

## PEAR BLIGHT AND ITS CONTROL UPON THE PACIFIC COAST

This is the Fourteenth 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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especially for the Medford Mail  
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### SUMMARY OF PRECEDING CHAPTERS.

To those who have read the preceding chapters carefully, it may seem unnecessary to add anything more, as it is believed that all of the important facts about pear blight have been clearly stated. However, a resume will bring before us all the pertinent facts so that the reader may see at a glance what he may want to know without reading the text again.

1. The history of pear blight dates from the year 1780; the first record was published in 1794 in the transactions of the Massachusetts Society for the Promotion of Agriculture. This first paper on pear blight gave to the highlands of the upper Hudson the distinction of being the birthplace of the disease. However, at the time of the discovery, the disease had a wider spread throughout the New England states than has been recorded.

2. The disease, known as pear blight, is not known outside of North America. Europe, Asia, Australia and all other parts of the known world are free from the disease.

3. The true character of the disease was worked out by Professor T. J. Burrell of the University of Illinois in 1878, and was published to the world in 1880. Dr. Burrell found that the disease is caused by a small germ belonging to the great family of bacteria, which are minute, microscopic plants, the smallest vegetable organisms in the world. The pear blight bacillus is only 1-25,000 of an inch in diameter, and about 1-25,000 of an inch in length; under the microscope, when magnified 1000 diameters, its appearance is that of a hyphen, "—".

4. The pear blight germ attacks all species belonging to the pome or apple family, and also in: infects plums and the apricot. Among the cultivated fruits, therefore, it attacks the apple, pear, quince, loquat, plum and apricot. The following wild fruits indigenous to the Pacific coast states are also attacked by it. I shall give the common names and after them the botanical or scientific names so that students of botany may be able to look them up:

- (1) Service berry or June berry (*Amelanchier alnifolia*).
- (2) Thorn apple or haw (*Eragrostis douglasii*).
- (3) Christmas berry or Toyon (*Heteromeles arbutifolia*).
- (4) Wild pear or apple (*Pyrus rivularis*).
- (5) Mountain ash or rowan (*Sorbus occidentalis*).

There are many more species of the above genera to be found in the eastern and southern states, but a knowledge of the fact that all pome fruits blight should be sufficient.

5. The damage by blight in the eastern and southern states has been such that practically all of the better varieties of pears have gone out and commercial pear growing is an industry of the past.

6. The blight has spread into every known section of the United States, Southern Canada and Northern Mexico; only a very few small districts still remaining free from it.

7. The first appearance of the blight is made evident by the blossoms and young shoots becoming withered and black, finally drying up. Later, branches and limbs, as well as the bodies and root system become infected. Even the fruit may become infected and wither away.

8. The infections first noted in the spring come from holdover cases which have resulted from the previous year's infection. These holdovers may be found in the larger limbs, bodies and roots of the pear, apple, quince, loquat and even our wild fruits, though less frequently. During the blossoming period these holdovers ooze and this gummy substance, which is filled with the bacteria, become points for the starting of new infections in the blossoms and twigs.

9. The germs from the holdovers are carried about by bees and other insects. Biting and sucking insects cause infections in the young twigs and even the bodies. Sapsuckers, or woodpeckers, may also spread the blight. The use of pruning tools, not disinfected, also spreads it. The blight may also enter small growth cracks in the twigs, limbs, bodies or roots.

10. Weather conditions favor the spread of blight, as well as favoring

infection. Dry weather tends to prevent, not only the spread of infection from tree to tree, but also the spread of the disease in the tree itself. It is as easy to understand this as it is to understand that dry weather prevents growth and germination of seeds and plants.

11. Thunder, lightning and other atmospheric disturbances have no influence whatever on the disease known as pear blight. The precipitation which accompanies them is the only factor besides warmth.

12. The only way to control blight is to remove all cases of hold-over before the blossoming period begins. Hold-overs removed during the blossom period do not insure that some infection has not taken place from them. To remove holdovers, or rather to find them, on the rough bodies use a gouge or other instrument with which to expose the tissues beneath. A water-soaked, reddish condition of the soft bark indicates infection which should be antiseptically removed.

13. The antiseptic to be used should be bichloride of mercury, or corrosive sublimate, and use no other. This disinfectant should be used at a strength of 1 to 1000 or perhaps stronger, but never weaker. The use of the various substitutes is a senseless practice, as there is nothing cheaper or more effective as a disinfectant than bichloride of mercury. It is a deadly poison and must be kept away from children and the containers should be plainly labeled so that unsuspecting persons may not be poisoned.

14. There are no remedies for pear blight, and all so-called patent washes or other "remedies" should be avoided. Anyone who claims to have a cure for pear blight is a "fake" and should be treated accordingly. Those having "remedies" for sale have no standing whatever, if they had they would not oppose every scientific fact known.

15. Summer cutting of blight should always be done, but the work to be effective must be done carefully. Always be sure to get below or above the point of infection. If infection is found in a fruit spur or water sprout never break them off unless you know how far the infection has gone. There is no further danger in the J.C.D. spur, but rather in the infection which has advanced beyond it. Breaking off the spur and then applying the disinfectant is not eradicating the blight. Never leave an infection until you know that there is no further danger from it. Remember that there is no such thing as "pretty good work;" the work is either good or bad.

16. In order to render the fighting of pear blight more easy, trees should be pruned in the vase or open head form. Never grow a tree with a main leader or center. Keep all water sprouts and fruit spurs off the body and main limbs of the tree. Let no water sprouts come up from the crown of the tree or the root system.

17. When blight is prevalent or when seasons conducive to blight occur, extreme caution should be used in the matter of using stable manure, commercial fertilizer or applying too much water. Irrigation practice should be studied carefully not only in its connection with blight control, but with the benefits or injuries which may result to the soil.

18. The only way to keep blight under control is to increase the inspection and make it rigid. If a grower is caught experimenting or not following out the directions for eradicating blight according to the letter of the law, force him by law to do what the inspector has ordered. I believe that besides the regular corps of inspectors we should have perhaps 40 or 50 volunteer inspectors who will look after their own interests by investigating the condition of neighboring orchards. There is no reason why we cannot get such a corps of men who will act. Their appointment may be made in the regular way, making them officers of the law having the right to enter upon a neighbor's premises. If this had been done the past year, several infection centers would have been wiped out, and there would have been no infection and a good many dollars saved.

19. Lastly, in closing permit me to say that as individuals you have a right and a duty to follow the advice and instructions which have been given you for eradicating and controlling blight. A government officer, who has had more technical and practical experience all over the United States for a period of years, certainly knows the situation and there is no reason for doubting his words. As a friend, I ask you all not to trifle with blight; it is too serious a

## COFFROTH'S RUN OF BAD LUCK

Unusually Quiet Four Weeks Precede Big Fight in Frisco—Bitter Pills Handed Out to Fight Promoter.

SAN FRANCISCO, Cal., May 25.—Any one desiring a brand-new "jinx," guaranteed to wear, can have it for the asking by applying to James Windermere Coffroth, Shasta and Sunshine clubs. Ever since the John-Ketchel fight, in which Ketchel lost three teeth, and a few tears, and Johnson did some ground and lofty tumbling for the benefit of the pictures, Jim has been down on his luck. Never having been a believer in the sign of the rabbit's foot or of the cross-eyed, red-headed girl, he has been loth to admit that he is possessed of a "jinx," but at last he has been compelled to "fess up."

The little imp of bad luck got on the job while Coffroth was dickering for the biggest job of his career—the promotion of the Jeffries-Johnson fight. The loss of the contest was a bitter pill, but there were more to come. A great light suddenly came over District Attorney Bullock of San Mateo county and Coffroth had to transfer the Papke-Thomas affair from Solma to San Francisco, thereby knocking himself out of an extra match for May.

Call Coffroth Fakir. On top of this came that awful "fight" last Thursday night. And now the supervisors, some of them, are putting the boot to Jim, while he is down, accusing him of being a "fakir" and of being in on the deal to boost the prices of admission above the advertised figures by keeping his box office closed and sending scalpers into the crowd.

Jim believes the "jinx" will be at it as soon as the decision of the San Mateo county court in his Colma test case is handed down.

Not counting the amateur shows and the daily chatter about the big fight, local boxing will be unusually quiet for the next four weeks. The one break in the hiatus will come on the night of May 27, when, according to present plans, Jeffries will give an exhibition at the Pacific club's show, boxing three rounds each with Bob Armstrong and Joe Hoyinski. Following that there will be nothing doing until the Landford-Ketchel contest, June 18.

Gathering of Stars. If Jeffries' date for Friday night is kept and the others expected to appear are on hand, there will be quite a gathering of stars and ex-stars. With Jeffries, Armstrong and Hoyinski in the ring and Jim orbett as a possible referee, the attraction will be great, but further interest may be added by Jack Johnson's presence as a spectator. Johnson is seriously considering attending the show to get a hint on Jeffries' condition. The negro is from Missouri when it comes to tawes of Jeffries' great condition, but a surprise will be in store for him if he decides to attend.

A day of rest and a day of play now seems to be Jeffries' program, despite his frequent announcements that he intended to box daily. Yesterday was a day of rest, the big fellow going fishing after doing a few miles on the road. The coming of Gutch and orbett it is anticipated will see the last of Jeffries' loafing, the expectation being that in the month remaining from the time of their arrival until the day of the fight Jeffries will attend strictly to business. As Johnson plans to begin his strenuous work about the same time, both camps should be mightily lively throughout the month of June.

Portland Teamsters to Strike. PORTLAND, Or., May 25.—Four hundred Portland teamsters today announced their intention to strike for higher wages June 1. The union, which includes these men as members, numbers 95 per cent of the team drivers employed in the city.

NOTICE TO STOCKHOLDERS. Notice is hereby given that the annual meeting of stockholders of the Pacific and Eastern Railway will be held at the office of the company, in Medford, Oregon, on Monday, June 6, 1910, at 10 o'clock a. m. By order of the President, G. P. HUMPHREY, Secretary.

matter. The value of the fruit interests in the Rogue River valley is too great to be trifled away by individuals who have neither knowledge nor practice sufficient to devise more efficient means than have already been worked out by the pathologists of the United States department of agriculture, whose entire energy is given to the practical side of fighting diseases. You have an United States department of agriculture, therefore, respect the advice it is able to give you through its agents.

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### NEW TEACHERS CHOSEN FOR KLAMATH FALLS

KLAMATH FALLS, Or., May 25.—Willis E. Faught has been elected principal of the Klamath county high school for the term of 1910-11.

He succeeds Professor John T. Butcher, who has been principal of the high school for the past two years. The other teachers selected are C. A. Howard and Miss Helen Conrey. There are three other teachers to select before the high school faculty is completed.

Work on School Building.

KLAMATH FALLS, Or., May 25.—Work commenced today on the

foundation for the \$30,000 public school on West Side Heights. L. N. Traver, of the contracting firm of Snook & Traver, arrived Sunday from Albany to take charge of the work.

# The Pasadena of Oregon

People of refinement; people with means; retired business men; professional men; college and university graduates, are coming to the Rogue River Valley by the score. Within the past two years almost a hundred Chicago and Evanston, Illinois, people have purchased homes near Medford, and nearly every one of them has a friend or two whom they hope to induce to come and locate in the valley.

New York, Philadelphia, Boston and many other eastern cities are almost if not quite as well represented, while St. Paul and Minneapolis have more representatives here than any other several cities combined.

Think these statements over and get your thinker going. Write to the undersigned or the Medford Commercial Club for detailed information about the country, and you will never have cause to regret it.

## Bearing Orchards Near Medford

Most of the producing orchards have been held in large holdings until recently. A few weeks ago the Eden Valley Orchard, containing 605 acres, was placed on the market in any desired acreage. We have been authorized to offer the bearing apples and pears for sale, and if you know anything about the country and want a desirable block of bearing trees, write or come soon. During the past week over \$150,000 worth of the property has been disposed of. It is located within two miles of Medford at an elevation of about 100 feet above the city and is one of the best kept orchards in the world. Parts of the orchard offered for sale have paid the owner over \$600 per acre per year for four years straight.

Do not come unless you are prepared to stay, for just so sure as you do come the combination of fat soil, grandeur of scenic beauty and Italian climate will steal you, body and soul. After one visit here you will be miserable any other place on earth.

# John D. Olwell

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