

here, namely that of the fruit canning industry.

Within the past few years this industry has grown enormously, and has opened for the fruit grower a good market for his fruit, and one to which he can send his inferior grades with the surety of receiving a fair price for such. The canners will accept the best, and pay accordingly for it, but they will also find a use for the poorer fruit, and due to the growth of this industry, must be attributed in a large degree the marked improvement in the general quality of home grown fruit to be found on any of our city fruit markets.

Brief mention might be made of the recent efforts of the Provincial Fruit Branch and the Dominion Fruit Division to ascertain the feasibility of shipping peaches to the English markets. South Africa having developed this trade to a certain extent, an effort was made along the lines found most suitable by our brother colonists, and the results of these efforts suggest a good opening for some of our best and most enterprising growers. The fruit was picked when well colored but quite firm (almost hard), only the very finest fruits were selected, and that with the greatest care. They were then each wrapped in thin soft paper and surrounded with a liberal allowance of wood wool and packed one layer deep in boxes containing twenty to twenty-four fruits in each. They were shipped in iced cars and Atlantic refrigerator storage, and arrived in good condition on the London Covent Garden market. The prices secured for them indicate that there is an excellent opening for someone alive to this opportunity, though there are several important points that it would be well to be thoroughly acquainted with before venturing on such long distance shipments; such as the methods of business on Covent Garden market (the largest fruit market in the world), the best route to ship by, the agents to employ as salesmen, and many other minor factors, such as cartage, wharfage, portorage - relics of conservative business methods, which though cumbersome to the uninitiated, may be depended upon as being thoroughly sound.

In conclusion, a few figures might be of assistance, if not to the growers, perhaps to those who wish to buy. For general reckoning the following numbers of the different sizes of baskets can be shipped per one hundred pounds express tariff: Six eleven quart, seven nine quart, and twelve six quart.

There are several excellent cooperative marketing organizations in the tender fruit districts, which have greatly facilitated the disposal of the fruit, and at the same time improved the quality of the pack; and to-day with the combined influence of cooperative organization,

the canning industry and fruit inspection, there is no excuse, if indeed there ever was, for dishonestly packed fruit. Samples of such packing should be diligently tracked to their source, and the offender punished in no light manner.

Orchard Management

Gordon McKeen, Hauts Co., N.S.

A number of years ago it was thought that the size of the orchard should correspond with the number of live stock kept to maintain the soil fertility. Now many a large orchard is seen where the owner may keep only one cow.

In keeping the orchard up to its highest capacity the two most essential factors are cultivation and fertilization. Combine the two and the orchard will meet your bills. Among the different modern methods of maintaining the fer-



A Handy Tool in the Orchard

Grape hoe at work in the orchard of J. W. Smith, Winona. Note the way it can be worked in close to and around the trees, thus practically eliminating hand labor.

Photo by a rep. of The Canadian Horticulturist

tility the leading one is to first, in the spring, thoroughly prepare the land by ploughing and manuring, then once a week give it a good harrowing until the middle of June, then sow with vetches whose roots are rich in nitrogen. These vetches make a good mat and keep the tree rootlets safe should the ground be bare and the winter severe.

I do not advise the ploughing of the orchard late in the autumn, as it exposes quantities of the feeding roots to the action of the frost. It is better to wait until a suitable time in the spring. When that time arrives repeat the methods already mentioned with the exception of the manure, as the vetches will take its place.

One thing in the management of an orchard that many of us have not the nerve to try is thinning the overburdened trees after the fruit reaches quarter size. In this one must use judgment, as some varieties that do not overbear can easily

bring their fruit to maturity with a high percentage of number ones. In many other cases this is a necessary operation.

Pear Scab and Its Treatment

Dr. J. B. Dandeno, Bowmanville, Ont.

Pear scab is a very serious disease of the pear tree. It ranks, perhaps, second in importance to that of the twig or fire blight. When pear scab gains a good start it is exceedingly difficult, if not impossible, to clear it out of the orchard because of certain characteristics which this disease possesses. Apple scab is a relative of the pear scab, having a similar relation to it as beets have to mangels. Both are fungus parasites. They differ, however, in one important particular, and a knowledge of this peculiarity is essential to a successful warfare against the pear scab. This disease attacks the fruit, leaves, and branches, while the apple scab attacks only the fruit and the leaves. The apple scab does not attack the pear tree, nor does the pear scab attack the apple tree, as many people suppose. Apple scab yields readily to ordinary fungicides, mainly because it grows upon the surfaces and, therefore, can be reached with the spray liquid. Pear scab works on the twigs and small branches, burrowing under the bark and wintering over while in this condition. Because of this habit the fungicide can not readily be applied directly to the fungus. Moreover, serious damage is done to the twigs and branches, many of them becoming so "cankered" by the scab that death is the result. Pear scab is common in this locality, and much of the roughened appearance of the older branches is due to it.

For trees which are not seriously affected, the disease can be kept well in check by spraying with lime-sulphur and bordeaux just as for apple scab, with the addition of one application after the leaves drop in the fall. This should consist of strong lime-sulphur, or of a copper sulphate solution (not bordeaux) of suitable strength. In addition to this it would be wise to examine the trees to see if the branches have become affected. If they have, such branches should be pruned out and burned.

For trees whose branches are now more or less seriously affected, the pruning saw is the chief instrument. Prune out the worst, even to one-third of the total top, a similar portion next fall, and the remainder of the old top the following year. By this method sixty to seventy per cent. of the orchard may be saved. During this time the orchard should also be treated with fungicide as indicated in the preceding paragraph.

Pear scab gains an entrance to the branches during their first year's growth when they are green and delicate. After the corky bark is formed, entry is made only through wounds.