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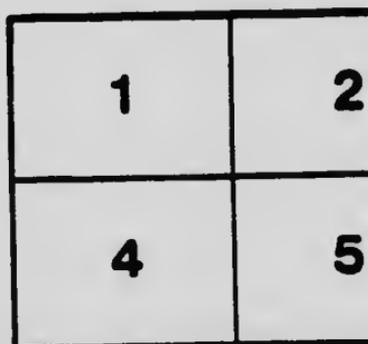
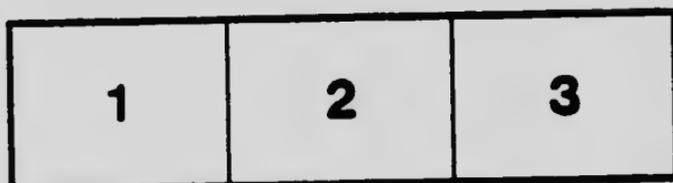
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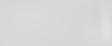
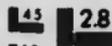
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THE ECONOMICS OF FRUIT GROWING

FELLOW MEMBERS:

While I deem it a great honor to preside over your meetings I also feel that I am somewhat out of place in the chair. I am not a practical fruit-grower, hence I have never run up against the many problems of the practical grower. I have never had the arduous pleasure of packing ten or twelve barrels of apples from a tree—each barrel netting \$2.00—and bringing in a hundred-fold profit. On the other hand I have never had the sadness of seeing a fine crop of fruit devoured by codling worm, and curculio, or a prospective orchard, costing many years of labor to bring it to the bearing age, destroyed by borers, cankers and mice. You will understand, then that so far as fruit-growing is concerned I have never lost many hours of sleep through excessive joy or sadness.

On account, therefore, of my inexperience with practical orcharding I found it difficult to choose a suitable subject for discussion at this meeting. It occurred to me, however, that perhaps I could not do better than call attention to a number of factors in fruit-growing that require attention by our orchardists. My experience during the past twenty years in the orchards of Ontario and Quebec as an experimenter in the control of insects and plant diseases, my work as a biologist, and my interest as a consumer should entitle me to a respectful hearing on your part.

Why do we plant Apple Trees?

This question often comes up in my mind as I go through the province and see the pitiable condition of most of the apple trees grown on the farms. Even in so-called fruit-growing districts the same question might very well be asked. According to the census of 1911 there were 1,252,856 bearing and 859,812 non-bearing apple trees in this province, and the estimated crop for 1910 was 1,500,000 bushels, or less than 1½ bushels per tree! Professor Hedrick of the Agricultural Experiment Station, Geneva, N.Y., stated to us two years ago that the average production for ten years of his experimental Baldwin orchard near Rochester was 4.33 barrels per tree.

Let us come to our own province. Mr. Waddell of Vicars told us not long ago that last year he sold 425 barrels of apples from his 4-acre orchard of 200 trees, or an average of 2½ barrels per tree. Mr. Martin of Mont. St. Hilaire, where another Provincial Experimental Station is located, told us

that he expects this year about 2000 barrels of apples from his 6-acre orchard of about 500 trees—an average of 4 barrels per tree. In both of these Quebec orchards it may be said that the high quality of the fruit has been one of the outstanding results of the kind of treatment given the orchards. The percentage of Nos. 1 and 2 in both these orchards ran between 80 and 90.

Judging from the poor condition of most apple orchards we might come to the conclusion that apple trees were planted to give business to nursery-men. Would it not show greater wisdom to devote the land to potatoes or oats? But perhaps the orchardist has the laudable desire of providing refreshing shade in summer and shelter against the stormy blasts of winter. If so he should have planted spruces, elms and maples. One cannot easily understand why persons will go to all the trouble and expense of buying and planting an orchard, and then leave it uncared for to be the prey of winds, mice, insects and fungi.

Is Good Orcharding Profitable?

Professor W. S. Blair, late President of our Society, discussed at the St. Hyacinthe meeting the cost of growing a 25-acre orchard and the expenses of its management before and after it began to bear. Without going into the details I may say that he placed the cost of the orchard until ten years of age at \$20 per acre per year, and after that at about \$30 per acre. If the crop is on the average 1 barrel per tree per year from the 10th to the 15th year, and 2 barrels for the following thirty or forty years, the profits are large and attractive, \$20 an acre for the first period from the 10th to the 15th year and \$50 an acre for the subsequent bearing period. These estimates of Professor Blair are rather low as witness the following actual case in New York State. Professor Hedrick in 1914 gave us some calculations based on a ten-year period regarding the cost of management of a ten-acre orchard he had in charge. He made out the cost of a barrel of apples to be 93 cents, including interest on investment, taxes, tilling, pruning, spraying, superintendence, picking, packing, sorting and hauling. His net profit per acre was \$93.74.

Many more examples might be given, but the cases I have cited are on record in our own Reports, hence are available to all who may wish to investigate this matter further.

It is plain, therefore, that an orchard well cared for is a paying business but on the other hand if neglected is a losing business.

The Good Work of the Society.

Twenty-two years ago this Society came into existence at Abbotsford. Through all these years it has urged the production of better fruit, and has tried to show how orchards should be cared for. Among other things, it brought to the attention of the public the high merits of the Quebec Fameuse, and it has tried to show the orchardists how best to place this Queen of Varieties on the market.

Five years ago demonstration orchards were started by the Society, and the results have been very gratifying. But there is still something lacking. The good people of this province are not yet seized with the importance of the fruit industry. There are large areas that are admirably adapted for apple growing, but very little effort is being made to set out plantations.

Our Society continually runs up against difficulties in its efforts to increase the apple areas of the province. Unscrupulous agents make their way among the farmers, and by their persuasive ability and by the display of highly colored pictures of apples they make sales of nursery stock which in most cases are untrue to name, and unsuitable to our climatic conditions. One can hardly blame the farmers if after such treatment they refuse to take any further interest in fruit-growing.

Last Spring the Society prepared an illustrated poster containing in a nut-shell the chief factors to be kept in mind by the fruit-grower in the care of his orchard and the production of good fruit. As the Society's funds would not permit of the publication of this poster the Department was asked to finance the undertaking, a matter of about \$250. We regret that it did not see its way clear to help us in this plan of helping the fruit-grower. To my mind a beautifully colored well-printed poster containing just the information regarding pruning, spraying, tilling, etc., the orchardist requires, and arranged for hanging up in the kitchen, is far more valuable than a bulletin which is often thrown away before it is read.

While I am dealing with the Department I shall refer to another matter of importance to the fruit-grower. Last year the ravages of the various cankers of apple trees were brought to our attention quite vividly by many of our members. Unfortunately no satisfactory remedy could be advised on account of lack of knowledge of the diseases. This Society and its sister Society, the Quebec Society for the Protection of Plants, thereupon urged the Department by resolutions to appoint an expert on cankers and other apple diseases so that relief might be brought to the fruit-growers. Again I regret that no action has been taken in the matter, and the disease continues its ravages unchecked.

It is a well known fact that our Quebec fruit has not been advertised to any extent in Montreal and other great consuming centers. Much inferior fruit may always be seen on the Montreal markets, often brought long distances and competing with our own fruit. As Quebec fruit-growers we have been very remiss, and it seems to me that some effort should be made now to place an exhibit of Quebec apples in Montreal. A store might be rented on St. Catherine Street for a month or six weeks and a constant supply of barrel and box fruit kept on exhibition, and perhaps to a certain extent on sale. It might be possible for some of our growers to market most of their fruit in this manner. Incidentally much information might be given the public regarding growers who could be relied upon to put up a No. 1 article. Why not keep the Montreal market for ourselves if we have the fruit—and we have the best in the country.

Again, as a Society we might very well discuss the progress of the co-operative movement in this province. In so far as the movement is affecting the fruit-grower we can see but little evidence of advance, yet co-operation is one of the most important factors in the production of high-grade fruit. I wonder if the Société Co-operative Agricole des Fromagers de Québec (under the excellent manager, Mr. Aug. Trudel) could not take unto itself the extra duties of selling fruit. If the fruit-growers would fall into line as the cheese and butter makers have, great progress would soon be announced. Mr. Seth J. T. Bush, Manager of the Eastern Fruit and Produce Exchange, N. Y. State, has this to say: "Our marketing problem can never be successfully solved until we have brought production to the highest standard and have properly prepared our product for the market. No sales agency can never overcome or correct the mistakes and neglect of the producer. The consumer is the court of last resort, he must be satisfied. He pays with a standard dollar and is entitled to a standard package."

If our fruit-growers do not co-operate for their mutual benefit the day of opportunity will perhaps pass away altogether. We may be forced to become "hewers of wood and drawers of water" to a better organized community, but with fruit of natural inferior quantity.

The Work of the Provincial Department.

Notwithstanding what I have said regarding the action of the Department in two or three matters of some importance, I heartily congratulate the Minister and his associates on the progressive fruit-growing policy initiated in recent years. They have advanced the fruit industry through the 37 Fruit Experiment Stations, and great credit is due Messrs. Lavoie

and Roy for the great energy and enthusiasm they have shown in the furtherance of the work they have in hand. We congratulate the French-speaking fruit-growers of this province in having access to the most admirable and recently published works on fruit and vegetable growing by Fathers Leopold and Athanase and Professors Lavoie and Latourneau. Perhaps Professor Bunting might be induced by the Department to prepare a similar help for the English-speaking fruit-growers.

One matter more. The well-meaning efforts of the Department to get the farmers to grow their own nursery stock are in my opinion doomed to failure and disappointment. Even under present conditions the farmer has little or no time to spare for the orchard, and it is hardly to be expected that he will undertake new responsibilities. The more I study the matter and confer with those who know more than I do about it, the more I am convinced that the scheme will turn out a failure. It would be far better to encourage a few reliable nurserymen from whom the farmer can secure hardy, well adapted, properly named, commercial varieties at a low price.

Our Hosts and Our Meeting.

On behalf of the Society I thank the Trappist Fathers for their kind invitation to us to hold our summer meeting here, and I know we will all enjoy our stay here. The presence of so many well known names on the programme should ensure a successful meeting.



