

DECEMBER 29, 1910

THE FARMER'S ADVOCATE.

Effect of Scab Fungus on the Set of Fruit.

At the recent Ontario Fruit-growers' Convention, Mr. Case, the New York State speaker, brought to the attention of the delegates an important point about apple scab affecting the set of fruit that has been investigated at Cornell University. Mr. Case was quoting from Prof. H. H. Whetzel, Plant Pathologist, of Cornell, though we are advised by Mr. Caesar, of the Ontario Agricultural College, that he believes the work on the scab was actually done by Prof. Wetzel's assistant, Erreb Wallace, a Nova Scotian by birth. The point discussed by Mr. Case was not entirely new to Canadian fruit-growers, Mr. Caesar having frequently endeavored to make the same thing clear. We quote Mr. Caesar as follows:

"The apple-scab fungus passes the winter not on the twigs, but in the diseased leaves on the ground. About the time the leaf-buds are bursting, this fungus has got well started to grow on these leaves, and has formed little projecting dark areas (perithecia), inside of which are a number of little sacks (asci), each enclosing several spores. When these have got about mature, if a rain comes, the effect of the moisture is to cause the little sacks to shoot the spores out like a wad from a popgun. The wind carries these to the lower leaves. Now, many of these are being sent out and establishing themselves on the leaves about the time the blossoms are ready to burst. Consequently, if a fungicide is not put on to prevent germination, once the blossoms buds are separated from the enveloping scales and are ready to open, the scab spores may alight on the stems of these, and, by germinating, and the fungus eating the strength out of them, cause the fruit to drop. If it is put on, the spores cannot germinate, and, therefore, the fruit will not drop to the same extent. This, all boiled down, comes to this: The spores of the apple scab begin to fly around shortly before the blossoms open (I have frequently seen the disease on the leaves by this date). Therefore, in seasons favorable to the scab, we must make our first application just before the blossoms open. We must not, however, forget that a fresh crop of different spores, known as the summer spores, quickly forms on the leaves on the trees, and is spreading rapidly by the time for the codling spray, so that this is a very important time to spray. If these two sprayings are given the worst time for the spread of the disease is tided over, and, unless the weather is quite moist, no further spray is necessary, as a rule. This is not because there are no more spores, but because they do not get favorable opportunity to germinate."

In reply to a question which we addressed to him, as to the control of the scab on the trees where the blossoms are late in opening, if one is to spray when the blossoms are just beginning to open on the earlier varieties, Mr. Caesar explains that he finds, in actual experience, a spray applied when the blossoms are just beginning to open on the earlier varieties destroys so many of the scab spores, and prevents to such an extent infection from any summer spores that may be forming on the leaves at this time, that we can rely on it, along with the spray immediately after the blossoms fall, to give us absolutely clean fruit in almost all the districts of the Province, though a few places like the district just along the St. Lawrence River, where there is so much moisture, may require an extra spray about two weeks later than the one for the codling moth.

An Apple-buyers' Experience.

"There has been less trouble with the inspection of fruit this year than ever before," said A. McNeill, Chief of the Fruit Division at Ottawa, to a representative of "The Farmer's Advocate," lately. Up to two weeks ago, there had been only twenty prosecutions for infringement of the Fruit Marks section of the Inspection and Sale Act, as against a considerably larger number at this time last year. The dealers seem to have fallen into line with the Act as far as the present system of buying and the frailty of human nature will permit them. While the old system of buying prevails so generally in Canada, Mr. McNeill expects we will never have our fruit packed according to the letter of the law. The co-operative associations do very much better, and the organization of one of these in a section means always a raise in the standard of the fruit packed. As illustrating this point, Mr. McNeill relates a striking example, which, however, is not very exceptional. In 1909, one of the largest Ontario buyers bought them to the Northwest. He was harassed from start to finish by the buyers of his fruit, the fruit inspectors, and so on. He paid hundred of dollars in fines, lost money heavily, and had a bad year generally. This experience decided him to buy no more fruit indiscriminately, so the past summer he purchased from one of our leading co-operative associations about 30,000 barrels, and, notwithstanding that he

had the misfortune to be sick in bed the greater part of the season, the business proceeded smoothly, he had no worry about the quality of the fruit, and no trouble with the inspectors. His customers sent flattering reports about the quality of the apples received, and he cleared up a good many thousand dollars on his season's operations. If all the fruit grown in Eastern Canada were co-operatively packed, the apple business would not be so precarious as it is, the demand would be increased, average prices raised, and the industry benefited in a good many ways. Of course, there is a danger of even co-operative associations lapsing into a state of carelessness, but the inspectors of the Fruit Division were instructed this past season to be very particular in examining the pack of these associations, in order, if possible, to guard against any depreciation of the good name of co-operatively-packed fruit.

Some Potatoes.

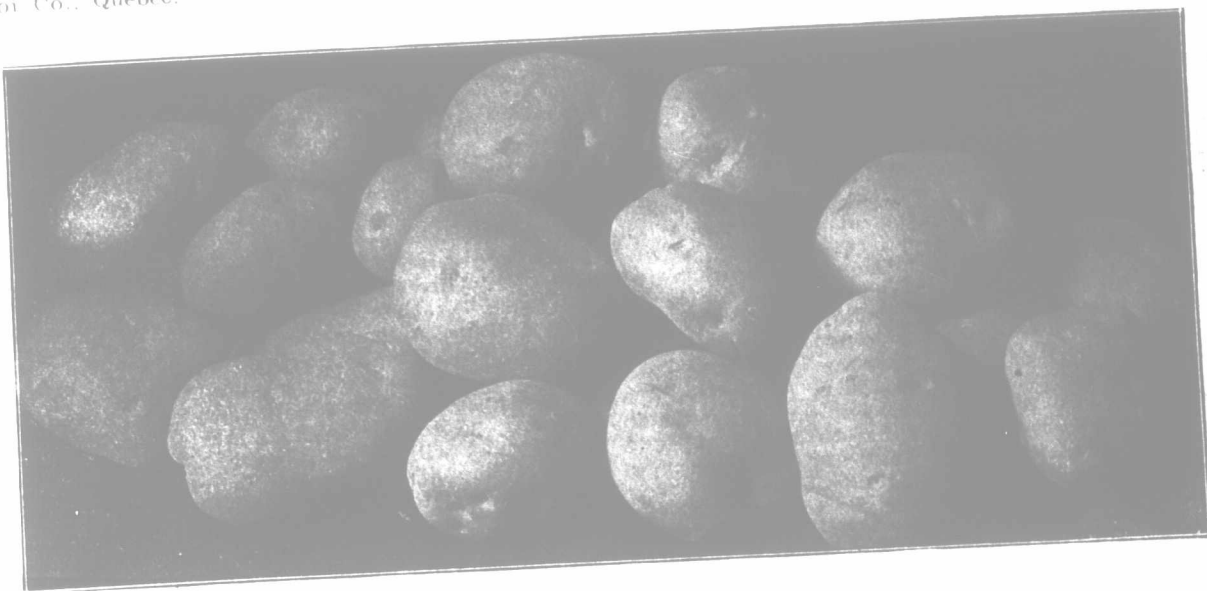
While the potato crop for the present year throughout the Dominion is not up to a high average, it is in most sections fairly satisfactory as to bulk and quality, though considerable rot is reported. In some districts tubers of abnormal size have been produced. C. M. Simmons, of Middlesex Co., Ontario, reports a single potato weighing 2 pounds 10½ ounces, with quite a few in the same field weighing 2 pounds. A member of "The Farmer's Advocate" staff, from one whole potato planted, had a yield of 5 pounds 1 ounce, the largest tuber measuring 6½ inches in length, 10 inches in circumference, and weighing 1 pound 6 ounces. But C. Fred Fawcett, of Westmoreland County, N. B., caps the climax by reporting a return from one whole potato planted of 31 tubers in a hill, 27 of which were marketable, and the total weight of which was 8 pounds 14 ounces.

F. J. Mathers, of Middlesex County, brought into our office, a few weeks since, seven fine, clean potatoes, fairly uniform in size, said by him to have been all grown from half a potato, to have been in new ground the last week in June. Notwithstanding that they did not appear above ground till the middle of July, the seven tubers weighed 3 pounds 13 ounces. Mr. Mathers also left with us a carrot of the short white type, weighing 5 pounds 5 ounces. It was produced with a crop sown on loamy soil, in good heart, to half an acre of which he had applied nine loads of manure and a dressing of salt, amounting, if we mistake not, to 250 lbs. per acre. Mr. Mathers attributed the success of his crop to the salt, although, as no check plot was grown without salt, the effect of the chemical cannot be said to have been conclusively demonstrated.

Alfred Hutchinson, Wellington County, Ont., writes: "I dug one root of 'Satisfaction' potatoes, grown in the field in regular row, that had 24 tubers; total weight, 7 pounds. Eighteen of these were marketable, and weighed 6½ pounds. I have kept this root by itself for seed, and intend to propagate it."

For sending in only one new subscription to "The Farmer's Advocate and Home Magazine," you may have a two-bladed Joseph Rodgers jack-knife or a two-bladed Joseph Rodgers penknife. Look up the particulars and read about our other premiums in the announcement on page 2071 of this issue.

"We all like 'The Farmer's Advocate,' and it heads the list of our farm papers. Wish you continued success."—J. H. L. Hawley, Missisquoi Co., Quebec.



One Hill of Potatoes.

Crop 1910, from one whole potato planted. Pioneer Farm, Westmoreland Co., N. B. Owner, C. Fred Fawcett. Number of tubers in hill, 31; marketable, 27. Total weight, 8 pounds 14 ounces. Green Mountain variety.

THE FARM BULLETIN.

A Successful Club.

The Brant Township Farmers' Club has held another successful meeting, and, to help others who are considering the forming of a club, we will give a short sketch of our life and what we have done. We were organized in the beginning of 1908, with a membership of 29. This membership has grown every year, until last year we had 43 on our list. We charge the small fee of 10 cents, and this is used to defray any expenses that may be incurred during the year.

From time to time we have had a Government speaker address us on some important topic. We have done a little in co-operative buying of seed corn and meal, but think it unwise to go into this extensively. The idea of co-operative selling of some of our products is being experimented with, and is proving a success, and should arouse farmers to the possibilities of more co-operation along the line of selling. The marketing of our produce is to-day of more importance than production, which latter has been well discussed in the past. If producers were to investigate the marketing end of their business, they would soon realize that they are not getting enough for their product, when they consider the final selling price as its value. They would also find out what becomes of the great difference between the price they receive and the price that the product is finally sold at to the consumer. Of course, many will say, "Nothing can be done," that nothing has ever been accomplished by these people. There are plenty of things that can be done, only we haven't tried to find them, and as soon as we get alive to the situation, these things will be thought out and tried; but so long as we are satisfied, and say, "Nothing can be done," just so long will things stay as they are.

At our recent meeting we were addressed by Joseph Lawson, of Guelph, on the subject, "Progress of Farming in Canada During the Last Decade," in which he showed us why we were most fortunate to be living in as prosperous and free a country as Canada. He did not, however, touch on the future of Canada, and how farmers could help to make the future more attractive for themselves than it had been in the past. There is a great cry at present for legislation in favor of agriculture, but let us realize that, before we can get any legislation in justice to farming, we must first send men to Ottawa who are in some way connected with agriculture, and who realize that the strength of a nation lies in the farming community. A. E. W.

Poland-China Breeders Wish to Show.

In Essex County, Ontario, and contiguous territory, there are a number of breeders with whom the Poland-China hog has proved so satisfactory that they are petitioning the management of the Toronto Exhibition to make provision for that breed in the classification and prize lists of that show. These men feel that, since the corn belt of Ontario is spreading considerably, since this breed is eminently adapted to make use of corn, and since it has established itself to a goodly extent without encouragement, and in keen competition with the bacon type, the development of this breed should be encouraged by the leading shows. There is reason in their argument, and a chance for the breed to stand on its merits seems a fair demand. Perhaps a wider introduction of the fat-hog type might bring the type would be evidenced by a difference in price when purchasing hogs. Angels have come in less attractive disguises than this.