

## PEAR BLIGHT AND ITS CONTROL UPON THE PACIFIC COAST

This is the Eleventh of a Series of Articles That Will Be Printed Daily Until Subject Is Completed—Every Orchardist in the West Should Save These Issues for Future Reference, as They Contain Valuable Information.

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(Continued from Thursday, May 19.)  
Pruning in Vase Form.

The whole subject of pruning is such a lengthy one that it can scarcely be gone into in full detail. However, the vase-formed tree headed low and with the main branches shortened in to 18 inches or less, is decidedly the most desirable form to grow a tree. Up to the third year the main forks or leaders should be shortened in so as to make a tree with sturdy frame-work, and at the same time keep it down low so as to be accessible for spraying, picking fruit, etc. If the water sprouts are kept off the body and main limbs, and if lateral fruit branches are developed within the fruiting area, the most desirable form of tree will be produced for controlling the blight. A tree pruned to this form, even if infected, has its blossoms well away from the vulnerable parts of the tree; namely, the body and frame-work. The tall pyramid with a single main leader and with its long branches covered with fruit spurs and water sprouts makes the work of fighting pear blight a difficult one. It is hard to get into the top of the tree with this closed center to find out what is going on, and, besides, the fruit spurs and water sprouts being close to the body as well as upon it, readily carry the blight in, usually resulting in the entire loss of the main portion, if not the entire tree. One only needs look around the valley where the pyramidal or central leader type is grown, and it will be seen that an infection on the body resulting in a girdling of it necessitates the removal of the entire center above the point of infection; thus removing practically the heart of the tree's growth. Any of the limbs left below the point of infection are usually long and slender, and, besides, are usually poorly placed to form a good tree of any sort thereafter. The prevailing type of Bartlett tree in California is very near the desirable form; however, in many cases, after heading back the trees, they have been allowed to grow three or four years and then reheaded several feet from the crown, sometimes as high as 15 feet, resulting in a two-story pear tree. In very few cases has there been any attempt to keep the fruit off the main frame-work branches, and to keep the water sprouts and fruit spurs from the bodies and roots. There has been no special occasion for forking at the frame-work, since at the time the trees were being formed pear blight had not made its entrance into the California orchards. Among many growers, especially those of the old school, in the Rogue River valley, we find that there is a tendency to adhere to the pyramid form of tree in practically all varieties grown, even the Bartlett. We readily understand why this has been the case, because the pioneer fruit growers in the valley recognized only this form of tree as being, perhaps, the easiest to prune and undoubtedly the easiest to keep from breaking down when heavily loaded with fruit. Their weak attempts at forming the open-headed tree were failures because during the first two or three years' growth they failed to shorten in enough. Even today this is the common error, and it would be better to shorten in six inches than to lengthen to 18 inches. Now that pear blight has come into the valley, this method of pruning, or forming the tree by maintaining a central leader, will have to be altered. I know of perhaps 500 or 600 trees that have been wholly lost on account of this style of growth, that is to say, practically the entire bearing portion of the trees had to be taken out on account of blight girdling the leader. In many young orchards which have been planted within the past two or three years, the growers are changing them into the vase or open-head form, recognizing the great difficulty in saving the other type of tree should blight become serious. In the larger trees it is a rather difficult thing to change them over into the vase form, but in every case where blight has seriously damaged such trees the resultant tree, of necessity, becomes vase formed when the blight is cut out.

Severe pruning, though in most cases, of course, giving good results in stimulating vigorous twig growth and fruit production, tends also to result in more serious attacks of the blight. Everyone knows that the more vigorous the winter pruning the more lux-

uriant the twig growth during the following season. The result always is that every dormant bud tends to push and, being very tender and sap-ry, easily becomes infected and blight badly. On the other hand, as soon as the trees come into bearing summer pruning if properly practiced will result in a more normal vegetative condition and the tendency to set fruit will be correspondingly greater. A very heavy set of fruit, other factors being equal, always tends to keep down excessive vigor; and this is usually a good thing under Pacific coast conditions, where the growing season is long as compared with eastern conditions.

### Cultivation, Fertilization, Irrigation.

Cultivation, fertilization and irrigation are three very important factors to be considered in connection with the control of pear blight. I shall take these up separately with only as much detail as will make the text plain. Thorough cultivation is more essential, especially from southern Oregon southward on the Pacific coast, than in the east, for the reason that rainfall is not only much less, but from the spring of the year until autumn the season is practically without precipitation. In districts where irrigation is practiced, cultivation is just as necessary. In the east it is not an uncommon practice to permit pear and apple orchards to grow in sod when it is evident that the blight is getting beyond control. Everyone knows that lack of cultivation induces surface evaporation from the soil, and trees are thus made to grow more slowly because of lack of moisture, and hence, even very susceptible varieties of pears and apples do not blight badly because the vegetative vigor is lacking. The necessity for cultivation as well as the method to be used varies so greatly in the Pacific coast orchards that it is impossible to make any general rule. Each soil type requires different treatment to the end that soil moisture be retained during the growing season of the trees. Some of the moist deep soils in the Sacramento River districts and perhaps in a few spots in the Rogue River valley retain their moisture so well that pears get along very well for a year or so without cultivation. On the other hand, practically all of the lands in these districts need thorough cultivation to bring them up to anything like normal and to mature full crops.

### Use of Fertilizers.

The matter of fertilization is an important one, especially where large crops have been taken for several successive years from an orchard. However, it is known that nitrogenous fertilizers, such as stable manure, as well as commercial fertilizers containing large amounts of readily available nitrates, tend to produce luxuriant growth, and hence trees so stimulated blight more seriously than those not fertilized. Fertilizer must be used, but it should be used in moderate amounts. There is no advantage in using an excess of potash to make the trees more hardy and thus more resistant to blight. The fondest hopes of some would be experimenter have been blasted by trying to prevent blight injury through the use of potash in the form of muriate and sulphate. It is the same old story, the blight must be controlled by having no holdovers present during the infection period. I have seen large commercial orchards practically ruined in one year where potash was used as a preventive against blight, so avoid using it for any other purpose than adding fertility to the soil.

### TO SEPARATE BOYS AND GIRLS IN CLASSROOMS

SPOKANE, Wash., May 20.—The boys and girls of South Central high school may be separated in their class work and their recreation next year, according to plans now being discussed by the faculty and the board of education. The change, if found successful, may later be adopted in the north side high school, and possibly in the grammar schools.

### Mayor Is Fined for Spitting.

MEMPHIS, Tenn., May 20.—Mayor Edward H. Crump was arrested, charged with expectorating on the tiled floor of the new \$2,000,000 courthouse and was fined \$5.

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## WET 40,000 ACRES ON ROGUE RIVER

Eastern Capital Plans to Store Water in Rich Fruit Section—Fred J. Blakeley Is Head of Company.

GRANTS PASS, Or., May 20.—F. J. Blakeley of Roseburg is backed by large eastern capital in a project to build a storage reservoir at the head of the Applegate river to irrigate the valley in the vicinity of Grants Pass by a gravity system. Mr. Blakeley has taken the preliminary steps toward the organization of an irrigation district, petitions for that purpose being circulated and signed by a considerable number of people. It is the claim of Mr. Blakeley and his associates that sufficient water can be gathered at the head of the Applegate to cover 40,000 acres of land, and the topography of the country is such as to make a large storage reservoir feasible and without any great engineering difficulties.

The coming of irrigation from some source is as certain as the sunrise. The values of fruit lands are constantly being advanced by the demands of newcomers.

Whatever plan of development is adopted by the local irrigation company, if it goes through as projected it will mean much to the city and vicinity, for it will put a large amount of cash into circulation, to say nothing of the appreciation of the land and the increased attractiveness of the region for investors.

### MOUCHERS ARE MOVED BY LOCAL POLICEMEN

The police force here has been busy during the past few days looking up and giving marching orders to a number of fellows who have been accumulating the wherewithal to procure food and drink—principally drink—by the simple process of asking some easy-looking mark for the price of a meal.

Wednesday a couple of the gentry were escorted to the city limits and this morning two more were given the "high ball." Besides, there are several others who have been notified that some other town would be a more congenial habitat.

The police force is making every effort to keep down lawlessness and have succeeded very well, considering the small force and the influx of undesirables drawn here by the activity in the labor market. Where ever unskilled labor is in demand the harpies who prey upon that class of people are to be found, and Medford is fortunate in being practically exempt from their presence.

### MAN LOSES HIS FORTUNE WHEN HIS SHOP BURNS

ASOTIN, Wash., May 20.—When Philliman Ramsdale lost his blacksmith shop in a fire Monday night he also lost his fortune. The smithy had over \$500 hidden in a keg partly filled with nails and serapiron, preferring to leave his money hidden rather than trust it to a bank. The heat of the fire melted the gold and iron together, and when Ramsdale found his hoard today it presented a sorry sight. The blacksmith is now looking for a friendly smelterman to return his savings to him.

### Strike Ends.

BETHLEHEM, Pa., May 20.—The strike of the laborers in the Bethlehem steel plant, declared May 4, has been ended.

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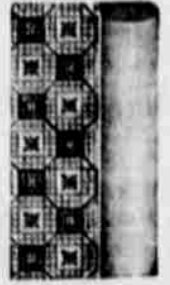


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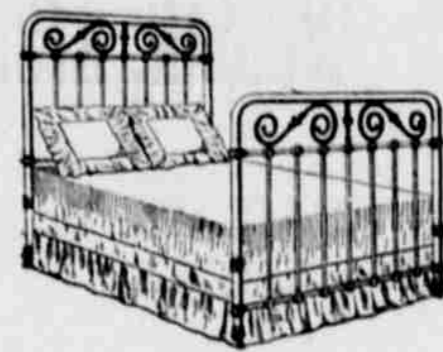
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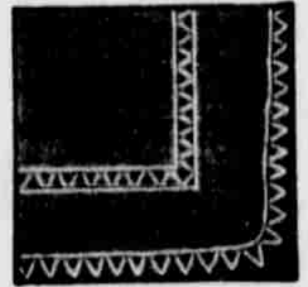
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**Married Three Sisters.**  
LEBANON, Pa., May 20.—Mrs. Nancy Neal, 82 years old, whose husband died several years ago, is dead. She was the third sister who married Neal. The oldest sister, to whom Neal was engaged, died, and he then married the next oldest. She died and he married her widowed sister, and at her death he married the youngest, who had already been married twice.

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