

in any way injured by grubs. I see most of the English seed firms are introducing it this year, and it deserves to find many cultivators.

AGRICULTURAL INDUSTRIES.

Mons. A. Tranchant, a French Civil Engineer, gave a lecture on the 7th May, at Quebec, before a numerous and select audience. Many members of the provincial parliament were present.

The subject chosen was "The Agricultural Industries of the province."

The lecturer began by giving an account of the present state of our agriculture, showing what progress had been made, especially in the introduction of new implements. "He regretted to say that our farmers had not sufficient means to develop a rational system of cultivation. The causes of the trouble were pointed out, as, for example:

The farmers, in general, have too much land, and not being able to employ sufficient labour to cultivate the whole, are obliged to leave great part in a non-productive state.

They do not take sufficient care of their manure.

Winter lasts too long, and, as there is not enough keep for the stock, the farmer sells off almost the whole of it in autumn; hence, they require no labourers from November to May, but in spring and summer they are often in want of hands; thus, the want of employment in winter, induces emigration from Canada, and hinders foreigners from immigration into Canada.

The want of good markets for certain products, prevents the *habitant* from pursuing that wise system of farming which would draw from the soil its greatest possible yield. Hence, the importation of wheat, flour, maize, and cattle, which we ought to be in a position to export ourselves.

And lastly, the science of agriculture is not sufficiently studied and taught, and the sons of our farmers unwisely prefer the liberal professions to the pursuit of agriculture."

After these criticisms, M. Tranchant suggested the remedies to be applied to this state of things, and continued:

"When agriculture suffers, commerce and trade do not prosper; but when agriculture is flourishing, commerce and trade share in her prosperity.

"The lot of merchants and operatives is closely connected with the success and well-doing of the farmer, and the powers that rule should make it their principal duty to foster and develop agriculture.

"So well does the Prime-minister understand this, that he has just introduced a bill containing certain reforms to be made in the act of agriculture.

"The most important clause of the bill is paragraph 3, which compels the agricultural societies to call meetings for the purpose of hearing lectures given by people sent out for that purpose; and, after the discussion of the subjects touched upon by the lecturer, to send reports upon the whole to the department.

"Here, will be a commencement of making the science of agriculture common to all, and a great step in the road of progress it is; but it is not enough for the future; further means to improve the condition of farm-pursuits must be tried. and in order to do this, agricultural industries of all kinds must be started, such as beet-sugar factories, starch factories, malt-houses, (1) glucose factories, and, to crown the whole, manufactories of artificial manures. (2)

(1) Plenty of these already, but a great want of skilled workmen.

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(2) Right! But as long as nitrogen and phosphoric acid, the two most important constituents of manure, are kept up to double their real value, the farmers won't use them.

A. R. J. F.

"With these factories in operation, farmers will find a ready market for their products, food for their stock in winter, and the means of rearing more calves, &c., than are reared now. Cheese and butter will be made in winter, there will be more manure, and the land will produce double its present yield.

"The labourer will be in request; he will obtain winter-work in these factories, which rarely start until after harvest; and, thus, the emigration of Canadians to the United-States will be arrested, and the immigration of wealthy agriculturists into our province will be secured.

"The government had better spend less in aiding immigration (especially of such a class as we have seen lately), and devote a fair amount of funds to the encouragement of these factories, and to the information of foreign operatives as to the vast resources of our country, and the profits to be derived therefrom. This would indeed render a great service to the country, and every one would reap his share of the gain.

Not being able in one lecture to pass in review the whole proposed system of agricultural factories, the speaker only enlarged on the principal one, beet-sugar factories, giving with impartiality, and without descending to personalities, the history of the factories established here in 1881.

For four years, at least, M. Tranchant conducted the factories at Berthier and West-Farnham. With that at Coatcook he was perfectly familiar, and he described and accounted for the failure of these three enterprises as follows:

1. The smallness of capital and its wasteful expenditure.
2. The absence of business-knowledge in the directors, and the absence of a good understanding among themselves.
3. The factory-people and the beet-growers did not pull together.

4. The farmers of the Island of Montreal (in 1882) and those of the Chambly district (in 1883) were not paid for their beets.

In spite of these hindrances, M. Tranchant had not the slightest doubt as to the ultimate success of the beet-sugar industry; provided sufficient capital could be invested, and the manufacture intrusted to competent persons, well acquainted with the country and its climate.

M. Tranchant stated that the reports sent into the department by Mr. Barnard, the Director of Agriculture, on the beet-sugar industry in Canada, even before the establishment of the factories, were exact at all points. That no country offers so many advantages for this purpose as ours, seeing that the climate permits of the manufacture being carried on up to the end of April. Fuel, too, is cheaper than in Europe, and labour, in winter, does not cost more than on the continent.

In conclusion, the lecturer hoped to see many of the industries mentioned established next year in the province of Quebec. He was sanguine as to their success, as the government would do all in its power to encourage them.

M. Tranchant had the honour of being received by the Premier, Dr. Ross, commissioner of agriculture, and by M. Brûre, president of the legislative Council.

These gentlemen congratulated him on his exertions, requested him to continue his lectures, and promised to take active measures to promote the success of the agricultural industries of the province.

We trust the lecturer may succeed in his object, and, like him, we have every confidence in the future.

(From the French.)

FEEDING CHICKENS FOR MARKET.

An English paper treats this subject as follows:

Now-a-days it is the custom among many breeders of table