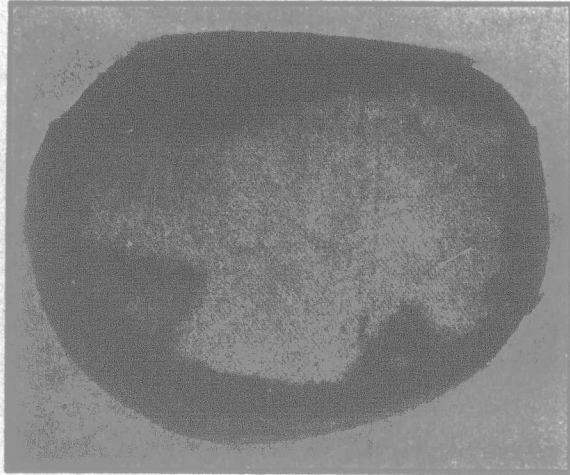


of the seed as well as in the selection and cultivation of the crop.

Destroy Diseased Tubers.

The late blight possibly causes heavier loss in potato fields than any other disease. As a rule the affected tubers either rot in the field or show indications of being diseased. Heat and moisture are conducive



Late Blight Rot.

From Pennsylvania State College Bulletin.

to the propagation of the disease in storage. Great care should be taken when putting potatoes in storage to discard all tubers showing any sign of the disease. Conditions in basements or pits are often favorable to increasing the loss if there are a few infected tubers to give the disease a start. Keep all suspicious looking tubers by themselves. Sometimes the potatoes look all right on the surface, but have a brown, watery discoloration extending in from the skin.

Common potato scab may not spread in storage, but care should be taken not to feed scabby potatoes to animals without cooking them, if the manure is to be spread on land where potatoes are to be grown in the near future. The disease organism survives the process of digestion and may be carried back to the field in the manure.

Powdery scab is a disease that should be guarded against in this country. While it is common in Europe it has not as yet gained a very strong foothold on this side of the Atlantic. It somewhat resembles common scab at first glance, but on looking closer it will be found that the scab spots start underneath the skin like blisters instead of on the surface. These blisters break open and show the interior filled with a dark, powdery mass.

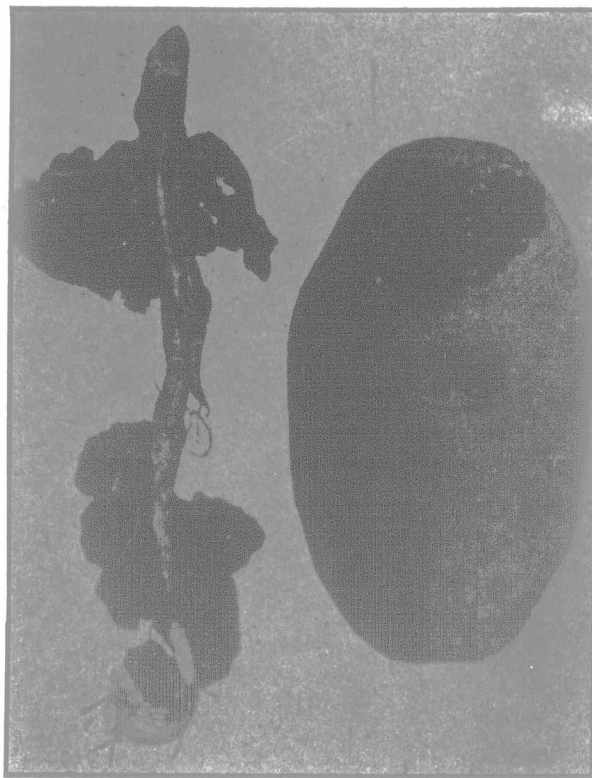
Potato canker or wart disease if neglected may spread over a farm and render the soil unfit for potato growing for several years. While this disease is not

common, every precaution should be taken to keep it out of Canadian fields. Warts or excrescences appear in the eyes of the young tubers and continue to enlarge until a large, spongy, brown scab is formed. In its advanced stage the disease is not difficult to identify, although tubers only slightly diseased might easily be overlooked and be a source of infection if planted.

Potatoes sometimes commence to rot about digging time or in storage without any appreciable cause. However, there is usually some disease associated with it, and a warm, moist storage-house is conducive to its spread. Potato growers must wage a continual fight against disease destroying their crops.

Marketing the Crop.

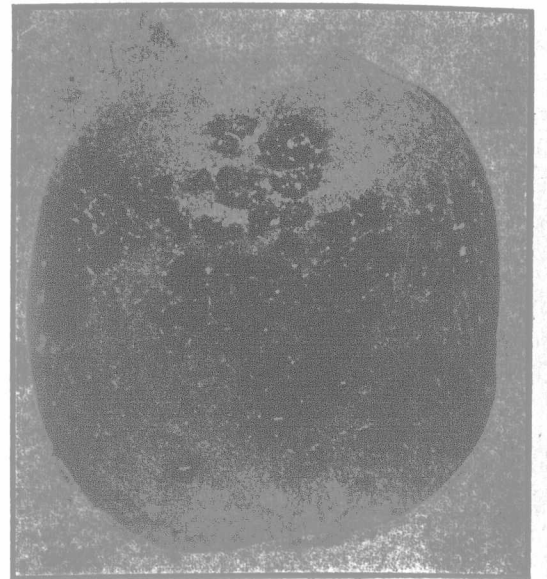
With potatoes, perhaps, more than any other crop the supply generally rules the price, as the demand is usually about normal. If for some reason there is a scarcity, the price soars and vice versa. However, regardless of the supply there are some districts that secure better prices than others, the reason being that all growers in the community have one variety, and place a uniform product, in regard to size, shape and color, on the market. There are far



Wart Disease or Canker on Stem and Tuber.

From "The Potato," by Grubb & Guilford.

too many varieties being grown. In some districts no two growers have the same variety, consequently when loading a car red and white, long, round or oval, little and big potatoes go into the same car, which gives a motley appearance, detrimental to the trade. The mixed cars are disliked by the dealers, and the producer suffers to the extent of ten cents or more per bag.



Powdery Scab.

Photo by H. T. Gussow.

Co-operation in the truest sense of the word is required. Have the community become noted for one variety of potatoes, then produce a good sample. When marketing, it will pay to sort the potatoes. This can be done by hand, by throwing out all small, poorly shaped or diseased tubers when filling the bags. Uniformity improves the appearance and incidentally the price. There are sorting machines on the market which grade the potatoes to different sizes, by the tubers passing over various sized screens.

Co-operative marketing has proved successful in districts where the growers held together. There is always opposition on the start, but if all interested support their organization and market only first-class produce, success is usually the result. With a good, reliable business man as manager, and sufficient cash to permit holding the potatoes for better markets, it seems reasonable that an organization of men with the same object in view should market their crop to better advantage than disinterested dealers could market mixed lots. The standard of quality must be high in order to satisfy customers and secure their trade in the future.

Canada's Young Farmers and Future Leaders.

Prepare for a Winter with the Stock.

The competition for boys and young farmers, which recently brought so many good articles before the readers of this department of "The Farmer's Advocate" proved one thing, that farm boys can do things well and can describe them intelligently for the help of other boys and older men. Particularly were we impressed with the results which the boys obtained with live stock and poultry, and these results should stimulate interest amongst other boys and encourage them to begin, this winter, to see what they can do as compared with their fathers' efforts in feeding some farm live stock. As a general thing, "Dad" is not a bad sort of a fellow if he is taken rightly. True it is that some boys find difficulty in getting to the point of ownership of any of the farm stock, and fathers who are not willing to give their boys a chance to have something their very own, and to feed, care for and pocket the proceeds from it, are standing in their own light. Nothing will encourage the boy more to do better all-round work on the farm than to give him a chance to show what he can do in the way of caring for some of his own live stock. A pig, a sheep, a calf or some poultry, is a good start.

The first difficulty the boy will run against, who has never had anything his own but who would like to try it this year, will be to get the stock. The first step should be a discussion with his father to find out whether or not arrangements can be made, and if so, the class of stock should be decided upon. The best place to get the stock is to select the pig, or sheep, or calf, or whatever may be decided upon from some of the stock in the father's possession. Pick one of the best, not necessarily the very best, but an individual

above the average of the lot; in fact, the father should be willing and anxious to give the boy the best in the pen. It would be wise and good policy to get the aid of "Dad" in selecting the animal with which the experiment is to be tried. If no suitable animal is to be found on the place, arrange some way to get the money to buy one. The boy may be interested in a pure-bred pig or a pure-bred sheep, or some pure-bred poultry, and, if so, he should get encouragement from his father and his help in the purchase of the same and in the feeding. We believe it would be better in most cases if the boy paid a fair price, even though the pig were taken from his father's pen. It could be arranged, if the lad had not the money, that the purchase price be returned to the father when the pig was disposed of for pork. By buying the pig, or the lamb, or whatever it may be, and feeding it through to the finished product, the boy has his operations on a business basis from start to finish. Of course, we believe that it is good policy for the boy to have some breeding stock of his own, but we are speaking now particularly of stock to feed through the winter, and not of breeding stock, a start in which the father should give the lad gratis, or we should not say gratis, but rather in consideration of his value on the farm, and of the fact that there is no better way of producing a stockman than by interesting the lad early in life.

We will assume, then, that no difficulty is experienced in getting the animal or animals with which to work. Now, what about the feed? Feed is going to be scarce this winter and the price will be high. To make the experiment a strictly business proposition all feed should be purchased at a price. Of course, the handiest and best place to get it is from father's bin, but it should be carefully weighed out and paid for at a fair market price at the barn. This will mean a little cheaper feed than when it is bought elsewhere, and the father will get the same price for it as if he sold it to someone else. Provided arrangements cannot be made, or that the boy thinks he can do better with some purchased feed, he should borrow the money if he has not sufficient on hand from his father, to be paid back when the animal being fed is disposed of. It will be seen that

it will be necessary to keep strict account of the transaction from the price of the animal in the first place to the cost of all feeds purchased and to the returns when finally sold. This is necessary, and will be a good lesson in farm bookkeeping.

We have the animals and the feed. The question, then, foremost in the mind of the boy is how to feed—how much and how often? Here again it is wise to consult father; but in some little things the boy may not agree with the older man, and he must, to a certain extent, map out his own plans of feeding. Whether it is done two, three or four times per day, regularity must not be overlooked. Besides, all feed troughs or mangers should be kept scrupulously clean, and watched carefully to see that the animal is getting just what it will clean up, and no more. Constant attention will be necessary if success is to follow the system of feeding practiced, whatever it may be.

When it comes to selling, it would be wise to have the pig or the fat lamb or the fat calf go with some that are being sold from father's pen, but if the boy's is a little better finished than the others, he should insist upon a premium in price. Always sell by the pound, as it is the fairest for both seller and buyer. Provided the weigh scales are correct (and here we might mention that it is well in the process of feeding to weigh at stated periods, to see just how the animal is doing) both parties to the transaction will get exactly what is coming to them. Watch the market reports carefully, and be sure to get all the animal is worth. The boy should make his own bargain, but, of course, it is no harm to get a hint or two from his father, who has had much more experience. Let the boy take all the responsibility in connection with the entire feeding and sale of the stock, and after the deal has been put through, all the business in connection with it should be straightened up, the stock paid for, the feed totalled up and settled for, and all expenses deducted from the sale price. All profits, of course, should go to the boy, and he should be encouraged to use them in a further transaction of a like nature.

— After all is over, write the matter up in a short article to be published in these columns.