

## Agriculture.

## The Culture of Early Amber Cane.

Dr. Collier, Chemist of the Agricultural Department, Washington, D. C., U. S., in his treatise on the Early Amber Sugar Cane, after writing at length of the great necessity of procuring the best seed, says: "Though it is advisable to sow 10 or 12 seeds in each hill, should they all come up, thin out to 4 or 5 soon after they appear."

You might have more in a hill but the best results are obtained from that number.

When you have too many stalks in a hill, the amount of crystallizable sugar per stalk is small in comparison with the percentage of foreign matter.

The danger resulting from birds pulling it up is small, but still more so than from worms or flies; the birds pull it up, but lay it down again not eating the seed, as it has a decidedly bitter taste when small enough to be pulled by birds or destroyed by flies or worms.

Pull up a stalk and taste it and you will be convinced: at least, such has been my experience.

An easy plan for keeping off crows is to drive a few sticks here and there through the fields, and tie strips of elm bark or twine from one stake to another, leaving them there until the cane is large enough to take care of itself.

As soon as the cane is up, perhaps half-an-inch, stir the ground around the hills which may have become crusted, and as it is now of slow growth and tender, the wind may wear off the small shoots against the sharp, rough edges of the crust.

Another benefit to the plant is this: it lets the warm rays of the sun down to the tender roots.

A great deal depends on the amount of labor bestowed on the cane at this stage; for, if it makes a good root, the root will make a good stalk.

Do not forget this, as it is very important.

Again, it gives a check to any grass or foul weeds which may have started, and if allowed to grow would soon spoil the cane, or injure it so severely that in nine cases out of ten it would never regain what it had lost.

Hence, keep the soil loose around the hills and free from weeds.

When the cane starts to grow, do not be discouraged if you should see it make but very indifferent progress at first; it will put forth suckers or false shoots. These are worse than weeds, they not only draw their strength from the same ground but extract the very life from the main stalks.

They are full of that foreign matter spoken of before, and should they be allowed to remain, at time of cutting, you will find that they contain a degree of sweetness in a very small proportion to the size of the stalk.

Therefore it is best to remove all but the parent or main stalk, which will be a large as well as a rich one if freed from those hangers-on.

Go through your cane about the middle of July and cut or pull off all the suckers and shoots close to the parent stalks.

Do not be afraid of losing anything by this, for all the saccharine matter absorbed by them will go into the main cane and make it all the sweeter.

If the suckers were not taken off and also not worked up the loss in quantity would be fully 25 per cent., and if worked with the rest the loss in quality, both taste and color, would be from 10 to 20 per cent.

Should they be cut before the middle of July they might require cutting again; but, if cut then, the leaves of the standing cane will so shade them that they will make but indifferent progress, and if a few should again obtain rank growth it will be but a trifling matter to go over them a second time.

Now go through the field occasionally with the hoe and cut all the weeds and throw a little fresh dirt around the roots.

(To be Continued.)

We are indebted to the Secretary, Mr. J. H. Real, of New York, for a copy of the Journal of the American Agricultural Association. This work contains several valuable papers on agricultural topics, which are written by able writers.

## Covered Yards.

At a recent meeting of an English Farmers' Club, Mr. H. M. Cobb read a paper on the above subject, from which we extract such as is of interest to Canadian farmers. He said:—

Lately I had the pleasure of seeing the yards erected by Mr. Randell, of Chadbury, Evesham, which are most conveniently and economically arranged; and I could not help making a comparison between the healthy appearance of his store beast, not at all extravagantly fed, and those of the store cattle we usually see in this neighborhood—in the former case quietly licking themselves with enjoyment after a comfortable meal, instead of standing with tucked-up quarters, using their bodies to keep off the rain and pitiless blasts. From what I saw then, I feel convinced that even store cattle kept in covered yards must be worth quite \$5 per head more at the end of the winter. Mr. Randell says, in a letter to me lately, the improvement of the animals alone would pay 5 per cent. on the outlay. Mr. Beard, of Horton, Canterbury, who has also erected covered yards at his own expense, says:—"I find stock are as hardy and do as well when they go out in the spring as others. There would, I think, be found no practical or theoretical man to attempt to disprove that the manure is considerably improved. This improvement has been estimated by various writers at 100 down as low as 30 per cent. To prove increased value you require results, and I will show the actual facts gathered by Lord Kinnaird and others from trial of the manure on different crops; the application of an equal quantity of manure from covered and uncovered yards, made under the same conditions as to the food and age of the animal, to an acre of land, gave the following results:—Dung from uncovered yards—first year, potatoes, 7 ton 12 cwt.; second year, 42 bush. of wheat, 156 stones of straw. Dung from covered yards—First year, potatoes, 11 ton 12 cwt.; second year, 54 bush. of wheat, 215 stones of straw. Showing an increase for the first year of more than 50 per cent., and in the second 25 per cent. in round figures—actual facts, more than confirming our previously determined 30 per cent. Again, two plots of an acre each of meadow land were treated with fifteen loads of the two sorts of dung separately, and a third left unmanured, the result obtained being:—From uncovered yard dung, 16 cwt. of hay; covered, 25 cwt., or a gain of over 50 per cent., thus again largely exceeding our estimate. The unmanured plot produced 10 cwt., thus confirming the correctness and value of the experiment. Dr. Voelcker says that the worst possible way of making manure is to make it in open yards, as a large proportion of valuable fertilizers are lost in a very short time, and after a lapse of twelve months two-thirds of the quality of the manure is lost, leaving only one-third, which is scarcely equal to the same weight of fresh dung.

This matter has been investigated by other agricultural authorities, all of whom decide that manure which has been sheltered is of much more value than the unprotected article. Canadian farmers would do well to notice this fact. In this country nine-tenths of all the manure is kept in the open barnyard. The straw stacks are in no way protected, and many of them are badly built, and in the fall, winter and spring from one to three feet of water-soaked straw, frozen in a solid mass, has to be chopped around and pried off the top before a cut can be made or good straw be come at. After this frozen mass is taken from the stack, it is left in the open barnyard to be thawed by the heat of the sun and warm spring rains, and after it has laid and leached for weeks it is hauled on the land and called manure. Such a state of things does exist on many Canadian farms to-day. The use of a covered yard from May until November is an item by no means to be despised. Implements which suffer quite as much from exposure to the sun as from rain can be stored here, and various uses could be found, especially when the barn will not hold the season's crop. In such cases grain can be stacked here for a short time until threshed.

Sweet corn has been planted quite extensively by farmers and dairymen this spring. Its value for winter forage and early feed is becoming better known and appreciated, and it will gradually gain until every live farmer will find himself providing it as regularly for the denizens of the barn yard as the mistress does for the table.—[Ex.

from the factory (one in grass is preferred), where from one to two hundred hogs are to be kept. Movable troughs for feeding are placed in this lot, the whey is drawn out daily in tanks and spouted into the troughs. Every two or three days the troughs are moved to a new place in the lot, the troughs being arranged so that they can be drawn to the desired spot with a horse, by simply hitching a chain to one end of the trough. In this way the whole field is gone over from time to time, insuring cleanliness in feeding, and avoiding any disagreeable smell. The hogs are constantly rooting up the ground in search of green food—grass roots and the like—and at the end of the season not a vestige of weed or vegetation remains. Occasionally shelled corn or peas are scattered over the ground thinly, in order to induce the hogs to keep up their work of rooting and cultivating the soil. Their constant rooting and stirring of the earth thoroughly mingles their excrement in the soil, thus preventing any disagreeable odor, and by fall the land has been manured and worked in the best manner for a crop of winter wheat, for which it is then employed. Mr. Losee stated that last season he kept 140 hogs on a ten-acre field. The hogs in the spring, or when he commenced feeding, weighed on an average about 100 pounds each, and when they were finished and sold in October the average weight was 223 lbs. Some shippings, shorts and grains were fed with the whey, the cost of which was not to exceed 50 cents for each animal, and in October, when ready for the butcher, they were in fine condition. During the season not a single hog was lost, or was in any way diseased. Mr. Caswell, who was present, and purchased the hogs in the fall, confirmed the statement of Mr. Losee, and said the hogs were the best in all respects that he had seen at any of the factories, the meat being solid and free from the soft, watery condition usual to whey-fed pork. He paid for them at the rate of 5½ cents per pound live weight, which was about the price paid per pound in spring when feeding was commenced. As they gained each on an average 123 pounds, and as only 50c. per hog was paid for grain and food in addition to the whey, it will be seen the profit on each hog was \$6.25, or \$876.40 on the lot.

In addition to this must be added the thorough culture and manuring of the ground and the eradication of weeds. Mr. Losee remarked that his plan was the cheapest and best way he was acquainted with for freeing the land of Canada thistles, for the hogs would follow every root and branch of the thistles until they had completely exterminated them. In preparing these ten acres for winter wheat, he had never seen soil in better condition. The whole piece had been worked over so many times by the hogs that it required little manual labor to put it in condition, and thus the whole lot looked like a garden.

This method seems worthy of attention among cheese factory managers, and among its prominent advantages is the keeping of factory premises free from disagreeable odors arising from decomposing whey and the hog-pen nuisance.

Where the whey is sold a charge is made of about \$2.60 for every ton of cheese manufactured. At some of the factories the whey is valued at about what it would cost to box the cheese, and this has ranged during the past year from \$2.60 to \$3 per ton of cheese manufactured.

During the discussion of the hog nuisance at factories, dealers in whey fed hogs stated that the shrinkage on live hogs, when dressed, amounted to about 22 per cent. on an average. The general impression prevailed that Mr. Losee's plan should be adopted, whether the hogs should be owned by the manager of the factory exclusively, or by patrons.—[X. A. Willard in Dairyman.

The Farnham correspondent of the St. John's News says the Beet Sugar Company is progressing very satisfactorily, and 1,900 acres have been secured for beet culture. The Company have now in operation a large number of machines for sowing and covering the seed. The farmers have simply to plough and harrow their land, the Company furnishing and planting the seed at a very trifling cost. To show how rapidly and economically this can be done with the improved machines, it may be interesting to know that at St. Hughes ten acres were planted and covered in by two double machines in two hours and a half. This does away in a measure with the argument that there is a greater amount of labor necessary in raising beets as compared with other crops.