

nurseryman succeeded in selling an immense number of his plants, and, like the other, he made as many victims as he had customers. The intrinsic qualities of his vines may have been excellent, but, not being adapted to our climate, they perished miserably at the first attack of the frost.

And, still, the vine is grown and capital wine is made in climates as severe as ours. The truth is, the wild-vine flourishes everywhere in our virgin forest. The illustrious Jacques Cartier could not conceal his admiration at the sight of the grapes growing on the Isle of Orleans, which he, on that account, named the Isle of Bacchus.

At the experimental farm, special attention is given to vine-growing. At present, 150 varieties of grapes are cultivated experimentally, and it is proposed to add a great number of other sorts. As soon as the practical value of any sort is settled, whether as regards the fabrication of wine, or as a simple dessert fruit, it will be distributed gratuitously among the farmers.

Especially are efforts being made to improve the cultivation of cereal crops. Since our summer is so short, it is of the greatest importance that only the most precocious sorts should be grown.

The farm-director, making use of the consular agents of the British empire, procured grain grown in climates analogous or even severer than our own. Thus, in 1887, a variety of wheat grown near Lake Ladoga, in the north of Russia, was imported. The latitude of that place is 840 miles north of Ottawa, and 600 miles north of Winnipeg. For three seasons, this Ladoga wheat has been grown at the central farm and its branches, as well as by a crowd of private persons, to whom samples have been sent for the purpose of experiments, which, up to to-day, prove that the Ladoga ripens, on an average, ten days earlier than our most precocious wheats, such as Red Pife, White Russian, &c. This is one of the most important operations. If, as everything goes to prove, this wheat be definitively introduced into our system of cultivation, it will render us such service that it alone will suffice to pay for the whole expenditure incurred up to the present time by our experimental farms. A Scotch farmer, of Manitoba, told me lately that a ten days earlier ripening wheat would have the effect of doubling the certainty of the harvest of that province, and would, besides, render possible and profitable the breaking up of millions upon millions of acres in the more northern part of our territories.

The official statistics of the ministry of agriculture show that the brewers of Great-Britain import annually from abroad 40,000,000 bushels of barley, in addition to what they buy in their own country. Now, out of this immense quantity of barley bought abroad, do you know how much Canada supplies? The confession is almost heart-breaking when one thinks of the extent and fertility of our land: we only sent out, last year, the trifling quantity of 1,600 bushels. (1) Hardly two car-loads!

Considering the facilities of production we enjoy and our closely linked commercial connections with the mother-country, this fact is almost phenomenal! Still, it is easily explained, when we consider that we do not cultivate the varieties of barley which the English brewers prefer. Brewing is carried to perfection in England. Visit any part of the known world and you will find that English ales are valued and consumed there. To the care taken in their manufacture is their reputation due. Now the selection of the barley is a part of this care, and it plays a great part in the quality of the malt. English breweries use exclusively 2-rowed barley.

The farm manager sent at once for samples of 2-rowed barley, selected from the sorts most in favour among maltsters,

in order to introduce its cultivation into the country. (1) These selections have answered perfectly, and from all appearances in a very short time our Canadian farmers will be able to supply a part of the above mentioned immense market which to-day is, so to speak, closed to them. A variety of *beardless* 2-rowed barley, from Reading, England, has been grown, this summer, at the central farm, and succeeded well, yielding 50 bushels an acre. Another kind, sent by the Royal Agricultural Society of Denmark, which country exports a great deal of barley to England, has been sown at the Indian Head farm. Less in yield than the preceding sort, it excels it in weight and quality.

In order to thoroughly understand the bearing of this proceeding, we must bear in mind that the average price of our ordinary export barley has been, for the last ten years, 71 cts the bushel; while the average price of *malting* barley in England, during the same period was \$1.30. Allowing the extreme cost of the Atlantic voyage to be 12 cts. a bushel, a balance remains of 47 cts. a bushel as an encouragement to us to open as soon as possible this new road to our agricultural prosperity.

We remarked that one of the objects assigned by Parliament to the experimental farms was the investigation of *questions belonging to the production of butter and cheese*. This part of the programme has not been neglected at the central farm at Ottawa. A fairly numerous herd already exists there, including representatives of the principal breeds of cattle, and experiments are being made on their respective properties as regards the production of milk and of butcher's meat. The value of plants relatively to the quantity and quality of milk is also the object of careful and methodical enquiry. This summer, a silo has been built, and 70 varieties of ensilage-corn have been grown, with a view to the discovery of the sort that yields the best crop, and is at the same time the best suited to the production of milk.

Again, for the advancement of the dairy-industry, numbers of trials are being made with different grasses, native as well as foreign, for the sake of improving our artificial meadows and encouraging the laying down of permanent pastures. An experiment has been begun in growing crops for *green-fodder* for cows in summer. It is intended that great attention shall be devoted in this division of the operations of the establishment.

IV.

I shall not insist on the services which the experimental farms are so clearly in a position to render us. Their usefulness, admitted as it is by all agronomes of to-day, cannot be doubted by the enlightened part of our farming population.

Still, one may doubt if our compatriots in general have taken a sufficiently earnest interest in the organisation and the aim of an institution founded expressly for the advantage of their province. When we study the list of persons who have visited the central farm at Ottawa, who have been in communication with the staff, or who have tried to take their part in the experiments carried on there, I confess with regret that the names of farmers of the province of Quebec do not appear very frequently in it.

Our educated men, our men of influence, might do immense good by employing themselves, each in his own sphere, in awakening the attention of their fellow-citizens, and in exciting them to rival the zeal of the inhabitants of the other province in the study and observation of the work at the central farm.

Let us make no mistake: the agricultural question seeks

(1) The Dow's brewery of Montreal uses nothing else, as long as it can be had; the Dawes' people of Lachine won't buy it! I agree with the former.

(1) To England, that is