

weeds have sprung up all over the piece, it is always a more difficult job to destroy them.

Next, with regard to hoeing, I propose to draw your attention to a fact which you have probably noticed, but about which you cannot study too much. You are aware that maize forms a multitude of radicles, little roots, which spread on all sides; these give it its great power of growth; its nutriment is imbibed through this multitude of ducts. Well! I advise you to pay particular attention, after your corn is up, to horse-hoe, &c., very shallow. If you hoe deep, you will destroy a great number of these rootlets, you will injure the plants, and you incur the risk of your corn not coming to perfection. I have no doubt you know this very well, but it will do no harm to repeat it. (1)

As soon as the plant begins to grow, it must be *lightly* cultivated, so as to do as little injury as possible to the rootlets which feed the plant and give it its strength.

I need not speak of the way to sow corn, since I presume every one has his own way, and will hold fast by it. They are all about equally good, but, as some may care to know how we sow ours, here is the description:

We simply make a furrow with the plough two or three inches deep, and scatter the corn in the row, and, last year, we covered it, too, with the plough. We found that it was buried at a much more uniform depth. When we used to cover it with the rake, there were always a good many seeds left above ground, while by passing the plough along at about the same depth as in making the furrow, the corn was well covered, and, after a rolling, came up uniformly.

Take great care in selecting your seed to have it sound and full of vigour. There is a way, which is very easily practised, to judge of the quality of seed. You have simply to take, indiscriminately, fifty grains from the bulk of corn, and sow them in a box of damp earth. At the end of a few days the plants will be up. You then count the percentage of plants to seed, and, then, you must reflect that in the open field you will not have as many grains come up as in the box, since the corn is under more favourable conditions in the box than in the field. By making this trial, we know precisely the value of the seed-corn, and do not hazard the loss of our best piece of land. For it is the best piece of land that is kept for silage-corn, and when this is sown, the season is over for sowing anything else, except buckwheat.

When I speak of sowing half-a-bushel to the *arpent*, you must not misunderstand me. Of course, if you are about to sow a corner of your piece in maize for your cows in summer, when the grass has become hard and the cows will no longer eat it, you should sow thicker. For, if you sow corn for that purpose, when the cows are in the pastures, and sow it so thin, the stalk will become too coarse and the cows will not eat it, or will leave the greater part. That is why a piece is sown thick; the stalks remain thin and tender, and the cows will eat it up to autumn.

I do not doubt but that in well fitted land, well manured and drained with $\frac{1}{2}$ a bushel of seed to the *arpent*, the weather being propitious, we may reckon on a yield of 20 tons to the *arpent*.

But when I say 20 tons to the *arpent*, it must be understood what corn I am speaking of. It is very sure that if you sow Canada corn you will never get such a crop as that, and if you sow Southern white-corn, you may harvest a good deal more. But until science has said its last word on the relative values of these different species, I can only advise you to sow the horse-tooth kind, or Western corn. With this, you may grow your 20 tons to the *arpent*, and if you sow it thinner,

you will have a crop of ears to enrich your forage, and with which your cattle will be highly pleased. I think, until we know from the positive decrees of science that other kinds of corn are preferable, we had better keep to this sort. Our climate is not unfavourable to the Western corn. I know that we cannot reckon on its ripening its grain, but that is not what we want. Later, we shall see at what period of its growth the maize should be cut and ensiled.

I have very few remarks to make on the construction of the silo. All those who have entered on the business know how to build one, and those who are beginning to grow corn for silage, and consequently have to build a silo, will find in almost every locality plenty of information on the subject. I will only make a few remarks on my experience in silo-building.

The whole secret of success with ensilage consists in putting the silage into an air-proof building. You may make it in any way you prefer, if this rule, which is peremptory, be faithfully observed. Whether it be constructed of wood, brick or stone, is no longer a question. Experience proves that wood is as good as either, if not better.

The most important part of the silo is the bottom. The best material for those who do not care to rake it of cement is beaten clay, raised to about half the thickness of the sleepers. This clay, beaten carefully, will guard against any influx of air from beneath, for this would be fatal to the silage. It is the air that enters from below that has the most disastrous effect. This is why I cannot advise any one to make the bottom of the silo of wood, because vermin will from time to time, without your suspecting it, make their way through the boards; thence, follows an escape of gas, a current of air takes its place, and a quantity of the silage is spoiled, without your being able to help it.

Of course, those who do not mind the expense (which is not very great) of a cement bottom, are still more secure. Still with a bottom of beaten clay there is no great danger of vermin getting in; especially if the building be earthed up outside to half the thickness of the sleepers.

The sides and the gables may be made secure by paneling them with two ranks of dove-tailed boards, one rank within and the other without. But for greater security against the entrance of air, I recommend putting two ranks of dove-tailed boards *inside* with felt paper between the two ranks.

As I have already said, I do not consider this necessary but it is a still greater security. It sometimes happens, that with a single rank outside and the same inside, air will enter without your knowledge while, when you have two ranks inside, with felt paper between them, you are safe from all danger.

If you want to exclude frost, fill in the space between the outside and the inside paneling with sawdust or tan-bark.

As to the size of the silo, that is a matter of practice, which all who concern themselves with the matter understand. You are aware that, as a rule, the average weight of silage is 40 pounds to the cubic foot; sometimes more, rarely less. But by taking an average of forty pounds, you are not likely to be deceived and consequently the dimensions will be easy to calculate. Forty pounds to the cubic foot is equal to fifty cubic feet to the ton. Now, supposing you intend giving ten pounds of silage to each of your cows at each meal, three tons each during the winter, you have only to allow, in building, 150 feet to each cow, and you will have room for 30 lbs. a head till spring arrives. If you want to give them more, build accordingly.

It is better to build less in breadth and in length, and to add to the height. The higher your silo is, the better will be the packing (*fouillage*). If your herd is large, build on a large scale and divide the silo into two or even three compartments:

(1) I hoe as deeply as possible until the corn is about 9 inches high—4 or 5 inches deep.