

# SUPPLEMENT TO ESTACADA PROGRESS

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The Press Bulletin aims to keep the state press informed in all matters of interest and value related to the work of the Oregon Agricultural College. Editors are respectfully requested to publish for the benefit of their readers such items as they think reasonable and suited to local use.

## EXTENSION

### BETTER LIVESTOCK DESIRED

An investigation of farm and range livestock conditions in Central Oregon has been made by Ralph E. Reynolds, animal husbandry specialist of the Agricultural College, in company with the county agriculturists of Klamath and Lake Counties. Mr. Reynolds found that the matter of herd improvement has not received all the attention the subject justifies in all parts of this extensive livestock district, and that an effort to interest growers in getting a better class of farm animals by selective breeding and the use of pure-bred sires is likely to meet with a hearty response on the part of the stockmen. As an example of the need of further improvement it was observed that while sheep in part of the territory sheared ten pounds those in other parts hardly reached seven. The additional three pounds are almost a clear gain and certainly well worth striving for.

### COW-TESTING SUCCEEDS WITH COOS CO. DAIRYMEN

Oregon Agricultural College, Corvallis, July 5.—Excellent progress is being made in cow testing in the Coos Bay section according to Professor H. T. French, state leader of county agricultural agents, who has just returned from that district. Some high producing cows are being discovered by the testing work many of them running from 360 to 400 pounds of butter-fat per year. On the other hand a good many poor producers have been located and there are now more beef cows for sale in the country than ever before. As this work of selecting the better producers and discarding the poorer ones progresses, dairying becomes still more profitable.

The cream from this section is marketed at Marshfield and other points where it is manufactured into butter and ice cream, or sold to the local trade. The cream is taken every day by boat which provides cool, quick and regular transportation, lending much to the good quality of the cream. Dairymen merely place their cans on wharfs or on small hame-made floating docks where it is taken up by passing boats that later return the empty cans to the same places.

The Catching Inlet Association held a picnic on Mr. Selander's farm, a beautiful and ideal place according to Professor French. The speakers' platform is in front of a natural amphitheatre constituted by a low coast hill which is sufficiently timbered to give the desired shade. On the top of this flat hill another open grove makes an ideal place for spreading the tables. Between the table and the speakers' platform the audience found comfortable and convenient seats arranged on the green sward. The picnic arrangements were in charge of J. L. Smith, county agricultural agent, who made an address explaining the progress of the work. Professor French also made an address on the subject of efficiency in farm management. Local dairymen made short talks on their exper-

ience in the work of testing and all spoke in keen appreciation of its benefits. An orchestra composed of people of the country surrounding furnished splendid music. The local singing furnished was also of a high order of excellence. "It is really remarkable," says Professor French, "that such splendid musical organizations could be brought together in such a small place. Two violins, base viol, cello, and other instruments were used in the orchestra, four members of which belong to Mr. Selander's family."

Other picnics of like nature were held on the three following days at Myrtle Point, Coquille, and Langlois. These meetings were addressed by Mr. Smith and Mr. E. B. Fitts, extension dairyman of the College.

## MILITARY

### U. S. FURNISHES MILITARY TRAINING TO STUDENTS

Oregon Agricultural College, Corvallis, July 5.—Announcements of the military instruction camp for young men who are students of universities or colleges or graduates of a high school, to be held at the Presidio, San Francisco, beginning July 10, have been received by President Kerr, of O. A. C. The purpose of the camp is to give the young men of the country an opportunity to take a short course in military training to fit them to discharge their military duties should the nation ever stand in need of their services. Aside from the foregoing scholarship requirements students must be between the ages of 18 and 30 years and not less than five feet four inches high, of strong constitution and free of organic diseases.

The camp will be in session for five weeks, and attendance will cost each student \$32.50 in addition to transportation. Of this sum ten dollars goes for expense of new uniform and the remainder for living accommodations, which will be furnished by the regular army quartermaster's department. Tents, cots, blankets, cooking outfits and infantry equipment will be furnished without cost to the students.

Officers of the United States army will be in charge assisted by regular troops. Instruction will be given in tactics, advance and rear guards, patrols, outposts, combats, military map and road making, use and care of rifle and target shooting. Marching, camping tent pitching, camp sanitation, first aid to injured and care of troops will be taught by practice. Use and construction of trenches, signaling, and a practice march of several days' duration will be among the exercises.

President Wilson, ex-President Taft, and other leaders of thought in the United States strongly endorse the work of the camp.

## ADMINISTRATION

### DEMAND FOR LEADERSHIP

"There is a demand in this nation as never before for intelligent, wise leadership," says President W. J. Kerr, of the Oregon Agricultural College, in speaking of the future career of recent graduates. "Neither in the history of our state nor of this nation has there ever before been so great a demand as there is today for men and women who have had the best training and the best discipline for the discharge of the duties of life. With the advantages and opportunities that have come to the college-trained men and women should be assumed by them corresponding responsibilities. They should sense that responsibility, and when they go out from the institution never fail to do anything in their power to show their

appreciation to the community, the county, the state and the nation, of the advantages that they have enjoyed. This responsibility should be discharged by rendering service not merely to themselves but to their community, their state, and to the nation."

## HORTICULTURE

### SUPPRESS BIG BRANCHES TO GET BALANCED TREE

Oregon Agricultural College, Corvallis, July 5.—Now that Oregon with but a small appropriation for horticultural exhibits at the Panama-Pacific Exposition has won the distinction of producing the finest fruit in the world, attention is being focused on the methods by which it is achieved. There are many factors including soil and other natural conditions behind the award, and likewise a number of orchard practices in producing, handling and packing fruit, all contributing to the general result. The system of pruning to secure vigorous and properly balanced trees is an important item of the orchard practices.

The Oregon methods as developed and advocated by the Oregon Agricultural College horticultural department aims to secure approximate equality of the four or more fundamental branches of the tree by pruning back most severely heavy branches and more lightly the smaller ones.

The general practice used to some extent even in Oregon, has aimed to secure this uniformity and balance by the reverse of this process, cutting back more heavily the lighter branches with the idea of stimulating them into producing a greater wood growth. Careful and extended experiments by the College experts have shown that this is not successful in securing the desired results.

"Pruning stimulates growth," says Professor Lewis, "both of the lighter and the heavier branches. But while pruning the tree more severely stimulates it more than pruning it lightly the same principal does not apply to two or more individual branches of the same tree. In this case if one of the branches is longer than it should be in relation to the others it is cut back further while the lighter branches have a less amount of wood removed. By this lighter pruning the lighter branch secures the stimulus of pruning and still has the advantage of having a greater amount of wood to start with than if it had been cut back far. If the branch is undeveloped in relation to the other fundamental branches, cut it back but slightly. If it is over developed cut it back closer to the tree, and by following this practice for a few years the tree can be brought into the desired well balanced form. In this condition it has the form and strength to produce and support without injury to itself a heavy crop of good fruit."

### MANY GRADUATES TEACH

During the last week of June seven graduates of the 1915 class at the Oregon Agricultural College received and accepted appointments as teachers of manual training in Oregon and other Pacific Coast state sections. These young men are: Wm. E. Dolde, who goes to Phoenix; J. A. Straughn to Silverton; J. W. Motley to Heppner; Luther A. King to Klamath Falls; Wm. O. King to Belt, Montana; Earl D. Dooce to Toledo; and G. R. Thomas to Forest Grove. The rapidity with which these appointments were made was due to the number of teachers at the College taking summer school work in which manual training in one or two room schools is being given special consideration, who could learn personally of the work of these young men.

## FEEDS INFLUENCE BUTTER QUALITY

### Information of Much Practical Interest to Dairy-men Gathered

Cotton Seed Meal Increases Melting Point of Butter and Causes Less Loss in Skimming Cream—Potato Feed Makes Hard Churning.

Since the factor of greatest influence in determining the quality of butter is the quality of milk from which it is made, which in turn depends quite largely upon the character of the feed, the feed for dairy cattle becomes a matter of prime importance to producers of dairy products. It is impossible to make a good quality of butter from dirty milk or from milk having an extremely high degree of acidity, abnormal odors, and tastes, many of which are due to the methods of feeding and character of feeds. In a dairy seminar paper at the Oregon Agricultural College, R. V. Wright discussed the effect of feeding stuffs upon the quality of butter as follows:

The detrimental effects of certain feedings stuffs have been counteracted to some extent by the use of starters and pasteurizers, which check the development of bad flavors and render it easier to secure proper acidity of cream.

A great deal of investigational work has been done with concentrated mill feeds and their effect upon the quality of butter. It has been definitely learned that cotton-seed meal greatly increases the quantity of butterfat. It increases to a marked degree the melting point of butter. It diminishes the volatile acids content and produces but little change in specific gravity. New York experiments show that the average melting point of butterfat from cows fed bran was 93 degrees while that from cows fed cotton-seed meal it was 99 degrees F. The Texas station reports show the average melting point of butterfat from cows fed cotton-seed meal to be 105 degrees F. The practical effect of this is that the butter will have increased firmness and remain in better conditions when handled and shipped in hot weather.

Feeding cotton-seed meal to cows on pasture is a very good practice for it has a tendency to harden the butter and increase the melting point. The richness of cotton-seed meal in albuminoids renders it of prime importance to mix with one or more feed stuffs poor in this nitrogenous compound such as ensilage and hays. If fed to excess the meal will injure the health of the cow and diminish the quality of the butter.

Another interesting point is that under farm conditions where the deep cold setting system is used a less amount of butterfat is lost in the skim milk and buttermilk when cotton-seed meal is used than when bran is fed.

General criticisms of cotton-seed meal butter are that the flavor is too flat, color too high, and a tendency to retain an excess of salt. It is frequently held that the butter will have a salty flavor which is very objectionable, and butter made of fats containing cotton-seed meal is rated appreciably lower by New York commission men.

Gluten meal in a ration has a marked effect upon the butterfat decreasing its churnability and producing a softer butter. When mixed with cotton-seed meal in not too excessive amounts it produces a butter of very good quality and good body. In feed-