

factories, as do, in Denmark, the holders of diplomas from the practice school.

The pupils who follow a complete course at our dairy school, should work two years in such butter and cheese factories as are under the direction of makers whose abilities are recognized.

We can find out who are our best makers by means of competitions in dairy produce, similar to those organized by the Danish Government.

4th. A competition of dairy products, organized after the Danish system, would aid in improving the methods of making these products. The prizes there given should be diplomas, distributed amongst the butter- and cheese-makers and not awarded to the owners of the factories.

VARIOUS PRODUCTS FOR EXPORTATION.

5th. If we desire to increase our pork exports, we should try to produce a meat suitable to make bacon, that is to say not too fat; to fatten the pigs when they are young, and to kill them when they do not weigh over two hundred pounds.

This trade should be developed at the same time as that of butter, from which, moreover, it is inseparable. Producing milk, butter, and bacon throughout the year, the farmer would certainly find in the two industries an assured market for almost all his farm produce.

6th. The poultry export-trade is susceptible of development; it can be made remunerative to the raisers, provided the killing, dressing and packing are properly done. On this subject interesting details will be found in the appendix.

7th. Our apples are in favour on the English market; but if we wish to encourage the multiplication of our orchards and increase the production of fruit, without overcrowding the local market, our nurserymen and the owners of orchards should try to produce apples that can be shipped without being bruised, and that will keep a few months after having been picked, these apples should command attention by their quality and appearance.

The exportation from Canada of preserved apples and tomatoes has for some years been increasing.

UNIFORMITY OF PRODUCTS—REGULARITY OF SUPPLY.

8th. In England they attach the greatest importance to the uniformity of the products put offered sale. We found traders who refused to buy our butter and cheese, because they are not of uniform quality. A provision merchant said to us: "When we buy Danish butter, we are certain that, from the first to the last brick, it is good, while often your butter is of different qualities." Another added: "If you don't hurry up, in your province, so that every place makes equally good cheese, you risk being outdone on our market by producers who succeed in making cheese that is valued for its quality and uniformity."

This uniformity should equally exist in the case of our apples and of all our products.

English importers are never deceived with impunity. Exporters who sell as good that which is of inferior quality, or who mix bad with good articles, run the risk of having their goods rejected in future on the English market.

The French so well understand the necessity of uniformity that they assert the farmers', or factory, butter,

by working it over, so as to produce a uniformity of colour and taste.

First-class butter is placed in boxes of a certain colour, and second class in boxes of another colour.

9th. If, after the Danish example, we wish to get a hold on the market, we must supply it regularly; only on that condition can we be sure of a constant demand for our products.

INSTRUCTION IN AND DIFFUSION OF AGRICULTURAL KNOWLEDGE.

10th. In our agricultural schools, or, at least, in one of them, more importance should be given to the theoretical course, so as to not only form good farmers, but also to turn out lecturers well versed in the science of farming.

11th. The schools for instruction in the domestic economy of the farm house must be greatly increased. The Roberval School, founded only two years ago, has already rendered great service to the farming class. It would be well to encourage the establishment of other such institutions in the Province.

12th. An elementary treatise on agriculture should be published and taught in our primary schools.

13th. Our *Journal d'Agriculture* and our lecturers should become perfectly posted on the requirements of the local market and on the foreign markets where we exhibit our wares. It is not sufficient to produce in abundance; it is important above all to produce that which can be easily disposed of and at remunerative prices.

14th. The establishment of agricultural lecturers has done good service in our country and elsewhere to agriculture, and we must try to increase their efficacy.

PRACTICAL IMPROVEMENTS.

15th. The agricultural societies should vary their operations and encourage by premiums the most improved methods of cultivation and those best calculated to augment the fertility of the soil, as well as the amelioration of cow-houses, piggeries, yards, the establishment of liquid-manure tanks, and the making of composts. The cultivation of green fodder and of roots should also be encouraged, if we wish to develop still more the dairy business. These products are, moreover, indispensable for supplying, during the summer drought, the lack of sufficient pasture, which results principally from the too small variety of grasses sown in the country, which arrive at maturity about the same time, thus leaving only poor food for the cattle after the first flush is passed.

16th. It is conceded that the absence of lime in the soil is injurious not only to the production of grain, but also to that of those fodder plants which the cow needs in order to give a milk suitable for cheese. It seems to be equally conceded that there is a lack of lime in a large part of the arable soil, perhaps in one-half of our Province. It is therefore important that our agricultural associations should encourage the testing of the soil, so as to find out if lime is really wanting, or what effect its presence exercises on farm production and on the grasses that serve for cattle-food. (1)

17th. The existence of bad roads is very harmful to agricultural progress and the dairy industry. The Danish system of improving roads should be tried.

(1) No analysis is any good except the practical analysis by test-plots. Lime does not act in a day or two, like guano or nitrate of soda, but takes at least a year to show its effects.—Ed.

18th. In Denmark, they are seriously occupied in replanting the country, and many Danish farmers have nurseries of forest trees. The forests of that country, composed generally of trees of the same kind and same size (having been all planted at the same time) produce a very fine effect. These forests are kept with particular care and the trees are from time to time pruned. (1)

We find, as to this subject, that it is very much to our advantage to continue the policy inaugurated this year by the Provincial Government, and to distribute yearly among the Farmers' Clubs seeds of forest trees, for the purpose of creating nurseries, and of planting some of our farms that are already denuded of trees.

FOREIGN COMPETITION.

19th. Finally, we will again remind our farmers that they have to meet on the English market with a strong competition on the part of the United States, of Denmark and of many other countries, and that they should strive not only to increase their crops and to diminish the cost of production, but also to produce goods of irreproachable character.

PRUDENCE.

20th. But, no matter how useful the improvement to be made, the farmer, before undertaking it, should consider his means. For, owing to having built too costly structures, some Danish farmers have placed themselves in financial difficulties that have led to their ruin.

Respectfully submitted,

G. A. GIGAUT.

J. D. LEOLAIN.

APPENDIX.

Interviews of M.M. Gigault and Leclair with the representatives of the commercial and agricultural classes of the different European countries that they visited, and an account of the information given by these different people.

ENGLAND.

Mr. HODGSON, of Liverpool, says that if Canadian cheese could be sold in England for 12 cents a pound, retail, the demand and consumption would considerably increase. The Quebec cheese is sold at a shilling less per cwt. than that of Ontario. Cheese that is imperfectly matured, on account of a too low temperature, which often happens in winter, the equipment of many of our factories being defective, should not be offered for sale.

Frozen butter does not sell better than that which is not frozen. Our butter is often too much salted, and arrives in England when too stale.

The Americans have better boxes for their cheese than we have.

Mr. G. NICHOLSON, of Liverpool, sells a great many apples preserved in tins containing about six pounds each. These preserves are made at Simcoe, Hamilton, and Cedar Spring, Ontario; these establishments belong to the "Simcoe Canning Co."

Marmalades and fruit jellies do not pay.

RICHARD BANKS, a butcher of Liverpool, received last year 102 tons of Canadian turkeys which he sold at 12 to 15 cents per pound. These birds were shipped with their feathers on. Geese should also be sent with their feathers and intestines, the importers

(1) Thinned cut?—Ed.

themselves dress the fowls; they should not be frozen, but thoroughly cooled before being packed. The head should be wrapped in paper and placed under a wing. The fowl should receive no food for 24 hours before being killed, so that the crop may be empty.

SAMUEL HUGHES, butter dealer in Liverpool: "Good Canadian butter sells at one or two cents less than Danish butter. Frozen butter does not sell as well as that which is only kept cold. Casks are preferable to tubs. Consignments of butter should be made weekly, and it would be well to mark them 'pure butter.' Canadian cheese keeps better than that of the United States. Cheese should not be made from skimmed milk. Bacon should be slightly salted and 'mild cured.' What is principally required in Liverpool is lean bacon, that is to say, with very little fat; in London, fatter bacon is used." Mr. Hughes says he prefers the hams unsmoked. (1)

Australian meats have lowered the price of bacon.

MACGEORGE & JARDINE, brokers and auctioneers of Liverpool: "The Canadian apples are the best; they are generally well packed by the Montreal fruit dealers. They should be uniform in size. We do not advise the exporting of plums. The Spies are the best apples; the Baldwins and Greenings come next. The Famenses sell well, but they are too delicate to be packed tightly in the barrels. The appearance of the fruit has a good deal to do with the price it brings. The apples should be shipped about the month of October, so as to avoid frost."

A visit to the Experimental Farm at Rothamsted, where we met the chemist, Sir Henry Gilbert. A vast laboratory is connected with this institution. For over fifty years, experiments, most important to agriculture, have been there made on the feeding of cattle, on fertilizers, as also on the different plants and grains. They have come to the conclusion that in the feeding of pigs, carbon hydrates help in the formation of fat.

This farm has several fields of wheat, dressed with different kinds of fertilizers; the meadows are also treated in various ways. At the time of our visit, some wheats were more advanced than others, and Sir H. Gilbert attributed the difference, as to some of them, to the various fertilizers used, their market value even varying according to the fertilizers used. The same thing was remarked in the meadows. Sir Henry recommends a moderate use of wood ashes for grasses, and above all for clover; he also advises that old meadows be dragged with a light harrow and rolled.

DOCTOR FREEMAN, member of the Royal Agricultural Society of England, and author of several works on farming, gave us the following answers to several questions that we asked him: In Canada, the late spring frosts, that often destroy the clover, will always be an obstacle in the way of permanent meadows and pastures; your indigenous grasses should claim your greatest attention and it will pay you to propagate them; some of them are earlier than others and should serve as a basis for your pastures; the addition of clover would suit very well. Farm-manure, especially if from animals fed upon oil cake, bran, and mixtures of ground grains would maintain fertility, while chemical fertilizers should only be used as required by the law of restitution, when not satisfied by the farm manure.

(1) That is, we suppose, that the smoking should be left to be done in England.—Ed.