

Editorial.

Harvesting and Storing Potatoes.

This month is the time when the earlier varieties of potatoes should be dug. It is a great mistake to allow the tubers to remain in the ground until late in the fall, as the generality of farmers do. Hence they are exposed to rains and are liable to rot, or at least to get so thoroughly impregnated with water that it takes a long time for them to dry and become in a proper condition for winter storage. Then the potatoes near the surface being exposed to the sun and weather; turn green and are totally unfit for use. Then after being dug they are often carelessly left in heaps, and exposed to the action of winds and the sun. It is not generally known that a potato exposed to a keen wind for a length of time without any sun will greatly injure its eating qualities. To retain its proper flavor it should be excluded from the light as much as possible. For the want of proper management in harvesting and storing, a great percentage of the potatoes in the country are spoiled every year.

The withering of the stalk tells that the tubers are fit for the harvest, and when the soil is dry the potatoes come from the ground clean and bright; if gathered in rainy weather much soil adheres, which injures both appearance and consequently the market value. We have noticed in London market that people, especially women, prefer a clean, bright looking potato.

In digging hilled potatoes a fork or potato hook is easier and faster than a hoe—a fork loosens up the dirt, yet leaves it behind when the potatoes are drawn out. In drills there is a uniform depth of planting, and as the potatoes will be found at about the same, a plow or potato digger can be used with advantage. Plow along each of the rows to loosen the dirt, then, with the plow set a little deeper than the seed bed, plow over the rows to throw them to the surface. All in sight can be picked up, and if any be covered a light harrowing will expose them. They should be gathered up and put under shade at once, for, as we said before, the light turns the surface green and renders the potato bitter and unwholesome. At the same time they must be spread where the air can circulate freely and dry them, lest moisture in the bin should induce rot. A cool shed, a barn floor, or a covering of straw, brush or boards, if the air has access to them, will any of them answer the purpose—but don't let a sharp frosty wind strike them. It often happens that a farmer carries his potatoes directly from the field to the cellar, and they winter through without harm, yet it is risking somewhat considering their liability to disease.

In storing potatoes there is a great loss in shrinkage from evaporation—from ten to twenty per cent. from the time of storing till the following spring, a larger waste than from any other crop, and hence taking it all around, farmers will make more to sell their potatoes in the fall than to keep them all winter. Because less evaporation takes place in pits than in cellars and bins, many prefer this method. If so, select a dry sloping space, or on well-drained land, where there will be no danger of standing water. Dig a shallow trench six or eight inches deep, four feet wide, and as the quantity to be protected demands. A furrow each side this trench is an additional safeguard against moisture. Ridge up the potatoes about as steep as the roof of a house; cover with straw sufficient to keep the fine earth from sifting through, and over this throw a thin layer of soil; leave an opening at the top every five feet and insert a stovepipe, or cover the opening with a slanting board to shed the rain. This will allow the heat to pass of rapidly. When

frost comes remove the ventilators and fill the openings with a wisp of hay or straw. When settled cold weather sets in, cover sufficiently with earth to prevent freezing. This trench could be portioned off with layers of straw and earth so that the potatoes could be opened up in sections as wanted without exposing the whole.

If potatoes are intended to be kept in a cellar, it should be dry and free from frost, capable of being made perfectly dark, and of being ventilated quickly and thoroughly. In such a cellar potatoes might lie on the floor in heaps without injury; but in the majority of cellars the floor is no place for them. Store rather in bins or barrels raised a foot or so from the floor. In bins board partitions may separate varieties, and there may be three or four rows of bins one above another. There is much less danger of rot in this arrangement, and a greater opportunity is given to pick them over in case of disease. However, temperature is one of the factors in keeping a potato. The germinating power of a potato is injured, if not destroyed, when exposed to a temperature below thirty degrees, and it commences to grow at a temperature above fifty degrees. Then a cellar that could be kept within this range, or better still from thirty-two to forty-five degrees, ought to furnish sound potatoes until spring, and that would sprout freely. A light sprinkling of lime upon potatoes when stored is a preventative against rot. Potato rot is a parasitic fungus, and the lime destroys the germ.

Sowing Wheat.

Active preparations should be made this month for putting in the wheat. We have invariably noticed that the plant that got a good start in the fall, stood the best chance to stand the attacks of a severe winter. Last year, owing to the continued drouth, the wheat, as a general thing, was put in late, and it got no root hold before winter. The best piece of wheat we have seen this harvest was sown the early part of September or late in August. It is well known now that wheat in Ontario will nothing like come up to the yields of the past four years, and although climatic influences affect to a certain extent the growth of the plant, yet proper cultivation and manuring have a great deal to do with determining whether a crop of wheat will be good or bad. As we have previously intimated, our farmers have gone too much into fall wheat, and, indeed, a number were making a specialty of it, and last fall acres and acres were thrown in on wheat and oat stubble in the most slipshod manner. In plenty of cases stubble land was merely gang-plowed once, the seed thrown in and harrowed down. How can farmers expect crops with this culture? To grow wheat successfully, the land should be thoroughly drained, manured and should be in good tilth. It is no use trying to grow wheat, no matter how rich the land may be, if it is but poorly drained. *Drainage* is the key note to successful fall wheat raising. Last winter, and during the present spring and summer, the land has been thoroughly soaked, and it is a wonder the wheat crop looks as well as it does. Where land is flat and low it would be advisable for our farmers to ridge up their fields in narrower lands than we see in general practice here. The furrows will also afford a surface drainage and protect the plant from being washed and frozen out. Besides these narrow lands, what a Yorkshireman calls "gripping" should be done, that is, running little surface ditches wherever the water is inclined to run. This could be best done when the fall rains set in. It may take a little trouble, but it will pay in the long run.

With regard to the prospects there are for wheat

growing in Ontario, we are strongly of the opinion that the fertile belts of virgin soil in the west and north-west can always discount this part of the country in wheat raising, and hence instead of our farmers going extensively into this cereal, it is advisable to relax their efforts in this direction, and instead of throwing in large fields of wheat, the way it was done last fall, put in a lesser proportion and do it well. Wheat is not the only thing a farmer should rely upon to make money; there is scarcely any crop but pays equally, and even better; and then, Why so much wheat? Wheat finally exhausts the soil, and we may say it becomes wheat sick. Nearly all the older States of the American Union and the first settled portions of Canada have gone through a series of spoliation from constant wheat growing, and the land has been left in a poverty-stricken condition.

That the productive power of our lands in this respect is being rapidly lessened is plainly evident, and it can be attributed to no other cause than the continuous growing of this cereal.

Government Drains.

In another part of the paper will be found an enquiry from a correspondent, "Whether there is in this Province a Government Drainage Fund, and if so, is it available to individual farmers or only to municipalities?" There appears to be a considerable misapprehension about this question of drainage, and we may say it arises from supposing that the Ontario Government has a special loan fund for tile drainage.

The original Drainage Act of 1878 provided for Municipal Drainage Works being executed by the Government, and that the amount expended should constitute a rent charge on the land improved. In 1878 a Bill was passed providing that the Council of any township municipality could borrow money on debentures for tile drainage from \$2,000 to \$10,000. This was extended to stone and timber drainage in 1879. Thus it will be seen that two methods of drainage have been in existence. Under the first the Government did the drainage and charged the municipalities benefited; under the second the Government lent the municipalities the money on twenty years' debentures bearing five per cent. interest. Hence in no case could private individuals borrow directly from the Government, but through their several municipalities. The sum that can be loaned to one person cannot exceed \$1,000, and not less than \$100 can be loaned, and on this the Councils impose a special rate of 88 on each \$100 loaned for the term of twenty years. Any person can avail himself of the Tile Drainage Act by making proper application to the municipality. Up to 1882 there was \$604,075 expended in Ontario.

Barn-yards.

The barn-yards in this country, without exception, are kept in a filthy condition. Take even farmers who are tidy and tasty in other respects about the farm, and the yard is totally neglected. In the fall of the year the barn surroundings are simply a mash of mud and slush, and locomotion is made at the expense of going in knee deep. For the female members of the family who have to do the milking, this state of things is intolerable, and we have no doubt serious diseases are contracted and their general health impaired. There is no wonder that young people take a dislike to farm life and think there is nothing worth living for in the country. Besides the disagreeable situation of people being forced to wade through sloughs three or four months of the year to attend their stock, the animals suffer from having to be continually