

of St. Lambert, gave over 82 pounds a day. A well-selected and properly-fed Jersey herd will average 5,000 to 6,000 pounds of milk a year; 350 pounds of butter a year would be a low average for such a herd, and some have averaged 450 pounds per cow per year.

The Jersey cow is a good feeder, and requires considerable concentrated feed to do her best work. She is very fastidious in what she eats, and will not use up so much bulky food as will the Ayrshire or Holstein.

Jerseys breed true to type, more so than the Guernseys.

### A Successful Creamery.

A short time ago one of our staff was able to visit the Chilliwack, B. C., creamery, located in that famous district. The output in 12 months amounted to 225,000 pounds, and has not dropped below 10,000 pounds in any month. Patrons number over one hundred, cream being collected thrice a week in summer, semi-weekly in winter. The butter is put on the market in brick form, the Babcock test being used to determine each patron's returns. The temperature of the water at the creamery is 52 degrees F. Any ice used is artificial, brought from New Westminster, costing \$9.00 a ton there, the creamery standing the loss of the waste. The butter is marketed at Vancouver, and brings 30c. in winter, 25c. in summer; the grocer's margin is 5c., which is considered a large one. The farmers own the cream cans; a ten-gallon can cost \$4.50. Last year the farmers netted 24.75c. a pound for their butter. Hauling costs 1/2c. pound of butter-fat.

## GARDEN AND ORCHARD.

### The Ontario Horticultural Exhibition.

The second annual Ontario Horticultural Exhibition and Honey Show was held in Massey Hall, Toronto, Nov. 14th to 18th. In 1904 the exhibition was called a Fruit, Flower and Honey Show; this year vegetables were added, and the more comprehensive name adopted. It is under the joint management of the Ontario Fruit-growers', Ontario Beekeepers', Toronto Gardeners' and Florists', and Ontario Vegetable-growers' Associations, the Toronto Horticultural and Toronto Electoral and District Agricultural Societies, and the Ontario Department of Agriculture, the Department granting \$1,000 towards financing it, the Toronto city council also coming up with \$250. The amounts contributed by the various organizations were all pooled this year and the total applied towards a general fund. The management consists of a staff of officers elected from among representatives of the several organizations.

From a visitor's standpoint, the show was a great success, although the meagre attendance was altogether unworthy of the magnificent display. The chrysanthemums were a wonder and delight, and, being interspersed with the fruits and other exhibits, made the scene fairly entrancing. The audience room of Massey Hall held the major portion of the exhibits, 'mums being ranged with particularly imposing effect upon the stage. In the center of the floor was an exhibit of fruits by the Chatham Fruit-growers' Association, the feature of it being a variegated column of apples arrayed concentrically about a concealed centerpiece, the apples being twenty-nine tiers high, and forming a pleasing color pattern. On this floor, also, was the St. Catharines Cold Storage & Forwarding Co.'s exhibit of pears packed in boxes, as put up for long-distance shipment. Each fruit was wrapped in tissue paper, and some ideas in packing boxes were graphically illustrated. On this floor, also, were the county and the amateur exhibits of fruit, as well as the apiary products. Beneath the balcony at the rear was an exhibit of fruits in jars, some of which, put up two years ago without sugar and in cold water, had apparently been perfectly preserved. It is a matter of information to know that fruits for cooking or baking may be thus kept, as these had been, with practically all their natural freshness. Your reporter had no opportunity of observing the process, but was agreeably surprised on sampling the results. Here, also, were the instructive exhibits of the Fruit Experiment Stations of the Province. From Craighurst, Mr. G. C. Caster had a couple of pyramids of enormous Wolfe River apples, that must have averaged about fourteen inches in circumference. One, by actual measurement, took 15 1/2 inches of string to go around it, and then we were by no means certain that we had the biggest.

Additional floor space was found in the basement, where were the competitive exhibits of commercial packages (boxes and barrels) packed for domestic and export trade. Entries were: Barrels, export, 33; boxes, export, 70; barrels, domestic, 6; boxes, domestic, 19. The total entries in fruit (apples, pears, grapes, etc.), exclusive of the Experiment Station displays, the Ontario Agricul-

tural College assortment, etc., were 625, being about double those of last year.

The packing showed a very great improvement. Mr. P. J. Carey, Dominion Fruit Inspector, who with Mr. H. W. Dawson, judged the commercial packages of apples and pears, stated that about 75 per cent. of the boxes this year were properly packed, as against 5 per cent. last year. The improvement is ascribed to the educative influence of last year's show, to the demonstrations this fall of Mr. Boies, the Ottawa Fruit Division's expert packer from British Columbia, and to a laudable disposition on the part of growers to avail themselves of opportunities to improve their packing. There is still, however, a tendency to cling to the habit of putting in excelsior and "blocking up" with newspapers. This is very undesirable, for a properly-packed box of fruit will be firm without such filling, and as the trade objects to it decidedly, boxes thus packed were sharply discriminated against in awarding the prizes. A box of Baxters, as fine as anything in the show, was undecked with prize cards on account of newspapers having been used between the layers of fruit, the exhibitor's idea being, presumably, to make them carry better. Growers are not all "on" yet to the various wrinkles in filling boxes. As most are aware, these must be packed in layers. Some try to fill the box by putting the layers in so that every apple will be directly above the one below it. This is not necessary; indeed, it is to be eschewed in favor of arrangements which will allow each apple to rest on several others. Some of the arrangements which look as though they left large spaces at the sides, are really the most compact methods. There are at least sixty-four distinct ways of packing a box of apples, and the ingenuity of the packer is tested in putting the apples in compactly without excelsior or other wadding. A box should be packed with the middle a little higher than the ends, so that when pressure is applied on the ends the spring in the top and bottom will still keep the fruit there snugly compressed as at the ends. Likewise, in packing barrels, the center should be a little fuller, and the pressure should be applied by a circular iron inside the rim, instead of by a block on the center. The Fruit Division, Ottawa, had an instructive exhibit of different kinds of packages, and barrel and box presses. The best thing for barrels is a circular iron such as described, screwed down by a lever on top, the pressure being obtained by means of long hooks which catch under the lower rim of the barrel. A simple but useful-looking home-made box press was also on exhibit.

The vegetable display was of moderate dimensions, but the quality was good. There was quite a fair showing in melons and cauliflower, and a particularly good one of Jerusalem artichokes, seeming to indicate an increasing interest in these. Chrysanthemums were considered ahead of last year's, while the table decoration attracted much attention also. Taken all through, the show would seem to be a great deal more worthy of patronage than some of the other events that from time to time engross Toronto's society. As it is, the attendance was frankly confessed to be disappointing, and unless it is better next year there will probably be a feeling to change it to some other place.

### Ontario Fruit-growers' Convention.

During the Horticultural Exhibition, conventions were held in Toronto by three provincial organizations, the Ontario Fruit-growers', the Ontario Beekeepers' and the Ontario Vegetable-growers' Associations, while on the 17th there was a meeting of pomologists and those interested in fruit experiment station work, and the same day delegates from the various horticultural societies of the Province met to form a new Provincial body, known as the Ontario Horticultural Association. The Fruit-growers' annual meeting began on Tuesday evening, November 14th, continuing till the afternoon of Thursday, 16th. On the opening evening there were, besides the president's address, speeches from several others. Hon. Nelson Monteith, Minister of Agriculture for Ontario, in a pleasing address pointed out the advantage of developing Ontario agriculture along intensive lines, such as fruit and vegetable growing. Mr. A. N. Brown, of Wyoming, Delaware, spoke on co-operation, citing some instances of what Americans were doing in that direction. Down in Delaware and Maryland the object has been to bring the buyer to the farmer's door, and sell to him f.o.b. Much has been done by co-operation in the potato industry. Whereas the growers used to get about 50 cents a barrel, they have increased the value of the product fully 100 per cent., by being able to guarantee grade and quality. Last year an organization known as the East Shore Potato Exchange, sold 350,000 barrels. Seventy-five per cent. of the California fruit-growers are co-operatively organized, and under co-operation they have captured the eastern markets. Prof. W. T. Macoun, Horticulturist, C. M. P., Ottawa, spoke briefly, calling attention to the fact that in the British market Ireland would

soon be a competitor to be reckoned with. Their fruit might not be the best for dessert purposes, but it will find a place for cooking. Many orchards are being set out that will soon be bearing, and one advantage the Irish will have over us in production is cheap labor.

### PRESIDENT'S ADDRESS.

After anticipating some of the topics expected to come up for consideration during the convention, President A. McNeill, better known as the Chief of the Fruit Division, Ottawa, referred to the season's crops and prices, noting that it opened with a remarkable show of bloom, which, however, did not materialize in fruit, the failure being probably due, among other causes, to cold and prolonged rains, and to weakening of the trees by a succession of heavy crops, or by the severity of the last two or three winters. He pointed out the desirability, financially and otherwise, of a systematic investigation of these phenomena, partly with a view of discovering some means of securing a more regular crop by more perfect pollination. He referred to the good prices for apples, and deprecated the practice among growers of selling their crops early to operators, who, knowing market conditions and prospects better as a rule than those they buy from, have the advantage of the latter in such bargains, which at best are of the nature of a gamble. He referred to an unfortunate widely-copied newspaper report, occurring at a time when the market was depressed with the remnants of the inferior early varieties, and predicting a great abundance of peaches, and low prices therefor. For want of prompt explanation and denial, the public expected cheap peaches, and refused to buy in full quantities when the fruit could have been obtained reasonably, and some housewives were still looking for those cheap peaches. As a matter of fact, there has been so much loss from winter-killing in the last few years that the crop, though good on bearing trees, was not excessive, but tardy demand resulted in unwarrantably low prices, and in some cases disappointment to would-be purchasers. The experience illustrated the need of fruit statistics.

The fruit trade of the Province was never in a more healthy condition. The outlook is good, though grave problems loom up for solution. The local markets for small fruits are now well supplied, and any further expansion must be in the direction of long-distance shipments. These will require a distinction on the part of growers and shippers between nearby markets in point of maturity, varieties, packages and packing, and in methods of doing business. For Western, Quebec or Maritime markets it will be necessary to encourage the growing of these fruits in large plantations, and the concentration of the business at a few points where the growers will undertake to make a specialty of long-distance shipments. It appears to be an almost hopeless task to assemble the small lots of many different growers who depend upon the local market for their chief outlet.

To a somewhat less degree the same remarks apply to peaches and plums. Ontario has the soil and climate to produce an enormous quantity of these, and we must work out the problem of long-distance transportation for them. There should be every year regular trial shipments to Great Britain. There is no reasonable doubt that with the splendid steamship facilities now at the disposal of the fruit-grower we can land peaches in England in the best of condition. The outlook is not quite so hopeful for plums, but even here fruit-growers will have to look at the question in a broad light and appreciate the fact that the ramification of the trade in canned fruits, jams and jellies is one in which they will have to take a lively interest.

The problems in apple-growing are somewhat different. The export trade has been developed till it completely overshadows the local trade, large as this is. Steamship facilities and export demand are excellent, but a pressing need is a better system of marketing. The middlemen engaged in the trade are excellent business men, but the present system is bad. A barrel of apples, for which in a normal year the grower would be glad to receive one dollar, is shipped to England or Calgary, and the consumer pays five dollars for it. While the perishable nature of fruit is an excuse for many of the bad methods in selling, it will not account for the system of buying in vogue in the greater part of Ontario, which is responsible for much of the waste and the want of proper grading and packing, for the serious deterioration between picking and selling, for the exorbitant price of packages, and for the unfortunate condition of affairs that will enable men, if so disposed, to get a product without paying a proper price for it. The large number of reputable apple dealers, he was ready to assert, would be glad to see a better system. He, therefore, heartily commended the work of the co-operative committee, and trusted the Association would give the movement every assistance, morally and financially.

Those who had followed the fruit trade would have noticed that in the change that must take place from the local to the long-distance markets