



Mr. D. Johnson, Forest, Ont.

The announcement that Mr. Johnson has been appointed to the newly created position of Dominion Fruit Commissioner has met with general approval. Note reference to Mr. Johnson published on page 133

of the eastern factories in 1913. In point of convenience, the elimination of the heavy barrel with the high freight and haulage charges, the leakage, freezing, and crystallization are all elements which any fruit grower will appreciate.

Scientific investigation is always slow. Progressive spray manufacturers employing the best chemical engineers obtainable, and the progressive fruit growers bent upon results, cooperating with the experiment stations with their equipment for research work, are right along bringing efficiency up to the minute.

Soluble Sulphur is a true spray efficiency up to the minute. The combination of the materials for spray purposes and the process of making are recognized as new and valuable, after most thorough investigation by the United States and Canadian patent offices and letters patent have been issued. Neither the discovery of the elements nor the fact that they would combine and form a soluble material is claimed, but the obstacles which have halted previous efforts to produce in a practical way a practical spray have been overcome by the invention of the soluble sulphur.

By cultivating early in the season fruit is better matured to a marketable size, and better coloring is secured; early cultivation also induces the fruit buds for next year's crop to form. The tree will grow with a steady, healthy growth, holding the sap at the top of the tree for the sustenance of the fruit buds. Early cultivation conserves the moisture. —W. T. Macoun, Ottawa.

Pears and Pear Culture

A. W. Cook, O.A.C., Guelph, Ont.

PRUNING pears must be done with the idea of securing fruit buds near centre of tree. This alleviates the tendency of large limbs to break under the strain of their crop. Remember to disinfect all large wounds, that are the result of pruning or other causes, with lime-sulphur solution or some other disinfect. Take the greatest care to thoroughly treat the pruning tools while going from one tree to another. If this is done it does not leave an opportunity for this disease to gain a foothold in the tree.

THIN THE FRUIT

When the tree reaches maturity and comes into the bearing state there can be a considerable amount of time saved in the thinning of the fruit by pruning off the fruit spurs. There is one disadvantage in this method when the orchard is located in a section that is known to have late frosts. As the pruning should be done before the leaves start there is apt to be enough fruit spurs left on the tree that has been late in maturing to give a yield of fruit while if no thinning had been done there probably would have been a light crop of fruit. However, taking into account this one disadvantage, pruning can be and should be practiced more throughout Ontario than it is. The pear, like many other varieties of fruit, can be made to yield more regularly by regular, systematic pruning and the thinning of the fruit each year.

The cultivation of the pear is very similar to that of the apple. Cultivation should commence as early in the spring as it is possible to do so. Cultivation should be very thorough and done systematically. It is very essential to keep a dust mulch at the surface to maintain the necessary moisture for proper plant and fruit development. As all fruits are composed mostly of water, the necessity of maintaining the soil moisture will at once be seen. This is the case in practically all orchards. The humus can to a large extent be enlarged by the use of cover crops. Among the best cover crops we have vetch, rye, rape, turnips and winter oats. The rye and vetch are sown in the later part of August so as to attain a good heavy crop. After this is ploughed in during the spring it is generally followed by rape or summer turnips.

In cultivating the orchard one should not continue it later than the latter part of June for the southern counties. If cultivation is kept up it induces large twig growth. If a high color is desired, this is a serious handicap. There has been a feeling amongst fruit growers in Ontario that certain chemical fer-

tilizers would produce highly colored fruit. From experiments conducted by the Ontario Agriculture College, it has been found that very little of the color is derived from the use of fertilizers. If one were to alternate the use of barnyard manures with commercial fertilizers it will be found more profitable than if either is used separately.

In some sections of the western states pears are put up almost exclusively in boxes for the fancy markets. In Canada, up to date, they have been handled very carelessly. This may be accounted for to a large extent from a large percentage of them being disposed of to the canning factories. The size of the package that has been used in the northwestern states is somewhat smaller than that of our standard apple boxes. The British Columbia growers use a box somewhat the same. The majority of pears that are marketed are usually put up in small baskets holding eleven quarts. This is used for the local trade. By using this size of a carrier the pear can be made to appear pleasing to the eye. However, if the fruit is to be shipped to a distant market it is best to pack it in a box that would be about half the size of our regular apple boxes. By doing this the pears present a better appearance upon reaching their destination, because they have been provided better protection. If one takes the care to pack regularly the fruit should always be wrapped. If the points here touched upon are borne in mind and followed out, pear growing can be made a success.

Fruit Tree Borers

I. F. Metcalf, B.S.A., Gore Bay, Ont.

An enemy of fruit trees that has done a great deal of damage is the borer. The presence of borers in a tree is indicated by the lack of growth and by the presence of sawdust like gnawings and excrement that are pushed out from their holes. These may not be detected until after the damage is done, unless the sod is kept away from the base of the tree. Frequently a tree will be entirely girdled before you are aware that the borers are working in the tree.

When the work of the borers is noticed the best remedy is to cut them out with a sharp knife, or a very flexible (copper) wire may be pushed in and they may be killed in that way. However, there are several ways of preventing this trouble. The idea is to prevent the female beetle from laying her eggs on the trunk of the tree. These eggs may be laid any time in the early spring, and would soon develop into the borers which would later on do the damage to the trees. Any pre-