The Farm.

The Sugar Beet Industry.

The possibility of the growth of sugar beets for the purpose of supplying the raw material for the manufacture of sugar is a matter which is now occupying the attention of our neighbors to the south of us, especially in the States of the great northwest. The consumption of sugar in the United States is about five thousand million pounds per annum, and not over one-fifth of this vast amount is produced in the country. It takes over three-fourths of the whole amount received by the people of the United States for the wheat and flour that they export to pay for the sugar they import. They send out of the country over one hundred millions of dollars per annum for sugar. It is claimed that the production of sugar from beets can be effected so economically as to make all this outlay upon foreign products unnecessary. It is authoritatively stated that the process of production has passed the experimental stage; and that the establishment of beet-root sugar factories will now be limited only by the capacities of any particular district for furnishing the raw material. There are three factories already in operation in California, two in Nebraska, one in Utah, one in New Mexico, and one in Wisconsin, and there is an agitation for one to be established in Oregon. The capital required for each factory is, however, considerable; a factory using 350 tons of beets per day would require about $500,000 capital. Such a factory would need about 7,000 acres of beet land available to supply it with roots, that is 3,500 acres each year, for the sugar beet-root crop is not grown two years continuously on the same land.

We should like to see the probabilities and possibilities of beet-root sugar manufacture thoroughly investigated for Canada. Unlike our neighbors in the United States, we have no competing sugar-cane districts. The whole of the sugar we consume must be imported. It is claimed that in some parts of Canada the sugar-beet thrives remarkably well, and matures with a rich proportion of sugar, so that the profitable manufacture of beet-root sugar here is only a question of capital. It is not likely, however, that an enterprise requiring so much capital will ever be established in any part of Canada until it has been authoritatively proven that the beet roots do well here, and this proof will not be undertaken, we presume, except by Government. We think this is a matter that our Dominion Government could very reasonably take in hand. If our total consumption of sugar could be obtained from beet roots grown upon our own farms, it would mean an immense accession to our annual agricultural production. It is estimated that if the United States manufactured from beet roots all the sugar they consume, it would mean an expenditure on home-produced industries of more than twice the money they now receive for all the wheat they export.—Farming.

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Depth of Covering Seeds.

As a general rule, the smaller the seed the lighter should be the covering. We are very apt to cover too deeply. Unions, parsnips, squashes and lima beans, such plants, especially, as push up the shells of the seed itself, find it difficult to force their way up through much depth of earth, after it is packed down by rains. A quarter, or half an inch at most, is quite sufficient for these seeds.

Care should be taken that no lumps of earth should be left over them. We like long rows of beets, carrots, parsnips, etc., and don't believe in wasting half the land in useless paths and walks with short rows running crosswise. Long rows are more easily worked and kept clean than short ones, and the labor for the same number of plants in long rows is less than in short ones.—Massachusetts Ploughman.

Wintering Peaches and Plums.

Mr. John Craig of the Canadian Experiment Fruit Farm read a paper before the Michigan Fruit-Growers' Association recently, giving an account of some experiments with the different standard varieties of peaches and plums, with a view of testing their relative ability to produce fruit after winters of unusual severity. Twigs of the different varieties bearing fruit-buds were taken from a number of localities in the Dominion, and examined with a lens, and most of the cions were placed in water in a glass-house where the blossoms were allowed to expand. Of course, the percentage of fruit-buds killed on a peach tree is not the measure of loss to the crop the ensuing year. If a fruit set for every bud that opened, thinning would be absolutely necessary, and the frosting of some buds might prove a help to the crop. Again, the specimen twigs may have been largely cut from the lower branches of the trees, where the temperature is colder at critical periods than at the top of the tree, where the greater part of the fruit is found after severe winters. The tables presented, therefore, of the different varieties of peaches and plums grouped in relation to the power of the fruit-buds in resisting frost, are merely tentative, although they have some value as a list subject to revision. Several interesting facts, however, were noted. For example, tender fruit-buds are not always associated with tender leaf-buds. As an instance, the plum glass seedling suffers less than most varieties at Ottawa from the winter-killing of terminal shoots, but it bears no fruit except after very mild winters. Other varieties which have their terminal wood killed back annually, like the Damsons, nevertheless produce fruit regularly on spurs of the older branches. This means that in the north there is much to learn on this subject, and after the selection of varieties of merit and of known hardiness the advice to cultivate so as to encourage the ripening of both wood and fruit-buds is the most practical that can be given.—[Garden and Forest.

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Canadian Trade with Japan.

Marquis Ito, the foremost statesman of of Japan, while on his way to England to attend the Queen's Jubilee, spoke some plain truths in Montreal. He commented particularly upon the ignorance in this country regarding Japan, which is really our next-door neighbor, although it must be admitted that the neighbors live at some distance from each other. Marquis Ito holds that Canada could establish an extensive and profitable trade with Japan if she would only turn her attention that way. The cost of making butter and cheese and of raising cattle is such in Japan that the Canadian article could be sent over, with proper refrigerator accommodation, and bring a handsome profit to the Canadian exporter. "It is only due to the carelessness of Canadians," said the Marquis, "that this market has not been worked up long ago. You do not seem to appreciate the number of consumers we have in Japan, and the fact that we are able to pay for a few luxuries outside of our rice, which, I suppose, you think is all we live on." —Farming.

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