

Immediately following the demonstration I set 1,213 apple trees, (different varieties,) by blowing the holes for them with stumping powder, using about one-quarter of a pound per tree. I found this method to be labor-saving and greatly beneficial in the growth of the trees, as a great many trees made growth the first year, of from ten to fourteen inches, and, as far as I know, all the trees are living. The demonstration was brought about by my suggestion and correspondence.

I have just finished setting two hundred and twenty-five assorted apple, pear, plum, quince, cherry, peach, and crab-apple trees with the stumping powder.

I think there have been a few others who have used the stumping powder in a small way since, but so far, it does not seem to have become popular among the orchardists in this locality.

Kings Co., N. S.

C. A. BORDEN.

### Co-operation in Fruit Growing.

It might seem strange in an enlightened country like Canada, that people had to be driven to adopt, as a last resort, what has here, as elsewhere, when rightly applied, proved a principle of striking and lasting benefit. Co-operation and the more desirable methods of putting it into practice in the growth and sale of fruit, is in brief the outline of a fifty-page publication by A. McNeill, Chief of the Fruit Division, Department of Agriculture, Ottawa. With the marketing of the present growing crop in view, it deserves a wide circulation, and an early reading. In another branch of farming, Mr. McNeill points out, that the North West Grain Grower's Association bids fair to revolutionize wheat selling.

In fruit growing under the old order of things, the trade and trade conditions fell into the hands of groups of dealers from whom the grower receives for his fruit little more than actual expenses. So unsatisfactory were the results, that it became no uncommon thing a few years ago, to see splendid orchards chopped down for firewood. Nova Scotia and Ontario have been the scene of the most marked progress, through the adoption of co-operation. But it is worth remembering that in the judgment of Mr. McNeill, the decrease of trees in the older, smaller orchards in Ontario, has been quite equal to the increase in the number of new trees planted in larger areas, under perhaps more favorable conditions. British Columbia, has been planting very rapidly, but the 1912 crop was the first to seriously affect the market outside the Province. Except for home use, or a local market, the author does not recommend orcharding at all, except where co-operative methods are adopted. Under the new order the fruit-growing areas are restricted, but the size of orchards is increased. Orchard is commercialized, and the extraordinary spectacle is observed of men in one part of the country receiving \$2 a barrel for their apples while in the next township apples are being allowed to rot under the trees. The small orchard as a side line has not proved remunerative, and with co-operative methods, Mr. McNeill recommends a five-acre orchard on every farm in the apple district of Canada.

It is pointed out that there have been failures in co-operation and one of these in Canada arose out of regarding it as an isolated movement to secure a few more dollars than the grower would otherwise obtain, instead of regarding it as a benefit society or friendly association.

Few Canadian co-operators recognize that co-operation is an entirely new method of doing business. It is not merely a modification of an older method, but something founded upon a different if not antagonistic principle. The prevailing system of marketing is founded upon competition, the practical motto of which is, "Every man for himself." The natural result of this is, that a few individuals receive most of the prizes. C. R. Fay, in *Co-operation at Home and Abroad* defines a co-operative society as "an association for the purpose of joint trading originating among the weak and conducted always in an unselfish spirit, on such terms that all who are prepared to assume the duties of membership may share in its rewards in proportion to the degree in which they make use of their association." Individual growers and buyers cannot be held altogether responsible for the disabilities under which the apple industry labors. It is the system under which they are working that is most at fault. It offers at every turn incentive to untruthfulness and misrepresentation. It places in the hands of unscrupulous growers and unscrupulous buyers an effective instrument of fraud and renders it more difficult for honest men to conduct a legitimate business. Indeed this fraud in the apple business became so serious in Canada that it necessitated the passing of the Fruit Marks Act, now merged in the Inspection and Sale Act, which has done much to correct some of the grosser evils.

Even if there were no misrepresentation between the buyer and the grower, yet from the conditions under which the buyer works, he is obliged to pick and pack the fruit and bring it to market at a much greater expense than that incurred by co-operative methods. Under the present wasteful competitive system it is not too much to say that from 50 to 75 cents is added, on the average, to the cost of every barrel of apples before it leaves the shipping station. The dealers are not particularly anxious to change this if they could, so long as these additional charges are uniform in the whole trade, since each is in as good a position as his competitor, and all may shift the burden upon either the producer or the consumer. If the grower attempts to ship to the ultimate market on his own account, the competitive system of marketing accumulates upon the fruit a number of charges, some of them perfectly legitimate, others quite unnecessary, or, if necessary, exorbitant. But whether these charges are right or wrong, the individual shipper is helpless. He has no way of investigating their correctness.

Co-operative methods substitute as a remedy a more economical method of picking, packing and marketing. They also take away most of the incentives to fraudulent packing and marking. The economies that can be effected will be noted more particularly in what follows. Here it is sufficient to direct attention to the fact that this economy does not consist in supplanting one person by another to whom a lower fee or less wages is paid. It is a method whereby one man without undue exertion can do the work that is now being done by two or three. So, too, co-operative methods do not propose to make men honest by law or rule. They simply take away the present incentives to dishonesty. The aims of co-operation, as applied to the fruit industry, are:

(a) To bring fruit products as directly as possible from the producer to the consumer.

(b) To encourage the best methods of production.

(c) To encourage thrift in the fruit grower, and economy, intelligence, enterprise and honesty in the packing, grading and marketing of fruit.

(d) To make it possible for a number of small growers to establish a commercial standing that will be a guarantee for grade marks or contracts.

(e) To act as a credit organization to make advances on products in the process of being sold.

It is essential that each member of a co-operative association should bear in mind that the success or failure of the organization depends upon the combined efforts of its members, in giving every possible support to the movement. The ultimate success of co-operation depends largely upon the cheerful optimism and enthusiastic loyalty of the association members. It is assumed that the leaders of the movement in any section, are men of greater executive ability and better training than the average grower. Such men are capable of doing many things well. But at the same time every member must have his mind permeated with the thought that unless he gives every possible assistance the efforts of the leaders are necessarily limited. Given good feeling among the growers, earnest endeavor on the part of each member, and enthusiastic and well-trained leaders, the success of the movement is assured. One of the main charms of modern social life is unselfishness, but the ordinary methods of business appear to have no place for it. Co-operation, on the other hand, endeavors to eliminate selfishness and its success depends largely upon the extent to which this is accomplished. Have by-laws and regulations by all means, but it should be understood among the members that there is a higher code of morality than can possibly be embodied in these. Co-operative methods limit the dividends that may be paid to capital and exclude share voting. In ordinary joint-stock companies, the influence and power is proportioned to the money invested, so that the rich become richer by appropriating selfishly, through the power of money, the fruits of the labors of others, the unearned increment of values created by society, and the natural resources that in justice should be shared in due proportion by everyone. Co-operation distributes wealth in proportion to the just earning of each worker, prevents the accumulation of large profits, and shares unselfishly all natural resources.

Those who are in closest touch with the Canadian fruit growers realize that what is needed most at the present moment is wise leadership in each locality. A few men at least in each neighborhood are fairly well grounded in the social problems that affect agriculture. In every agricultural district there is a wealth of knowledge and public spirit unorganized, that might be applied under wise guidance to the problems of that particular locality.

Management and Control.—The principles of co-operation are few and extremely simple. Never-

theless co-operators experimented for many years before evolving them and acting on them with confidence. Perhaps the main reasons for this are their simplicity and the fact that they are fundamentally opposed to ordinary business methods.

Ordinary commercial associations, whether they are partnerships or joint-stock companies are formed for the purpose of securing dividends from the partnership or company. Co-operative associations are formed, not for the purpose of securing dividends through the association, but for the purpose of benefiting the industry.

Joint-stock companies, banks, loan associations and business partnerships are essentially autocratic. In these institutions the great majority of the shareholders take little or no part in the association. Co-operative associations are essentially democratic. The management is in the hands of the members.

In ordinary business associations voting is upon a money basis, and the men with the largest moneyed interest control the affairs of the association. In co-operative associations each member has a vote and no member more than one vote. To still further guard against the concentration of power in the hands of one man or a few men, no proxies are allowed.

In commercial or industrial concerns no limit is placed upon the amount of remuneration received by capital, and capital is employed for the sole purpose of securing this remuneration in the form of dividends. In co-operative associations the amount that is earned by capital is as strictly limited and as definitely stated before it is engaged as the wages of employees, and capital is used not for the purpose of securing dividends, but for the purpose of carrying on the business.

In competitive business, capital is master; in co-operative associations it is the servant.

### Canada's Fruit Crop.

The first Fruit-crop Report for the season has just been issued by the Fruit Division of the Dominion Department of Agriculture. The winter of 1912-13 was particularly favorable for both small and tree fruits. Conditions of growth the latter part of the 1912 season are reported as excellent, but in some cases growth continued too late for safety. Telegraphic reports from the chief tender-fruit districts of Ontario would indicate that little injury was done by the May frosts, except perhaps on the north shore of Lake Ontario, between Toronto and Hamilton, and then only in small fruits, but it is safe to say that the full effects of such a frost cannot be fully estimated until some time has elapsed. Upon the whole the weather conditions for fruit generally have been good, but it must not be forgotten that complications may arise any time between now and harvesting. This is particularly true, for instance, with reference to the cherry crop, which promised last year to be very large, but was seriously injured by excessive precipitation, especially in Eastern Ontario, between the growing and harvesting months.

Apple crop reports are most optimistic. In British Columbia and Ontario, the bloom at the time the report was written, was sufficiently advanced to show that it was especially heavy, and an excellent showing has been made in Quebec and the Maritime Provinces. The season has been two weeks earlier than usual in many districts. Trees wintered well. Tent caterpillars are bad in a few districts.

The pear-growing sections of Ontario and British Columbia report conditions favorable. No winter killing is reported. In the Maritime Provinces only a medium pear crop is expected. The Kootenay District anticipates a heavy crop.

Plums have undoubtedly suffered much injury from the late spring frosts. The plum bloom is prolific, and it is not improbable that a sufficient number of buds will be left to make a medium, if not a large crop in Canada's plum district. British Columbia will have a heavy crop.

Peaches promise the heaviest crop on record, in Southern Ontario. Fall and winter conditions were practically good and the spring frosts appear not to have done any serious injury. Damage has been slight in British Columbia.

Cherries, owing to favorable conditions, promise a bumper crop, although some slight injury may have resulted from frost.

Grapes wintered well and if frost does not damage, promise a big crop, and all small fruits are in splendid condition to produce abundantly.

No new insect is offering any special problem. The aphid is likely to be troublesome in most sections.

The event of the year, though it is confined to a comparatively small portion of the country, is the infestation of the tent caterpillar. The ravages of this insect this spring are fully as serious as last year, and in many localities even more damage has been done than during last year. Throughout Eastern Ontario, Quebec