

in by cultivator; find it pays well and for more than one crop.

5.—Have not tried pumpkins or squash alone to any extent; think it would pay; but we never fail to plant pumpkins in our field of ear corn. Find squash with their immense leaves liable to stunt corn, but pumpkins won't. Consider them one of the very best of feeds for milch cows, also boil them and make a mush with provender for pigs. Find them a profitable fall feed. We always put them through root slicer for all purposes.

6.—Have had no experience with rape yet; shall try it this year.

7.—After two years' trial, I think a great deal of Perry's Hybrid sugar corn as an ear corn, and it gives a large crop of fodder also, but needs a good long season to thoroughly ripen; always two ears and often three on each stalk. Compton's Early and Longfield have done well here, but are nowhere with above sugar corn either in quantity of ears or fodder. For a large bulk of corn fodder we don't seem to get any corn better than Mammoth Southern and Red Cob Ensilage. Corn is king, and should be every farmer's standby, but I find by experience it must not be fed without other foods, either as stover or ensilage, for certainly the quality of "gilt edge" butter will be affected thereby.

NOTE.—Allow me to say re cultivation of hood crops, start the cultivators as soon as you can see where to drive, and keep them going as long as the crop is not injured thereby. No other work will give a better return than this.

Glengarry Co., Ont. JAMES H. ESDON.

Level Cultivation for Potatoes.

1.—Plow in the fall. Draw out the manure in winter and spring, putting in piles. Scatter and plow in spring.

2.—Select the medium sized, cut the best eyes, planting three sets in a hill, hills three feet apart. For early crop, plant the last of April or first of May. For field crop, about the 24th of May. To prepare the ground, plow in the fall; a good coat of manure. Plow and harrow in the spring, then furrow out.

3.—Level cultivation.

4.—After wheat and oats plow in the fall; manure and plow in the spring again. About the 1st of June sow with a twelve-hoe seed drill, stopping all but three, about a bushel to the acre. Use the ordinary cultivator.

5.—Grown with corn and potatoes. Consider them good feed for milch cows and pigs.

6.—I have never grown rape, but I am going to try it this spring with oats.

7.—Mammoth Sweet and Red Cob. Northumberland Co., Ont. WM. STILLMAN.

Potatoes and Corn Under Quebec Conditions.

1.—(a) We spread manure for corn on grass land that is to be broken up, late in the fall, and plow immediately, setting the plow as deep as it will turn, say eight inches or more, so that in spring we have a fine seed-bed after thorough harrowing. We put on about 25 or 30 loads to the acre; this manure is what has been made about the barns and pigpens during the summer and early fall stabling; most of it is quite green, and contains quite an amount of litter, but it will be ready for the crop by the time the corn reaches it. We use about 300 pounds of fertilizer to the acre in the hill.

(b) For potatoes, 20 loads of mixed horse and cow manure. Spread along in the row, and drop the seed on it and cover the whole together; for the last twelve years our yield has been from 300 bushels to 450 bushels per acre, except two years, when it lacked a few bushels of 300 bushels.

2.—We usually select medium-sized potatoes for seed from the bin, but of late have selected some varieties at digging time and consider it the better plan; ground plowed in the fall; generally breaking up, plowed deep, or else out stubble fall plowed, well harrowed early in spring, then furrowed out and manured as stated above. For very early potatoes, start in hotbed or warm corner some seed potatoes, and when well rooted, plant, avoiding breaking off roots, as early as the ground is dry enough to work. For field crop we plant as soon as the spring wheat is all sown, and we can attend to it usually by the 10th of May. We plant medium-sized potatoes whole. If large and full of eyes, split in halves; one set in a hill, 20 inches apart, and rows 2 feet 9 inches apart, for most varieties; heavy-growing top varieties 3 feet apart.

3.—Cultivate as near level as possible till the last hoeing, then hill up small hills just enough so the tubers will not sunburn. Do not believe in digging down and cutting off the roots for the sake of getting a lot of earth to make a big hill.

4.—After grass for both ear and fodder corn. Ground prepared as stated in No. 1. Plant from 20th to 25th of May, according to season. It is difficult to state the quantity of seed, as different varieties have different sized seed. In both cases we plant rows about three and a half feet apart; for ear corn five to six kernels in a hill, two feet four inches apart, and for fodder three kernels to the foot.

5.—Pumpkins we usually grow with ear corn; plant in every fourth row and thin to one plant to every fourth hill, and no injury will result to the corn. If planted alone in rows ten feet apart and hills seven or eight feet apart, thin to two plants in a hill. If left too thick the roots will bind in the ground more than the vines will on top, and small pumpkins will be the result. Of little value to

hogs, but good for cows, giving milk a nice flavor; of more value if seeds are removed, as the seeds act to much on the kidneys.

6.—Rape has not been tried here to my knowledge.

7.—For ear corn our native eight and twelve rowed varieties do best; for fodder, Perry's Hybrid (sweet), and among the dents are Ex. Early Yellow, Huron, and White Cap Yellow Dent. The larger growing dent varieties are too late maturing for this Province.

NOTE.—Questions 1 and 4 are nearly duplicates with us, as we always plant corn on the sod, followed by grain and seeded down. It is with much interest that I wait for the published answers from other parts of the Dominion. P. P. FOWLER. Shefford Co., Que.

Success in Corn Culture.

In none of our cereal crops are farmers taking more interest at present than in corn. The failure of the clover plant, and the rapid extension of dairying, has led to the adoption of corn as a forage plant, both for summer and winter feeding, and certainly we have no other plant that will furnish as much food on a given area.

Up till recent years very little corn was grown in Ontario outside the Lake Erie counties, but by the selection of early-maturing varieties it can now be grown successfully over the whole Province. The writer has seen corn grown in Cornwall which the grower claimed yielded 125 bushels of ears per acre. The ears were certainly well matured and were a fine sample of corn.

The value of a corn crop depends (1st) on the quantity of ears and (2nd) the maturity at which it arrives before being harvested; hence, all efforts at corn growing should be with a view of growing well-matured, well-eared stalks. [NOTE.—We should also aim to combine a stalk of good size and leaf with the foregoing.—EDITOR.]

For successful corn growing we must have a free soil, either naturally or artificially drained, as corn will not thrive on cold, spongy soils, nor yet on very hard, unyielding clay that bakes hard after every rainfall. Careful preparation of the soil is required; a clover sod plowed down and well-worked makes an excellent seed-bed for corn. If the land is heavy it should be carefully plowed in the fall, so that the action of the frost will cause thorough pulverization. On light sandy or deep alluvial soils as much success can be achieved by spring plowing or even plowing a few days before planting. If the soil is not naturally rich it should be manured liberally. On heavy soils which have been fall plowed the manure may be drawn out in the winter season and spread so that it may be worked into the soil as early as possible in spring. Heavy soils should be thoroughly worked before planting, so as to get as fine a seed-bed as possible. Cultivate about the first of May and then leave alone for ten or fourteen days, so that all weed seeds may germinate and be destroyed before planting; then cultivate and harrow thoroughly just before planting.

As to varieties, each locality seems to have a preference. North of latitude 43 the varieties that give best results are Compton's Early, Longfellow, and Thoroughbred White Flint, with the first named at the head of the list.

Seed corn should be selected with great care. Large, well-matured ears should be chosen, and the tips and butts of ears should be broken off and thrown aside. Before you plant, be sure that 99 per cent. of the seed will germinate, as the success of your crop depends on the first planting making a vigorous growth. Plant a few dozen kernels in a warm place ten or twelve days before planting, and thus test the vitality of your seed. More feed of better quality can be obtained by planting in hills rather than by growing in drills. Corn is essentially a sun plant, and the freer the circulation of air and the more we allow the rays of the sun to have direct contact with the plant, the better the quality of corn. Mark from 42 to 48 inches each way and plant the corn with a planter, about five kernels to the hill. Press each hill firmly with the foot when planted, or, failing this, the ground should be rolled with a heavy roller, as this will do much to secure an even, rapid germination, especially in a dry season. Just as you see the first blade peeping through, harrow the cornfield thoroughly. Use a light sectional harrow; if the teeth slant backward a little, all the better. This harrowing will destroy many weeds and keep the soil in good condition till the corn gets large enough to use a scuffler. [NOTE.—Many successful corn growers now harrow two and three times.—ED.] Cultivate each way and stir the soil as closely to the plant as possible. Do not cultivate too deep. The corn crop should be hand-hoed at least once, stirring the soil closely around the plant. A man can hoe about 1½ acres per day, and this hoeing certainly works wonders. The scuffling or cultivating should be continued until the corn is tasseled out. If weather is dry it will pay well to cultivate each way every week. Always cultivate after a heavy rain, in order to break the crust and allow free circulation of air.

Corn should be well matured before cutting. When ears are well glazed and the kernels are quite firm is time to cut. When it arrives at this stage cut as quickly as possible; for if corn gets overripe the value of the stalk as fodder is very much lessened. The best tool for cutting hill corn is a wide-bladed, sharp hoe, made by a blacksmith out of a saw plate, with a handle about 18 inches long. Put

up in shocks with 36 or 48 hills in a shock, binding securely at the top.

There are three ways of disposing of the corn crop: 1st, by cutting and storing in a silo; 2nd, by husking in the field, the ears being stored in a crib and the stalks drawn into the barn as fodder; 3rd, by drawing from the field and feeding as required, ears and stalks being fed together.

In regard to expense, the cost of hauling and putting in silo and of husking and drawing in the ears and fodder will be nearly equal, not considering the cost of constructing a silo. The latter method is very much the cheapest, and certainly gives good results.

The cost of husking a bushel of corn in the corn belt is four cents. It takes two bushels of ears to make a bushel of shelled corn, which costs three cents to grind it into meal, making a cost of eleven cents for 56 lbs. of meal outside the cost of growing the corn.

There certainly would not be that much loss in feeding the corn on the stalks if the cattle were followed by hogs. I believe that the latter method is going to be practiced more in the future than it has in the past.

If the cornfield has been kept cultivated as it should, and is perfectly clean, better results will be obtained by cultivating the corn stubble the succeeding spring without plowing, and drilling in a crop of spring grain; and if the field is to be seeded down a far better catch of seed will be obtained. Elgin Co., Ont. MUNGO MCNAB.

GARDEN AND ORCHARD.

A Farm with Ornamental Hedges.

"Why is it," said a visitor from the Old Country to me lately, "that so many of your farm houses and outbuildings present such a bleak and dreary appearance, standing out, as they do, without a tree or ornamental fence to relieve their bareness? It cannot be from lack of trees to plant or because the trees when planted will not grow. It must be simply because this feature, which would add so much to the attractiveness of farm steadings all over the country, is not sufficiently appreciated by the farmer. And yet what an improvement a few trees or a well-kept ornamental hedge would be to most of your farms."

Similar thoughts to these had often passed through my mind while travelling through the country. It is an indisputable fact that the majority of our farm houses and buildings do look terribly bleak and dreary. Many of these are fine and well-built, but their lack of surroundings greatly detracts from their appearance in the eyes of visitors. It is a great relief to the eye to come across a farm where well-kept fences and shade trees planted in suitable spots show that the proprietor has a touch of the artistic in his nature and has had the good sense to carry out his ideas, to the great improvement in the appearance of his surroundings, and with this further advantage, that should he at any time wish to dispose of his farm he will be able to do so more readily than the man who has neglected to give his farm the few finishing touches of improvement that count for so much when a bargain is being made.

Of all the various kinds of trees or bushes out of which hedges can be formed there is probably none that for general utility surpasses the cedar. In this country at least, the Canadian thorn, while it offers more resistance to live stock, soon grows thin at the bottom when trimmed up in hedge form, while the much-lauded osage orange, locust, and other hedge plants do not seem to be the ideal articles that they are represented to be.

One frequently comes across a short stretch of cedar hedge near a farm house, serving both as an ornamentation and a windbreak, but it is rare indeed to find any great length of it. I lately, however, had the pleasure of inspecting a farm on which there are fully three miles of cedar hedges. The farm in question is "The Briars," Sutton West, owned by Dr. F. C. Sibbald, who has a large and flourishing herd of Shorthorns and a number of trotting-bred horses. The beautiful condition of the hedges and their imperviousness by live stock led me to interrogate the Doctor as follows, so that others might reap the benefit of knowing how to plant and train up a cedar fence.

"How old are these hedges, Doctor?"

"Most of them are fifteen years old."

"What size were the plants when you set them out?"

"I selected such as were one and a half to two feet high. They were planted four feet apart, which is close enough for good thrifty stock."

"When do you first trim them?"

"The tops when they are about five feet high, the sides when they have grown about two feet thick."

"Your soil is specially suitable for cedars?"

"Yes, they do best on sandy loam. You will notice that they have not done so well in some places. That is because the soil is of clay there."

"Do you find that they will turn stock, or will the animals damage them?"

"You will see that I have them protected by a light post and rail fence. That was put there when they were first planted and has never been renewed. In other parts I have a board fence at the back. I do not think that stock will damage them much. They should, if well grown, turn stock at ten years from the time when they were planted."