

WHAT OTHER PROVINCES ARE DOING.

The first evening session was devoted to addresses by A. G. Turney, Provincial Horticulturist, Fredericton, N. B.; W. T. Macoun, Dominion Horticulturist, Ottawa; Norman Jack, Chateauguay Basin, Que.; and Harold Jones, Maitland, Ont., on fruit-growing in New Brunswick, Nova Scotia, Quebec, and British Columbia, respectively.

Mr. Turney outlined the possibilities of New Brunswick, showing that as yet the industry was in its infancy, and few men depended upon it for a living, yet he believed that Fameuse, McIntosh, Rethel, Dudley, Duchess, Wealthy, King, Spy and Ribston apples could be grown successfully, and, as land could be obtained for a very low price, he thought it a good place for investment in fruit lands. It has an immense geographical advantage, being close to the Old Country market, which is a great consideration.

The Province of Nova Scotia has the longest horticultural history of any part of Canada, dating back to 1668. The fruit-growing districts of the Cornwallis and Annapolis Valleys are well known. Apples, pears, plums, cherries and small fruits, and, to a limited extent, peaches and grapes are grown in these valleys. Gravenstein, Tompkins, King, Ribston, Blenheim, Baldwin, Northern Spy, Rhode Island Greening, Golden Russet, Nonpareil and Wagener apples do well in Nova Scotia. Nova Scotia, in climate, price of land, and access to market, compares very favorably with the other Provinces, and is making rapid strides in fruit-growing, according to Mr. Macoun.

Many of those present evinced surprise when Norman Jack stated that apples could be successfully grown in nearly every county of the Province of Quebec. Fifty years ago, said Mr. Jack, it was considered lack of wisdom to plant a commercial orchard in Quebec. Fameuse, St. Lawrence, McIntosh Red and Alexander, are varieties now recommended by Mr. Jack for planting in Quebec on a commercial scale. Wealthy also does well. Other fruits, as pears, plums and small fruits, succeed well in Quebec.

Mr. Jones, in speaking of British Columbia's fruit industry, praised their well-organized methods of packing and handling their fruit. Apples, cherries and plums are doing very well in the Province, as are also small fruits. Insect pests and fungous diseases, he said, were not very troublesome, aphids or cherry slugs being the most numerous. Orchards in British Columbia pay expenses, and show a profit at eight years of age. In some parts the temperature falls too low for tender varieties of apples, and trees were noticed by him showing the effects of frosts. He was quite satisfied to return to Ontario, where he thinks we have ideal fruit-growing conditions, although British Columbia, like every other district, has its own peculiar advantages.

PEACH DISEASE IN ONTARIO.

L. Caesar, B. S. A., of the O. A. C., Guelph, gave one of the best addresses of the convention, on the various diseases of the peach in Ontario. He discussed Leaf-curl, Brown Rot, Scab or Black Spot, Gum Disease and Cankers, Powdery Mildew, Crown Gall, Yellows and Little Peach. The last two named diseases are the worst enemies of the peach, as they cannot be controlled by spraying, but by a system of careful inspection by thoroughly competent men, and the prompt destruction of all trees showing symptoms of the disease, these two can be controlled quite successfully. The large number of diseases listed would indicate that peach-growing is a difficult proposition, but nearly all of them can be overcome by careful cultivation and thorough spraying. Most of those present showed more interest in the discussion of Little Peach and Yellows, and for this reason special mention is made of these diseases. Yellows causes the premature ripening of fruit, which is highly-colored and blotched with red on the outside, and the inside is also more or less streaked with red from the skin to the pit. The diseased fruit the first year is usually larger than normal, but the following years it gradually becomes smaller. Well-advanced diseased trees show dormant or concealed buds on the main branches, which often burst into little slender shoots. Leaves often turn yellow and become curled and clustered. During the early stages, however, the foliage is usually green, but the following year the yellow tinge will show, and more fruit will be affected. The disease will sometimes kill a tree in two or three years, but they usually linger four or five years.

Unlike the Yellows, the fruit of trees affected by Little Peach ripens later than normal, and is usually somewhat smaller. This must not, however, be relied upon too much, because affected trees have been frequently found on which the fruit ripened near the usual time, and was about as large as healthy fruit. The second year the fruit will be much smaller. There is no high coloring or blotching of the fruit, as in Yellows. The most characteristic and reliable symptom of the disease is the peculiar way in which the leaves curl and cluster, and turn an unhealthy yellowish

and often reddish color. Most of these leaves appear shorter and flatter than usual, and they turn down at the tip in a claw-like manner. It takes some experience and care to recognize the disease. Often trees are noticed with all the outer or terminal foliage reddish and sickly, but the central and inner foliage green, vigorous and normal. Such trees are not attacked by Little Peach or Yellows, but are lacking in vigor, and often show brown spots upon the leaves, due to Shot-hole fungus. Buds often burst in the axils of the leaves and dormant buds on the main branches, but, unlike Yellows, these shoots never develop into slender, bushy twigs, with narrow-pointed, yellowish leaves.

Yellows and Little Peach are very destructive diseases. These diseases are now widespread in all the peach-growing States north of Alabama, and are now found in the Niagara District of Ontario, where, according to Mr. Caesar's estimate, 50,000 of the 1,200,000 peach trees showed symptoms of these diseases. About nine-tenths of these trees were found in about thirty-five orchards. The cause of the disease is as yet unknown. Care should be taken in the selection of buds by the nurserymen. Every orchard should be carefully inspected in August, and again in September, and diseased trees marked and removed immediately.

Mr. Caesar thought that a good biologist should be appointed to spend his summer studying the diseases, helping inspectors to recognize the earliest symptoms, and encouraging them in their work. He also urged the carrying on of demonstrations in each district, and a better training of inspectors, who, he said, should get higher pay, as the present rate of wages is not high enough to keep the best men, and encourage them to do their best work. He recommended that the inspectors be appointed by and responsible to the Provincial Government, and that the salary be increased to \$3.00 a day and expenses in the beginning, which, on good service, should be increased to \$4.00.

LITTLE PEACH AND YELLOWS IN NEW YORK

Following Mr. Caesar's address, came B. D. Van Buren, Assistant Chief of Bureau of Horticulture, Albany, N. Y. Mr. Van Buren has had a wide experience with these diseases, and strongly favors Government appointment of inspectors. Inspection commenced in New York State in 1902, when forty orchards, including 62,000 trees, were inspected, and 2,633 trees were found diseased. In 1904, 44,000 trees were inspected, and 2,005 found diseased. In 1905, 133,000 trees were inspected, of which only 803 were found diseased. In 1906, 129,327 trees inspected, and 901 diseased. The inspection of 1907 showed 730 diseased trees out of 115,100 inspected; that of 1908, 11,297 out of 418,000; 1909, 96-100 of 1 per cent. of 497,000; 1910, 4,768 out of 506,000; and 1911, 8,410 out of 564,000. This shows the magnitude which the work has attained in this State, and also demonstrates that, by careful inspection and prompt destruction of diseased trees, these diseases can be successfully held in check. Each diseased tree is marked upon inspection, and all such trees must be removed within ten days of marking. Many of the best growers use the axe freely previous to inspection, cutting out all suspicious-looking trees, with the result that orchards of 6,000, 3,000 and 2,800 trees only showed two, nine and six diseased trees, respectively, in one year. He urged that every fruit-grower be his own inspector, and that no sickly trees be allowed to grow.

ORCHARD LEASING.

Dr. C. H. Riggs, of the Cared-for-Orchard Company, Toronto, addressed the fruit-growers on a somewhat new phase of horticultural enterprise in Ontario, that of leasing orchards. To make a profit, he said that much depended upon the geographical situation, convenience to market, availability of labor, access and egress to a large center, the number of trees available in the locality, the water supply, and the condition of the roads over which the fruit must be hauled. Good foremen should be given definite areas to supervise, and, in his opinion, a late summer spray of lime sulphur is beneficial in promoting high coloring and better development of the fruit. Asked as to what strength he would apply it, he stated that late in July or early August, when the foliage is ripened up and hard, good results follow the application of the lime-sulphur at ordinary winter strength. This statement provoked much discussion, many of the fruitmen present believing that so strong a spray would injure the foliage, even at so late a date. Dr. Riggs showed some apples which had been so treated, and they were very fine specimens, indeed. He was a strong advocate of careful and systematic thinning of fruit, and made the statement that "no orchard can be brought to a successful commercial issue unless thinning is practiced." He also was responsible for the statement that "no other fruit than fancy or first-class should be packed for shipment." He also advocated the establishment of co-operative canning factories in all fruit districts to handle the cull and fallen fruit. This address was of much

interest, and many good suggestions were thrown out by the speaker.

ASSOCIATION DIRECTORS.

The following men comprise the directorate of the association for the coming year: Wm. Alford, Ottawa; W. H. Dempsey, Trenton; Wm. Stainton, Oshawa; L. A. Hamilton, Lorne Park; J. W. Smith, Winona; A. Onslow, Niagara-on-the-Lake; J. Gilbertson, Simcoe; D. Johnson, Forest; R. R. Sloan, Porter's Hill; F. M. Lewis, Burford; Adam Brown, Owen Sound; W. C. Beaven, Bowmanville, and W. J. Bragg, Prescott.

THE DOMINION CONFERENCE OF FRUIT-GROWERS.

Jas. E. Johnson, manager of the Norfolk Fruit-growers' Association, believed that the associations were outgrowing the education of the people. He believed that all the associations should be reorganized, and that each applicant admitted should show qualifications entitling him to become a member of the association. This he claims can only come from educating the growers in up-to-date fruit culture in all its branches. Growers, merchants, dealers, and all concerned, are now agreed that co-operative associations are a great benefit to the industry, and that because of the better quality of the fruit everyone from the grower to the consumer receives great benefit. He urged that a competent man be sent to the Old Country to study co-operation there for six months and bring back a report. He also advocated the meeting of the local associations at least once in two weeks to keep abreast of the work. Small associations, he believed, would be preferable to those of very large membership, because more thorough work could be done.

A. W. Peart, of Burlington, impressed upon those present the great need of fuller fruit statistics. In the annual report of this branch four columns are now given where only two were allotted previously. Apples and small fruits were the only fruits receiving a column before, but now vineyards and gardens have been added. He proposed that the Provincial Government be asked to specialize a fruit list with separate columns for the acreage of apples, pears, peaches, plums and small fruits.

A discussion followed on the advisability of holding a national apple show in Toronto in 1912, but the proposition was turned down almost unanimously, the members believing that better work could be accomplished by retaining the Provincial show.

RESOLUTIONS.

Resolutions to the following effect were passed by the association:

1. That a committee of the association be appointed to procure the latest information with regard to the best style of packing of fruit, and that they report to the directors of the association for publication.
2. That the Ontario Government be requested to provide a short course for fruit inspectors at the O.A.C., Guelph, and that they grant certificates to each successful student; also that schools to instruct apple-packers be provided in the counties.
3. That railway companies be interviewed by the transportation committee, with a view to improving the refrigerator-car accommodation, and to protect fruit, and that the railway companies be asked to guarantee refrigerator cars to move fruit in cold weather.
4. That the Ontario Government be requested to send a capable man to Europe to study co-operation and market conditions and report to the said Government.
5. That the Government have daily market prices of fruit cabled from their agents in the Old Country and published in the daily papers in all Provinces of the Dominion.
6. That the association urge upon the Dominion Minister of Agriculture to appoint a commission of three from each Province, composed of fruit dealers or growers of prominence, to select and recommend for appointment fruit inspectors.
7. That the Dominion Government be requested to have the forms issued to basket manufacturers, so as to insure the uniform size of fruit baskets.
8. That the association endorse the recommendation made by L. Caesar, that Provincial inspectors be appointed to investigate diseases and insects of fruit trees.
9. That the Government be asked to amend the Fruit Marks Act, so as to form a uniform size for each variety.
10. That the Government be asked to amend the Inspection and Sales Act, and appoint a larger number of inspectors, and that inspection be made at point of shipment, and a certificate of same be given.
11. That every effort be made in the propagation of new fruits at Jordan Harbour.
12. That the association convey congratulations to Hon. R. L. Borden, on his good judgment in selecting Hon. Martin Burrell as Minister of Agriculture; also that congratulations be forwarded to Hon. Martin Burrell, whose appoint-