quantity of roots with hay fodder is both safe and economical for milch cows; and whother the animals are in better health with root rations than with grain. Remembering at the same time that we have to await further tests, as this is our first systematically conducted one." The root-milk was slightly inferior in quality to the grain-milk, but that was to be expected. I should like to see the experiment tried over again with the substitution of two pounds of crushed and scalded linseed for five pounds of the mixed grain.

ARTHUR R. JENNER FUST.

## The Agricultural Commission.

The members of the above commission have presented their report to the Lieutenant Governor of the province, and I presume we shall soon see some fruits produced by it. Their opinion seems to be that no good, or at least very little, has been done up to the present time by the agricultural colleges, now existing, though they kindly attribute their failure more to an in-ufficiency of means than to a want of knowledge. The school at Ste-Anne de la Pocatière seems to be, as far as profitable exploitation goes, in a most flourishing condition, as the profits made in the year 1886 amounted to \$1,500, though the expenses embraced the interest on the cost of the farm-buildings, and  $2\frac{1}{2}$ %, on that capital for repairs. The land is rented, so of course the rent is charged. This is really wonderful, and I am not surprised to hear that "under pretence that the pupils would waste the labourers' time, or injure the implements, they are excluded from a great part—the most important part—of the operations of husbandry; they are only allowed to dig potatoes, and do other trivial things of that sort." It would be no trifling misery to a genuine farm-manager to see good work spoiled by the meddling of a few boys who have not yet learned to handle their tools. The way would be to give up ten or twelve acres of land as a practice-ground for them, and let them plough and work it until the farm-manager was satisfied that they were capable of doing the regular work of the farm with skill and accuracy.

As for the general complaint that the school-farms do not show a profit, I can only repeat what I have said before that it is the most unreasonable thing to expect such a thing. The best processes can be shown in operation on school farms, but not the most economical way of conducting them.

The stock kept on the L'Assomption farm is said to be 41 head per arpent! What can this mean? Perhaps it means 41 arpents to each head, which I take to be more like the truth. On both these farms - Ste-Anne's and L'Assomption - the rotation is one of 10 years: 1st, meslin, i. c., oats and wheat; 2nd, roots and tares, heavily manured; 3rd, wheat with grassseeds to lie out seven years. (1)

The farm-school in connection with the College of St-Francis at Richmond seems not to have given much satisfaction to the commission. The fences are said to have been in bad order, and the general cultivation not what was to be expected at a farm of this kind. Besides meadows, there were only a few acres of barley- and oat-stubble, showing that hardly any grain was grown. Root-crop, except potatoes, very poor.

The creamery at Richmond was the best thing about the place; there was not a pupil to be seen; and there were, apparently, no books kept. (2)

(1) The word I have translated mastin is printed in the report and the former of these two words for the former of these two words does not convoy a very charming idea. At Chambly, it is called gabourage—neither word is in the dictionance.

Mass n is a Yorkshire word, through originally French.

A. R. J. F.

(2) There are said to be seven pupils.

A. R. J. F.

The whole number of pupils on the three school-farms is 27, and as the grant to the colleges is \$8,800 a year, the cost of each boy amounts to \$320 a year! And worse still is to come: as only about 20 of these become farmers after leaving, each farmer reared and trained in these schools costs the country \$440 a year during his term of residence. At Guelph, the cost of each pupil is only \$184 a year " which is an excellent thing"!

The following is a condensation of the general remarks on the schools by the commissioners: The instruction, both theoretical and practical, given in the schools is far from being what it ought to be. The theoretical course is at most an elementary one, and it is probably on that account that our young men avoid these schools, a fact which is shown to be true by their only having at most thirty pupils, while

Guelph has about a hundred.

The professoriat, the implements, and the stock, are not up to the mark. It is admitted that the principal aim of agriculture in the province should be the rearing of cattle for ment and dairy-production. Now, no one can be a successful breeder of stock without of a fair knowledge of veterinary science and of the practice of dissection, and neither of these branches is taught in the schools to any useful extent, as may be easily understood when we consider that the salary of the professor of veterinary surgery is SIXTY DOLLARS A YEAR?

There are no museums or apparatus for the practical demonstration of the teachings or of the lectures of the professor, except at Ste-Anne's, and the apparatus there on view is not of much account.

Another great at at is that the farms connected with the schools are not the property of the schools: at Ste Anne's and L'Assomption, they belong to the colleges at those places, and at Richmond, the farm belongs to a company which uses it as a matter of money-making. The proprietors naturally try to make all the profit possible out of the farms, and when their object comes into competition with the teaching of the pupils, the latter go to the wall. The proprietors will not risk any innovation, neither will they spend any money, however necessary the outlay may be for the completion of the practical course of instruction.

The management and feeding of the different breeds of cattle are not identical. If the cattle kept on the school-farm are all of the same breed, the pupils cannot possibly be taught. as they ought to be, how to feed and manage different breeds.

The lads, when they enter, are too frequently almost entirely ignorant of the ordinary rudiments of education, barring reading and writing.

In spite of what has been said, the commission believes that the connexion existing between the agricultural schools and the classical colleges inspires the farm-pupils with a feeling of concempt for their future business. In other words, the pupils of the classical colleges treat the farm-pupils with considerable hauteur.

The experimental part of the practical course is neglected. A complete course of instruction in agriculture should embrace the cultivation of all the crops that can be grown in the province, and unless the pupils have an opportunity of seeing this carried out, no surprise can be felt if, after their course is completed, they, on embarking in business on their own account, become just as much the slaves of routine as their forefathers.

In two of the colleges, Ste-Anne's and L'Assomption, there is neither a creamery nor a cheese factory. Lectures are given on dairy-work, it is true, but what good can they do without practical teaching? It is clear that pupils leave the schools knowing no more about dairy work than they would have picked up by reading a printed treatise on the subject. At the same time, it should be noted that a special grant has