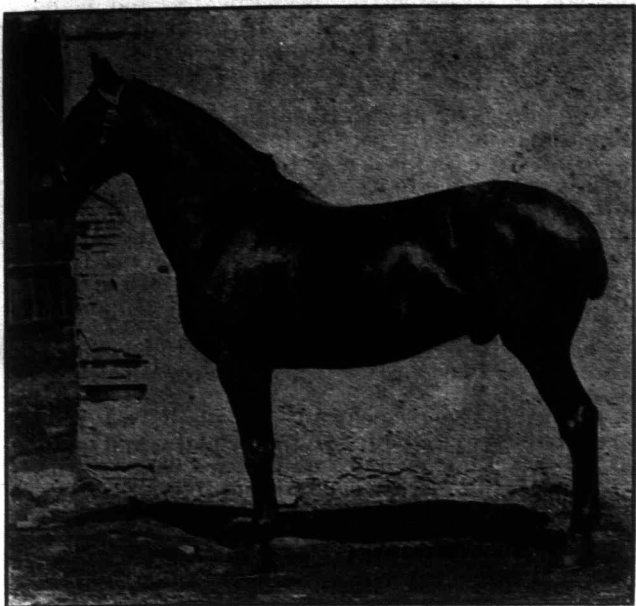


Corn Culture.

PREPARING THE LAND—PLANTING THE CROP—
VARIETIES—AFTER CULTIVATION.

We give Americans credit for leading us in some lines, especially in taking up good ideas readily. In the matter of growing corn, they have in some of the Western States (principally Iowa, Nebraska, Illinois, Montana, and Kansas) for years found it to be one of the chief crops. True, these States have a soil and climate particularly suited to this crop, which is of great advantage to them, so much so, indeed, that of all crops grown in some of these States, corn is claimed to be king. During the last ten years, we in parts of Canada at least are beginning to place the corn crop well up amongst others in rank of importance, especially in sections where stock-raising and dairying are the leading branches



HIGH-STEPPER, HAVELOCK.
Winner in Tandem and in Pair not exceeding 15 hands 2 inches.
EXHIBITED BY CROW & MURRAY, TORONTO.

of agriculture. We are forced to the opinion that a stock or dairy farmer in a section suitable to corn-growing who does not grow a considerable acreage of corn and put it in a silo is either a very conservative, good farmer, or else he is unprogressive. While we may not be able to grow enormous yields with the same ease as our American friends, we can, by careful selection of varieties and proper cultivation, get a very profitable crop for ensilage purposes, and well worth the effort. In the co-operative experiments with different varieties of corn grown over Ontario last year by the members of the Experimental Union, the yields of the five best sorts averaged from 10 tons to 14.6 tons per acre, from 2.7 to 3.1 tons of which were ears. These were averages obtained on a very large number of farms, while over 20 tons of crop containing 4 tons of ears is not too much to expect where conditions of soil and climate are at all favorable and the best sorts of corn are grown and proper cultivation given. While bulk of crop, and especially weight of ears, is very important, it is of first consideration to grow a sort that will mature well before severe fall frosts come. For this reason, also, it is well to get a portion of the crop, at least, in as early after the tenth of May as the ground can be gotten in good shape and there is warmth in the soil, although corn planted two weeks later may produce almost as heavily.

It has come to be generally considered that a clover sod, plowed in the fall and given a coat of barnyard manure during the winter or spring, is perhaps the best place to grow corn, for the reason that the land is rich in nitrogen and other necessary elements, very friable, and by reason of the decomposition of the manure is at a higher temperature early in the season, just when the young plants need a push forward. Where the manure is not too long to admit of it, surface cultivation in spring is now generally considered preferable to plowing, as soil moisture is thus better retained. In whatever land it is sown it responds well to manure, and it is labor well spent to make generous preparation for the seeding. There are different methods of planting the corn crop, but the two principal ones are sowing in rows and planting in squares or check rows. While one usually finds enough to do without much experimental work, it is worth while to plant portions of the field in different ways and with different varieties, although a few rows of new sorts will usually suffice to indicate their respective merits to the farmer who grows them. Last year the writer sowed five acres of Improved Leaming with the grain drill, in rows three feet apart, and thirty pounds to the acre; and five acres with an American check-rowing planter, about fifteen pounds to the acre. Without weighing the crop, we decided that the check-rowed corn was the more valuable for the silo, as it grew larger stalks and better ears. It also afforded the advantage of allowing the land to be cultivated both ways, which made hand-hoeing almost unnecessary. The check-rowed corn allows the sun better access to the roots of the plants, which is of great advantage to this crop, which belongs naturally to a southern climate.

In the preparation of ground for planting, one

can hardly take too much pains. The more thorough before planting, the less work will be required afterwards. The great thing is to get the ground in perfect tilth, and to accomplish this the land should not be gone onto until it is in a condition dry enough to work nicely. If the land is to be plowed and it can be done a week or ten days before planting time and well harrowed, it will afford the weeds a chance to start, so that they can be destroyed by cultivation before the corn is planted. If it is decided not to plow, but to give surface cultivation only, it is well that harrowing and cultivation be attended to a week or two before planting-time, for the purpose of starting weed seeds. Where the crows give trouble by digging or pulling up the young corn, it should be planted deeper, and if the grain is moistened with strong tar water before planting, it will serve as a repellent to the robbers. It is very important that some precaution of this sort be taken, especially where the corn is check-rowed or in hills, as a blank hill means a good deal of waste space. For the same reason one should be very careful to use only first-class tested seed, of the varieties we are sure to do well in the district. In the southern portion of Ontario, Mammoth Cuban and other large varieties do well, but in more northerly districts only early sorts should be sown. Such as Compton's Early, Early Butler, Angel of Midnight and Longfellow are fairly sure to give satisfaction. If it is preferred to sow the seed with the grain drill, stop all the seed spouts but two, if it is a ten-hoe drill, leaving the third one from each end open for sowing. Also leave the outside hoes on to mark for wheel in return, running the wheel in the outside hoe-mark, the same as if sowing other grain. The corn will then be in drills about three feet apart. Set the indicator to sow twelve pecks on the large pea scale, and it will sow about one-half bushel of corn to the acre. If it all grows and none is taken by the crows or blackbirds, it will be too thick for best crop, but some of it can be chopped out with the hoes, if thought desirable. We find the best corn-growers, both in Canada and the Western States, harrow the land several times after the seed is sown before it comes up. This keeps it mellow and moist, kills the young weeds, and the plants soon begin to show up very encouragingly. A rather fine-toothed harrow is best, as it cuts up the surface more thoroughly. The new "weeder" is a grand implement in a corn field at this stage of the growth, as it can be used every few days with good effect and without fear of injuring the corn until the plants are about a foot high. By this time the weeds should be fairly well destroyed, but cultivation should not yet cease. The riding cultivators, arranged to straddle the rows, now make good work easy and thorough, but the effect can be accomplished by a walking scuffler (of which there are good sorts on the market) very satisfactorily. The thing is to keep the surface stirred well as late in the season as one can drive between the rows. Rather deep cultivation may be done at first, but the corn roots run out very rapidly, and unless the cultivation is shallow from this time forward, very harmful root-pruning will be sure to result.

Trouble with Water Pipe Overcome.

To the Editor FARMER'S ADVOCATE:

SIR,—In reply to a question in your April 1st issue (page 183) by L. A. B., of Ontario Co., regarding his trouble with a water pipe, I would say that I think the reply by Prof. Reynolds will not help him out of his difficulty. I had an experience of the same kind, and it took me nearly two years before I got mine to run. Putting in a larger pipe I consider is a useless expense. I did the very same thing. I first had a $\frac{3}{4}$ inch pipe and it stopped running. I then took it up and put in $1\frac{1}{4}$ inch pipe, and reduced it to $\frac{3}{4}$ inch at the outlet. It stopped again. I then took it up and put in a 2-inch pipe at the spring and reduced it to 1 inch pipe at the outlet, with no better success, and the distance was only 200 yards. I was one day conversing with a civil engineer and the subject turned to running water, and I told him my trouble. He told me to tap the pipe about half way to the outlet, and put in an air pipe to let the air out of the pipe, and it would run. I did so, and it has now been running constantly ever since. I did this in the beginning of September last, and have had no trouble since. My pipes used to stop up with a mossy kind of substance, which looked like iron rust. I think if L. A. B. will leave his $\frac{3}{4}$ inch pipe down and put in two air pipes, say one near the spring and the other about two-thirds of the way to the outlet, that he will have no more trouble. One-quarter-inch pipe would do for the air pipes. It will be necessary to clean out the pipe, with a force pump and a barrel of water, from the outlet to insure a good clean start.

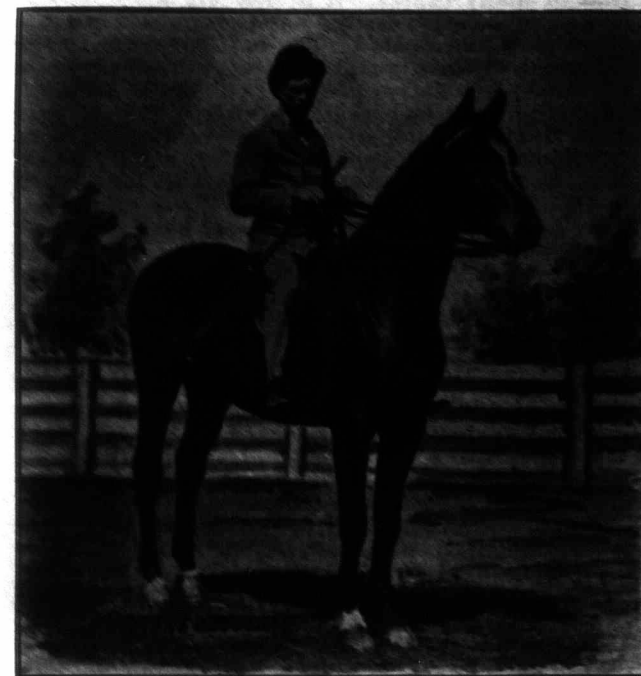
Northumberland Co., Ont.

The prize list for the Toronto Industrial Fair this year for the potato exhibit has undergone quite a change from previous years. Prizes are offered this year for the different types, such as Rose type, to include the five or six varieties of that type; the Hebron type, Ohio type, Bell type, Long White type, Oblong or Medium White type, Round White type, and any other variety not named. Each type includes from three to six varieties. Half-bushel of each variety to be shown to compete for the prizes.

Suggestions for Arbor Day.

Since the establishment of an annual arbor day for public schools very many country school grounds have been materially brightened and improved. That there has been, and still is, need for improvement there is no room for controversy. The training for life begins in the home and is fostered in the school. It is, therefore, of great importance that the surroundings of the place where so much of a growing child's early life is spent be attractive and comfortable. We have all seen many rural school grounds that are bare, harsh, cheerless, and even immodest, with their outhouses not far apart and unhidden from view. Children may be compelled to attend such schools, but they cannot be forced to enjoy it. They like it only when it is worth liking, and when they like it they make the best sort of advancement. While much has been done by teachers and pupils on arbor days during recent years, the work has generally been of a minor and detailed sort, such as planting flowers and cleaning up the yard, which would do well as finishing touches to a more general system of improvement under the supervision of the trustees.

What is really needed is a general reform, headed by an energetic member of the school board, who can get the co-operation of the most influential men of the section. With some organized effort a good meeting may be called to arrange for a "bee" to improve the grounds, when a general but definite plan can be worked out. Many school grounds are too small, and when this is felt it should not tax a section very heavily to buy half an acre of adjoining land in order to have it right to commence with. Even though this is not done the chances are the fences need repairing, rebuilding or removing altogether. The old, plain, close board fence is a very bare and unattractive enclosure, which, if hidden by trees or overgrown with vines, would present a pleasing appearance. A neat, painted paling fence would, however, answer all the requirements of separation from the outside without marring the appearance of the grounds. During the "bee" of one day the fencing could be attended to by one man and some helpers, others could level the ground if necessary, sow grass seed, and prepare the soil by plowing, harrowing and manuring for a belt of trees and shrubs, which could be secured by another set of men in a neighboring grove or a nursery if thought wise. A stiff row of trees similar to the ordinary roadside maples is not enough. The plantation should be more of a belt of graceful irregularity, so that the ground would in a few years be set off from the bare fields, while the center of the yard would still remain open for sports. The idea should be to have the place picturesque and cosy, more like a picnic grounds than a repulsive, cheerless stock yard. It would require a landscape gardener to do the laying out properly, but almost any



HEATHERBLOOM.
Prizewinner over Hurdles.
EXHIBITED BY CROW & MURRAY, TORONTO.

farmer who possesses an attractive lawn at home could well be depended upon to plan the improvements. The outhouses, bare corners of the school, and such other objects that would be better hidden could be easily secluded by evergreens, vines or the like. If a well-planned day's work by a fair representation of the section were carried into effect for each of two or three successive years, we have no hesitation in believing that the generations that would attend that school in future would reap untold advantage, while those who did the work would feel repaid a hundred-fold for the labor of love every time they chanced to see the ever-improving condition of the plantation. There would then be some encouragement to the teachers in future to do their part towards Arbor Day exercises, or general floral or shrub decorations.