

succeed fairly well, so that it is not surprising that in this district there are probably more than half a million trees. One could not recommend, though, the planting of early varieties for commercial purposes. These varieties would be three weeks or a month later than those grown in the southern tier of counties, and would come in during the glut months, having none of the advantages of the apples of better varieties and better quality grown in the southern tier of counties. I see no hope, therefore, of a profitable apple business being conducted here, except along the general lines that would be recommended for the Ottawa and St. Lawrence Valley, District 4.

A FAVORED ORCHARD DISTRICT.

I have referred to the height of land running through the central portion of Ontario, beginning at Queenston and constituting the bluff from Queenston to Hamilton. This height of land, continuing, as it does, north to the Georgian Bay, slopes much more rapidly towards the east than it does towards the west, as it approaches the Georgian Bay, and it begins near Collingwood to once more take the high-cliff form similar to that between Queenston and Hamilton. It is upon the eastern slope of this height of land, near the Georgian Bay, that we find some of the finest orchards in the world. It is a happy blending of soil, situation and climate that makes it an ideal country in which to grow winter apples. Here new orchards are being planted very rapidly, and, as a general thing, the bearing orchards are composed of comparatively few varieties. The fruit-growers of the district had learned the lesson taught by the experience of the older orchardists in southern Ontario, and gave their orders so as to have, say, three, four or a half dozen varieties in their whole plantations. They also had sufficient confidence to plant in large blocks of ten, twenty or thirty acres, and are now reaping the reward of their forethought.

DIVIDENDS ON \$800 AN ACRE.

It is not an uncommon thing at all in this district to find large orchards that are paying dividends on a capitalization of five to eight hundred dollars an acre. When you consider that the land without trees is valued at from fifty to seventy-five dollars per acre, and that the cost of putting in an orchard and caring for it until it comes into bearing is probably not more than a hundred dollars per acre, it can readily be seen that the whole operation is a paying one for the farmer. The drawback is that he has to wait ten years for his dividends, and in this glorious age, when fortunes are being exchanged every few hours, ten years looks to be such a hopelessly long period that even the patient farmer sometimes dismisses the scheme in disgust.

PROFITABLE ORCHARDING ALONG LAKE ONTARIO.

The counties north of Lake Ontario, styled District No. 3, owe their high reputation as an apple region partly to the climate, partly to the geological formation, and partly to the shrewdness of the orchardists in learning lessons from the experience of the older orchardists in the west. Geologically, the best apple orchards in this district are in what is known as the Iroquois Basin, extending to the high land at varying distances from the present shore of Lake Ontario. This land is extremely fertile, and has the climatic advantages of the lower situation protected by the high ground to the north. Many very excellent orchards, however, are grown on the high land just beyond this basin till it merges into district 4, where only the hardiest trees will grow.

LARGE ORCHARDS, FEW VARIETIES.

Large orchards are the rule in District 3. The varieties have been well selected to meet the requirements of a winter trade. Orcharding is a specialty with many growers, and the enterprise is considered extremely profitable. This district is well adapted to the usual methods of the apple operators. Owing to the larger orchards and the fewer varieties, the cost of picking and packing is much smaller than in District No. 2. The recommendation here is, of course, to continue along similar lines, planting the hardy winter varieties.

Cold storage is quite unnecessary for winter fruit in districts No. 2 and 3. They are, consequently, twenty-five cents a barrel, at least, ahead of winter varieties grown anywhere else to the south. The business, therefore, of growing apples might possibly, though it is exceedingly improbable, become unprofitable in New York State, while the growers in Districts 2 and 3 could continue with a margin of twenty-five cents per barrel, at least.

DESSERT APPLES TO PERFECTION.

District No. 4 contains probably much less than a million apple trees, many of these of unsuitable varieties. The area covered is extremely large, so that, with the exception of a few small sections in this district, it cannot be regarded seriously in the light of a business.

Nevertheless, there is no part of Canada where a larger return might be made than in this district. They grow to perfection here the Fameuse, the McIntosh Red and the Wealthy. In addition to these, the Alexander and the Wolfe River can be grown quite profitably; they are much better apples and better keepers than when grown further south. Nevertheless, they are not of extraordinary quality. The Fameuse and the McIntosh Red stand at the head as dessert apples. If the excellence of these apples as a dessert fruit were recognized, and if the growers would but pack in boxes after the style of the Pacific Slope fruit, the business would be extremely profitable. There is a splendid opening for any packers who will take up the packing of these apples in this district and cater to the very high class of customers—those who are willing and able to pay a large price for a most excellent article.

SUMMARY.

To sum up the situation generally, I should recommend that District 1, or the counties along Lake Erie, should devote themselves very largely to early fruit.

The pressing need in District No. 2, or the counties along Lake Huron, is better organization for harvesting and selling. Co-operative associations are an absolute necessity in this district of small orchards with many varieties.

What has been said with reference to the Ottawa and St. Lawrence Valleys is equally applicable to many parts of the central high counties of South Grey, Wellington, Waterloo and Perth.

The Georgian Bay and Lake Ontario counties, District No. 3, will undoubtedly devote themselves to the winter varieties, and we can look for a large increase in the acreage of orchards on these lines.

I have less hope that many new orchards will be planted in district No. 4. Nevertheless, if co-operative associations were formed, that would induce a somewhat better culture, and introduce box-packing, fruit-growing would become one of the leading industries.

The Forest City.

City Park Commissioner Pearce, of London, Ont., estimates that there are in the neighborhood of 20,000 trees in the streets of the Canadian city on the Thames. He has taken out 3,000 in the last three years, and the diminution is scarcely perceptible. A mistake made was the planting of so many trees of the one variety and too closely together. He favors planting different streets with trees of various kinds. He likes the Norway maple very much, and prefers nursery trees to those taken from the forest, a large proportion of which die.

The Sooty Fungus.

Fruit-growers have this year found the sooty fungus much more prevalent than usual. Indeed, in Western Ontario it has been almost as serious a pest as the apple-scab. This fungus, while not causing the same material waste as the apple-scab, so discolours the outside of the apple that it renders an apple, otherwise fairly good, almost unsalable. It appears to develop very rapidly after the barrels are packed; much more so than the apple-scab. A. McNEILL.

APIARY.

Feeding Bees in Winter.

While all bees should long before this time of year be snugly tucked away in their winter quarters, with plenty of honey within their reach to carry them through until spring, there are almost sure to be a few hives here and there which, from one cause or another, have entered the winter "light in stores," and, unless something be done to help them, will starve to death before the winter is over. Perhaps their owner neglected them in the early fall, thinking he would have more time to attend to them later on, or the bees may have become the property late in the season of some person who knew nothing of their requirements, and has only very lately become aware of their condition. In either case the bees must have feed given them, if they are to be brought through the winter. If the owner of the hungry bees has any combs full of honey in his possession and the combs on which the bees are wintering are of the movable variety, his best plan is to remove a comb from near the outer side of the hive, if this can be done without breaking the cluster of bees, and to put a full comb in place of the empty one, getting it as near the bees as possible. If the comb cannot be got into the hive, the next best plan is to lay it flat on top of the frames, placing a couple of narrow strips of wood under it to hold it up from the frames half an inch or so, so that the bees may get at all the under side of it. When the bees have emptied the under side, turn it over; and when both sides are empty remove it and place on another full

one. If no combs of honey are to be had, it will be necessary to make what is known as hard candy for the bees. If well made, this candy will winter the bees just as successfully as honey will. To make the candy, place granulated sugar in a vessel and add a little water—just enough to slightly wet the sugar. Melt it on the stove and boil it until it will become hard and white when taken from the stove and allowed to cool. Stir it more or less while boiling. To tell when it is "done," test it occasionally by taking a little from the stove and stirring it on a dish until cold. When it cools hard, smooth, white and dry, it is all right. When it reaches this stage, remove it from the stove and stir while cooling. If not stirred it will harden like taffy instead of like candy, and will daub the bees when they go to eat it. When it has cooled to the point where it will just nicely pour, it should be poured into dishes or pans that will make cakes of convenient size for laying on top of the frames of the hive. These cakes are laid on the frames in the same manner as the combs spoken of above. About ten or fifteen pounds of this candy should suffice for an ordinary colony of bees, but they should be examined again early in the spring and given more if they are anyway nearly out. The principal thing to be careful of in making hard candy is to not let it get burnt. The least sign of burning renders it unfit for bee food, and it will kill them if given to them. Better make a small lot first to learn how. After bees have been given honey or candy, they should be covered up well with chaff or leaves if wintered outside, and should then be left severely alone until there is reason to believe their supply of food may be nearly exhausted.

Feeding bees in cold weather is only making the best of a bad job, but if you find yourself with the bad job on your hands, it is better to make the best of it than not to make anything of it, and bees wintered on candy are just as good, other things being equal, as any other bees; and are worth a good deal more than bees that starve to death in February. E. G. H.

THE FARM BULLETIN.

"The Eastern Townships."

What is known as the Eastern Townships is that district of country in the Province of Quebec situated south of the St. Lawrence river, and includes practically the whole southern and eastern counties of the Province. These townships have been for years celebrated as one of the best dairy sections of the Dominion, as also they control the bulk of the maple sugar manufactured in Canada to-day.

The country is naturally adapted for the pasturing of sheep and other stock, as its numberless hills always contain plenty of grass and water all through the summer season; and when other parts of Canada suffer for want of water these townships enjoy an abundance of it, from the numerous springs and brooks to be found everywhere.

Within the last number of years considerable has been done along the line of breeding pure-bred cattle, preferably Ayrshires, Holsteins and Jerseys, although some fine herds of Shorthorns and Herefords are to be found. Cheese factories are becoming less in evidence every year, and are being replaced by creameries of the most modern type, and the farmers are realizing the benefits to be derived from advanced dairying. They were among the first to take up the idea of the Government cow-testing societies which have been advocated, and a number of successful societies have been conducted during the year.

Farms in these sections are considered inadequate unless they contain a good acreage of sugar-maple trees, as this is one of the leading and most profitable industries at the present time, and will continue to be, as almost every farmer has his sugar house, with a complete equipment for manufacturing pure maple sugar and syrup, from at least six hundred to twelve hundred trees, and good prices are realized at both the local and foreign markets for their produce.

Sherbrooke, a city with a population of some twelve or fourteen thousand, is considered the leading market in this district, although there are a number of smaller ones also. This city is situated on the main line of the Grand Trunk Railway, between Montreal and Portland, at the junction of the Magog and St. Francis rivers, and has abundance of water power, as its numerous factories indicate. It can be reached by the Quebec Central Railway, the Boston and Maine, the Canadian Pacific and the Grand Trunk Railways, and has one of the best markets in Quebec. Here also is held every year in September one of the leading exhibitions in the Dominion for all kinds of farm produce and live stock, which is visited annually by thousands of people from all parts of Canada and the United States. J. H. S. Quebec.

How to Get or Sell Supplies.

Judging by correspondence we are receiving, it would be a good opportunity for farmers who want to sell or buy hay or corn in quantities, to make frequent use of our "Want and For Sale" advt. column.