

a sight of imposing beauty. Such Kings, Gravensteins, Baxters and Wolf Rivers! And such apples of all the other varieties, green and russet and red!

In his strawberry paper, Mr. A. E. Dewar gave us the best bit of practical notion on local work we have so far had. He is a big grower himself, and knows how. The Chair wanted an expression from him as to the Island's capabilities in growing the favorite berry. "We can grow

the best strawberry in North America," was the modest way he put it. And he's right.

Mr. C. R. Dickey has a little gold mine in cranberries. His address made us sit up straight and listen. Thirty-seven barrels this year off half an acre, was his assurance. And \$36 per barrel they fetched last season in Montreal.

There was a great deal of routine matter transacted at the Annual. The reports, resolutions, recommends, are usually of a sort. We

will not burden the page with them. The officiality is continued. We protested, but in vain, against our continuance in the chair; then we accepted the soft seat with resignation, and promised faithful service for the new year, but not a day longer. Thus, the Island convention was pulled off in two days. And many say—what won't people say, anyway?—that it was one of the best.

A. E. BURKE.

Future of the Apple in Ontario.

[Address by A. McNeill, Chief of the Fruit Division, Ottawa, before the Fruit-growers' Association of Ontario, November, 1906.]

The future of the apple trade in Ontario rests upon several natural conditions—soil, climate, markets, transportation, and the trend of trade—as well as upon the character of the men who are growing the fruit and the character of the men who are handling it. I will also assume that men will do what is for their best interests, although I am perfectly well aware that not infrequently this rule of action is violated. On the whole, it would be more correct, perhaps, to say that I am endeavoring to show the lines along which the apple industry should develop, rather than the actual development that will take place.

Of the various elements that enter into this problem, I propose to select a few, the importance of which has been overlooked, or which are not likely to be handled by others. Some of the most important I will pass over with just a simple reference; transportation, for instance, is a most important element in connection with the future development of the apple industry. Soil is also another important element. Fortunately here I need say little, inasmuch as there are few parts of Ontario where the soil is unsuitable for the culture of apples. Some parts may be slightly better than others; but, on the other hand, the conditions are so uniform and the question so local that it may fairly well be omitted in an investigation of this kind.

GEOGRAPHY, TOPOGRAPHY AND VARIETIES

I shall confine myself more particularly to questions of climate and the selection of suitable varieties for local conditions, and the trend of trade, with special reference to the markets. For the purpose of developing these points, I have drawn a map, coloring the various portions of it to suit the conditions which I believe prevail with reference to temperature and climate generally. I will use this map for the purpose of drawing your attention to certain physical features that have a most important bearing on the development of apples, a bearing that has been entirely overlooked in the planting of the orchards of Ontario. Nevertheless, by a process of the survival of the fittest, the trend of apple-orcharding is shaping itself very nearly as the physical features of the Province would dictate, and, in any case, the development of markets and the distribution of population has proceeded so rapidly within the last quarter of a century that those who planted the orchards twenty-five years ago can scarcely be blamed if they did not foresee some of the results that were inevitable, now that their orchards should be in full bearing.

APPLES AND ALTITUDES.

I would first draw attention to the heights of land. This element in the determination of climate is not a striking one in Ontario. Nevertheless, the net results of height above the sea-level are just as definite and just as effective as in mountainous districts such as British Columbia. The traveller in British Columbia can stand at the foot of a slope and pick tender flowers, but raising his eyes but a few hundred feet, he can see the whole mountain top covered with snow, and, perhaps, even with glaciers that never disappear. The result is brought about solely by the differences in the height between the base of the mountain and its top.

The slopes in Ontario are so gradual that we are not aware of the heights we reach. I would, therefore, play the schoolmaster to the extent of noting that Lake Huron is 575 feet above the sea-level, Lake Erie 565, and Lake Ontario 262 feet. Compared with this, we have: Chatham 589 feet, London 805, Brantford 705, Stratford 1,189, Durham 1,687, Walkerton 931, Mount Forest 1,348, Orangeville 1,557, Lindsay 854, Peterboro 649, Ottawa 215, Montreal 47.

FOUR NATURAL DIVISIONS OF ONTARIO'S FRUIT AREA.

By a glance at the outline map accompanying the reader will observe that four natural divisions have been indicated.

EXPLANATORY NOTES.

District No. 1 grows all the tender fruits, such as peaches, apricots, dwarf pears of all varieties, and all varieties of apples, plums, pears, cherries, etc. This region is specially adapted to early fruits and vegetables, being from ten

days to two weeks ahead of the districts surrounding the large markets.

District No. 2 grows excellent winter apples of all varieties to perfection. It is characterized by a large number of comparatively small orchards containing numerous varieties of fruit. Many portions are excellently adapted for plum and pear culture.

District No. 3 is specially adapted for winter apples. There are many large orchards especially on the shore of Lake Ontario. The farmers here are making a specialty of orcharding. District 3 (a), on the Nottawasaga Bay should be classed with District 3, having large orchards of comparatively few varieties of winter fruit.

In District 4 the ordinary winter varieties are not hardy. This district, however, grows Fameuse, McIntosh Red, Wealthy and Wolfe River to perfection. The first two are dessert apples that, if properly packed, should command the very highest prices as dessert apples. District 4 (a), the midland counties of Western Ontario, on account of their altitude, must be classed with District 4. In this district, the ordinary winter varieties grown in the adjacent counties are not hardy.

The height of land embracing the Counties of Dufferin, Wellington, Perth and Waterloo renders the winter climate frequently so severe as to make it impossible to grow the tenderer varieties of apple trees. We are, therefore, obliged to put these counties in the same apple district as the northern portion of the Province, which I have designated as District No. 4, and which includes the Valley of the Ottawa and St. Lawrence Valley, roughly, as far as Kingston. For the purpose of the apple industry, I need only consider the more favored portions of this District No. 4, where they grow the Fameuse and McIntosh Red, the Wolfe River, Duchess and Wealthy. Such varieties as the Spy, Baldwin, Cranberry Pippin, King, etc., are altogether too tender for this area, so that this district is not considered in the production of what we call winter varieties.

The counties bordering on the north shore of Lake Ontario, together with a small portion of the County of Grey bordering on Georgian Bay, and one or two townships in the County of Dufferin, designated District No. 3, have that happy-medium climate that renders them peculiarly well fitted for the winter varieties. The temperature is not so severe as to cause serious loss from winter-killing, and the summer temperature not so high as to prematurely ripen these varieties.

The counties bordering on Lake Huron, and the second tier of counties north of Lake Erie, named District No. 2, are also admirably suited in cli-

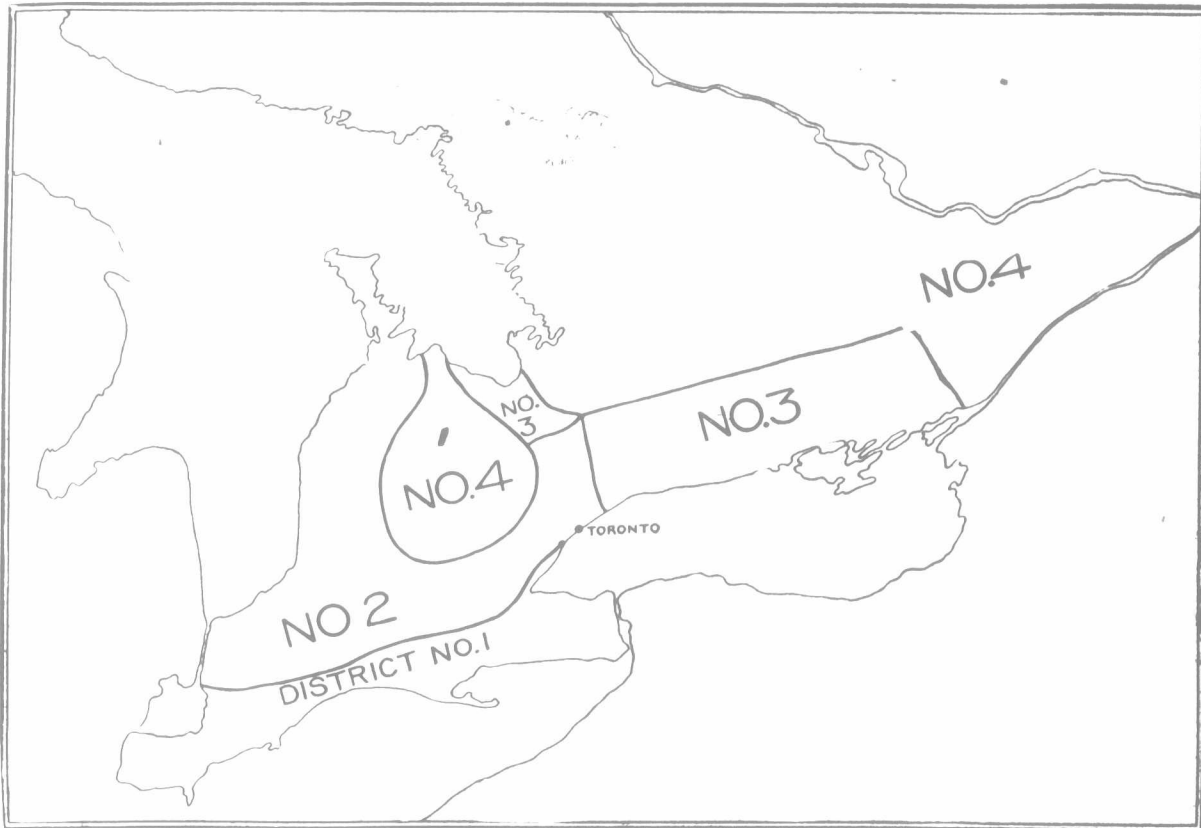
mate and soil for the production of winter varieties, but the orchards of these districts were planted under different conditions that have induced me to place them in a separate class.

PECULIAR CONDITIONS IN THE LAKE ERIE COUNTIES.

We now come to the counties bordering directly on Lake Erie, which I have grouped under District No. 1. This may be called the tender-fruit belt of Ontario, where peaches, cherries, tomatoes and all tender fruits are grown with the greatest success. The apple also grows here to perfection. Nevertheless, it is a matter of notoriety that, though the earliest orchards of Canada were planted in this district, and though it made its reputation as an apple-growing district long years before the other portions of the Province were settled, of late years the industry has fallen into disrepute. Splendid old orchards, in perfect health and vigor, and bearing a full crop, have been chopped down to make way for ordinary grain crops, and even in years of comparative scarcity, as last year and this, thousands of barrels of apples have been allowed to go to waste in the orchards in this district. Some of the finest of the apples, if not the very finest exhibited at the recent Horticultural Exhibition in Toronto, came from this district. Such a condition of affairs calls for some explanation. If the fruit can be grown to perfection, and if orcharding is profitable, why is it that we find this waste of fruit and want of confidence in the apple industry?

THE SOUTHERN FRUIT LACKS KEEPING QUALITY.

The explanation is partly a question of climatology and partly an economic question. As a matter of climate, this District No. 1 has a mean annual temperature many degrees higher than districts 3 and 4. The Fameuse apple will be in full bloom in Chatham early in May; the same variety will not be in bloom in Lindsay for two weeks later. The fruit-grower in Chatham does not fear serious frost until the first of November, probably until the 10th or 15th of November. The fruit-grower north of Lake Ontario is very anxious indeed if he has any apples exposed the last week of October. It will thus be seen that apples north of Lake Ontario begin to grow nearly two weeks later than in the southern parts of Ontario. It will also be noted that in District No. 3 they do not have nearly so high a temperature during the summer months, and consequently are nearly a month later in reaching the same degree of maturity as the varieties in District No. 1. In consequence of this, all the com-



Province of Ontario's Apple Districts.