

# SUPPLEMENT TO ESTACADA PROGRESS

THURSDAY, AUGUST 12, 1915

Published weekly by the extension division of the Oregon Agricultural College. R. D. Hetzel, director.

Exchange copies and communications should be addressed to Editor of Press Bulletins, 116 Agricultural Hall, O. A. C., Corvallis, Ore.

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

### SHIPPING CHOPPED HAY IS SUCCESS

(Hermiston Herald)  
The McNaught contract for the shipment of 500 tons of chopped alfalfa hay is working out very successfully, according to C. N. McNaught, who is in active charge. Other orders are being negotiated and there now seems no question but that the entire Maxwell and McNaught hay that is sold will be disposed of in this way. Arrangements may also be made whereby other hay that is sold will be handled in the same manner.

Mr. McNaught says when all is running smoothly the outfit is capable of chopping about 50 tons per day. The machinery is old though, and this output cannot be maintained steadily. The hay is chopped at the stack in the field and hauled in special racks to the car. At present it is handled by fork. He is figuring on a small blower to put it in the car. In that event the wagons would drive alongside a hopper and dump the load and much better time could be made in handling the hay.

The wagons average two tons to the load and no great difficulty is experienced in getting the weight into a car.

## DAIRY

### FIVE FACTORS FAVOR HEAVY MILK PRODUCTION

Oregon Agricultural College, Corvallis, Aug. 9.—It is perfectly natural for the highly developed dairy cow to produce large amounts of milk if she is supplied with proper conditions, relates Professor R. R. Graves, head of the O. A. C. dairy department. These favorable factors of high yield are said to be abundance of palatable food, balanced rations, succulent feed, moderate temperature and bodily comfort. The last two are to be secured by a comfortable, well-lighted, well ventilated barn. The others are explained in detail in the recent Extension bulletin, "Feeding the Dairy Cow," prepared by Professor Graves for use of Oregon dairymen.

In support of his views Professor Graves cites the fact well known to every dairyman, that in the spring when grass is good and the days are moderately cool the milk flow reaches its maximum. This, he says, is because the cows get plenty of palatable succulent food composing a well-balanced ration, and are comfortable in the moderate temperature. It is under similar conditions that the successful dairyman must try to keep his cows throughout the whole of the year. To accomplish this would be to increase the average production of the herd almost fifty per cent.

That a good dairy cow will continue to give milk even at the expense of her body nutrition but that the flow will decrease, was shown by an experiment at the University of Missouri. A mature Jersey cow in good condition at the time of calving was fed just enough to support her body leaving nothing for milk production, for thirty days, at the end of which she was producing but one pound less milk

than at the beginning although losing 115 pounds of weight. Ninety pounds of milk solids had been produced from her own body. After decline, however, it is next to impossible to bring production of any cow up to the former level.

## FACULTY

### NEW DEAN OF WOMEN

Dean Mary E. Fawcett, recently appointed as dean of women at the Oregon Agricultural College, has begun her work at this institution and is compiling information necessary to carry on her work of providing wholesome and pleasant campus life for the women students. She says that she likes the big opportunities of the Oregon field and that she hopes to maintain the democratic policies that have previously obtained in the State College. She endorses student government and will work for its development along right and rational lines, and thinks that life at Waldo and Cauthorn Halls will continue to be most attractive and popular.

## COMMERCE

### BULLETIN IN BUSINESS SIDE OF FARMING SERIES

Oregon Agricultural College, Corvallis, Aug. 9.—Bulletin number three on the Business Side of Farming has just appeared from the Oregon Agricultural College press. It was written by Honorable E. E. Wilson, an attorney at law and member of the Board of Regents, and was issued by the Extension division. It deals with the Oregon laws on real property and copies may be had by residents of Oregon by making application to the Oregon Agricultural College, Corvallis, Oregon.

In determining what is the law relating to titles to real property, Mr. Wilson had recourse to three sources of authority—statutory enactment of the legislative assembly of Oregon, decisions of the supreme court of Oregon on questions of the common law of real property not covered by previous decisions, and the principles of common law as announced by judicial decision of the courts of other states and generally recognized throughout the United States.

Subjects treated are numerous among them being title by purchase, deeds, leases, mortgages, dower, and recording; title by will; methods other than grants including judicial process, administrator's, guardian's and execution sales, eminent domain, and related proceedings. The first division deals with the history of possession of lands and the last with abstract of titles. The volume is designed as supplemental to two previous volumes on the Business side of farming prepared by the School of Commerce.

## ALUMNI

### GETS GOOD POSITION

Miss Ruth Jackson, a graduate student of O. A. C. receiving a master's degree in agriculture, has been elected to the head of that department in the Idaho State Normal at Albion, at a very attractive salary. Miss Jackson has been associated with some of the leading specialists of the United States Department of Agriculture in various phases of agriculture, and has done much practical work here as the basis for her degree. Her garden in the College fields is a marvel of high production and good quality, and shows the practical character of her training. With her direction the Idaho school should be able to accomplish the special purpose for which a woman was employed—interesting rural women teachers in teaching agriculture.

## BUD KNOWLEDGE AIDS TREATMENT

### Manufacturing Machinery Calls for Intelligent Care

### FRUIT CROP DEPENDS ON BUDS

Pruning to Control Bud-Formation and Proper Distribution of Nourishment Should be Based on Exact Knowledge

(By E. J. Krause, Research Associate in Horticulture at O. A. C.)

If the fruit-buds are regarded as the actual fruit manufacturing machinery of a tree, it is necessary to know something of where they are located, how and when they are formed, and how they should be treated, says E. J. Krause of the Oregon Agricultural College. For convenience, they may be classified according to their particular location on the tree; namely terminal buds (on shoots), axillary buds (on shoots, and those borne on spurs).

The terminal fruit-buds are those which are at the very tip or terminus of a shoot. In certain varieties of apples, such as Johnathan, Gravenstein, Newtown and others, and in some varieties of pears, notably the Bartlett, Winter Nelis, and Angouleme, much of the first crop of fruit-buds is borne terminally on shoots.

The axillary buds are also borne on one-year-old wood, but on the sides of the shoots instead of at the tips.

The third class of buds, those borne on spurs, which are really nothing more nor less than very short branches, are borne either singly or in aggregations of two, or many. Generally they developed first from either one or two-year old wood, though at times from that which is older. They develop either from single terminal buds, as is general in plums and prunes, or from one to several lateral buds, as in apples and pears. Depending upon variety and environmental conditions, these annual increases in length may vary from a fraction of an inch to several inches, with the result that the older spurs may be very compact, or loose and spreading. In some instances large spurs consist of as many as forty or fifty buds on more, or less angled branches. A fruit-spur may be a single short branch bearing one or a few fruit and leaf buds, or a large aggregation of such branches which arise from one another.

The proportions of the several classes of fruit-buds vary greatly according to the kind and variety of fruit. In the peach, particularly, all the fruit buds are axillary and borne on one-year wood. Some of the annual branches are so short that they might be regarded as spurs, perhaps, though the proportion of buds borne on such spurs, as compared to the total number on the tree, is small. In this particular class of fruits the fruit-buds, which usually contain one or sometimes two flowers, are borne singly on one side or the other of the leaf-buds, or in pairs with a leaf-bud between them. They are usually more numerous toward the tips of the branches, though when the trees have been properly kept open to admit light and air they are plentiful on the smaller laterals and scattered well along the branches, except at the bases of the larger ones.

In the plum and prune, fruit-buds are borne both on one-year shoots and have large quantities of axillary buds, much as has the peach, except that frequently there are more than two at each node. The number of axillary buds on one-year-old wood in the case of the common varieties of prunes should be regarded as small compared with those on spurs, though one-year-

old spurs are often prolific bloomers.

The sweet cherry has its fruit-buds either on spurs or as axillary buds on one-year-old wood. If the one-year branches are of any considerable length, it is worthy to note that the fruit-buds on them are borne near the base, or at least the basal one-half. Apples and pears may be considered together, since the methods of fruiting are similar. The fruit-buds are borne on spurs, as axillary buds, or terminals on one-year wood. Varieties vary greatly in this regard. Some have a large proportion of their fruit-buds on one-year wood, especially while young, while others bear very few such buds, having practically all, except a very few terminals, borne on spurs which sometimes are present on one-year wood. Attention is called to the fact that, normally, the axillary fruit-buds are borne near the tips of the branches instead of the base, just the reverse of the condition prevailing in the sweet sherry.

In apples and pears it is frequently objectionable to have fruit at or near the tips of long one-year branches, because such branches are bent with the fruit and becomes misshapen, are swayed with the wind, and thus bruise not only the fruit they bear, but all in the immediate vicinity, and tend to bring the fruit to the very outside of the tree, so that even a light load is apt to cause breaking. Yet it is undesirable at times to remove all such fruit-buds, because they may constitute a large proportion of the entire crop. If it were possible it would be of much greater advantage to have bearing on short laterals so that they might be saved to produce fruit. Such a condition actually can be brought about, especially with young trees, through a method of early summer pruning, whereby some of the branches, instead of being allowed to grow normally, are headed back sufficiently early in the season to allow laterals to spring from them and develop terminal and even axillary fruit-buds.

### MANY COLLEGE PEOPLE ATTEND NATIONAL MEET

Oregon Agricultural College, Corvallis, Aug. 9.—President W. J. Kerr, of the Oregon Agricultural College, and a large number of College officers and staff specialists are in attendance at the group of national association meetings now in progress at Berkeley and other California points. President Kerr is vice-president of the Land Grant College Engineering Association and in addition to assisting in the deliberation of that society will deliver an address before the Home Economics section. These associations convene at Berkeley on August 10.

Professor R. D. Hetzel, director of College Extension, is chairman of the Extension section of the national body and will preside over its proceedings and direct its activities along lines closely related to extension and demonstration work in the various states, including Oregon. The Oregon system of extension has attracted the attention of extension officers of other states, resulting in Professor Hetzel's appointment to this important chairmanship in the national association.

Dean A. B. Cordley, director of the Oregon Station, will represent this state in the American Association. He will also attend the meetings of the American Association for the Advancement of Science, of which he is a fellow, and take part in the proceedings of the society for the promotion of agricultural science.

Professor H. F. Wilson is president of the Pacific Coast Association of Entomologists, which meets at Berkeley, and he will present scientific papers before some of the affiliated societies. Professor Loyden has been asked to give an address before the American Poultry Association, and Professor H. B. Brooks will speak before the National Educational Association.