green Ribbon
April 7	Truck Crop Propagation	A Vegetable Frame-IIn
April 14	Principles of Breeding	A Family Affair
April 21	Keeping Machinery in Repair	A Farm Prenaredness Program
April 20	Spring and Summer Management	Your Flock-Clinning the Council
May 9	Feeding the Cow in Milk	The Daily Grind
May 12	Closing the Project Book	Profits in Penmanshin
May 19	Home Beautification	The Sweet in "Home Sweet Home"
May 20	Culling, Summer Flock Care	Vacation Without Pay
June 2	The Home Farm Shop	First Aid for Farm Machinery
June 9	Supply and Demand	Loaves and Fishes
		- W. O. WHA I IDIION.



"Just a second, fellows. Here are some new features for this series. Get your pencils ready to fill out the outline which your instructor has for you. And-wait a minute-remember to send in your questions for answer on these programs. Don't forget--tune in every Tuesday morning from 9:30 to 9:45 on stations KPO, KFI or KFSD."

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