

Our shipments this year have again increased, the totals being about thirty thousand boxes more than last year. I think I may state without fear of contradiction that the most of this increase is from the Province of Quebec, and the average price for the season is about equal to last year if not better in many sections. Our butter exports have been a mere bagatelle; it is hoped that some other method of selling our good butter will be adopted than has heretofore existed. We had a gain of cheese syndicates for this year and a loss in the butter but, together, one more than last year. As Prof. Robertson has said we have got well up in quality but we lack in the appearance.

This information is supplemented by Mr. Elie Bourdeau, assistant inspector-general. He visited 241 cheese factories, of which he classed 156 as No. 1, seventy-two as No. 2, and three as No. 3. Many of the cheese factories, even those classed among the good ones, are altogether unfit to protect the cheese against frequent changes of temperature. Mr. Bourdeau insisted especially on the injury which results to the cheese industry from the excessive number of factories in some localities and from the inordinate competition which follows. The manufacturers are compelled by the competition of factories to accept bad milk from the patrons, the milk supply being divided between too many factories.

These views were heartily endorsed by the Rev. C. P. Côté, Dr. Coulombe, Milton MacDonald, M.P., and Mr. Girard, M.P. The latter two suggested that it was time for the government to intervene, and to enact a law to limit the number of factories according to the territory and the number of cows. On their motion it was resolved to appoint a special committee to study the question of excessive competition and to suggest remedies. This committee consists of Abbé Côté and Gagné and of Messrs. E. Bourdeau, Wm. Forrand, D. A. Bourdeau, J. DeL. Taché, H. S. Fortor and E. Theberge.

Mr. Ed. Barnard said that the most effective way of preventing the excessive multiplication of factories is that the manufacturers take upon themselves the trouble of bringing the milk from the homes of the farmers.

Mr. James Fletcher, botanist and entomologist of the Experimental Farm at Ottawa, spoke on a number of questions within his sphere. Dealing with potato rot, he showed that by the use of a composition of vitriol, blue-stone and lime it was possible to protect almost perfectly the potato against this disease. He also recommended the raising of orchard-grass as one of the most profitable species of hay to be raised in this province.

A discussion arose as to the qualities of the various cows and the Canadian was proclaimed the best dairy race.

At the evening session, Mr. A. Chassé, mayor of the parish, presented an address of welcome. In his reply the Rev. Abbé Montigny, among other reforms, called attention to that of the improvement of highways. Mr. E. A. Barnard immediately moved that a good roads association be organized under the patronage of the convention. The proposition was received with enthusiasm.

The Hon. Mr. Beaubien then delivered an address in which he promised to assist all agricultural schools and strongly advised the manufacture of butter in winter time to do away with the inferior cheese. He advocated the inspection and stamping of all cheese. He would even favor a law which would compel all manufacturers to join the syndicate and to live

up to certain conditions. He promised his earnest support to the Good Roads Association.

In answer to several invitations, the board of directors has decided to hold a number of district meetings during the winter.—(Witness)

The President now read his annual address. The county of Beauce had 25 parishes all encouraging the dairy industry. There are about 50 factories in this county. He gave a full resume of the dairy industry for the past 12 years, showing the rapid progress made in quantity as well as quality during that time; he also said that it was absolutely necessary for the farmers to improve the roads. Who will compute the loss in injury to horses and vehicles apart altogether from the loss of time and keep that is due to the rough condition of our country roads. In an industry in which I have taken special interest I have been making enquiries. There are in round numbers 2000 cheese factories in Canada. The cost of drawing the milk, whey and cheese at each factory is probably \$1000 a year, 2,000,000 a year for whole country. It is quite certain that with roads anyway approaching those of England this cost could be reduced by a fourth. In other words, the profits of the cheese trade in Canada could be increased by half a million dollars each year, a very good interest on 13,000,000 output.

J. de L. Taché said that at present the Government was giving a bonus for winter made butter, but he thought it would be better if they changed that to a bonus for good butter exported during the summer. We could handle all the butter made during the winter in our home markets, but had no good outlet for the summer make. That he was one of a committee recently appointed at Ottawa to consider this matter, and that they were to make a report to both the Government at Ottawa and Quebec, and if the Hon. Mr. Beaubien would appoint a time, a delegation would wait upon him and lay their views before him this week.—(Star.)

DAIRY CONVENTION CLOSED.

The Proceedings in Detail—Waterloo the Next Meeting Place.

(SPECIAL TO THE STAR.)

ST JOSEPH DE BEAUCE, Que., December 7.—At the Dairy Convention, Hon. Mr. Beaubien, in addressing those assembled, began by recalling the services the clergy had rendered popular education in the past; they were now doing the same good work. When the people in the time past wanted political leaders they (the clergy established classical colleges. Now they have formed agricultural schools. The future of this province rested a great deal on the zeal with which the farmers followed the directions given them. He was glad to notice the pupils of these agricultural schools were increasing. He called attention to the necessity of more careful feeding of the cows during our long winter and spoke of the profits of butter-making in the winter. Most of the cows were allowed to remain idle too long. The farmers who had poor milk and the factories which turned out butter and cheese of a poor quality were depreciating the property of their neighbors. He invited the honest and intelligent manufacturers to devise some law to protect

them and promised his support. In concluding Mr. Beaubien referred to the movement on foot for the improvement of roads and promised his hearty support to this useful measure.

G. A. Gigault, Assistant Commissioner of Agriculture, followed, giving a very full résumé of his recent trip to England, Norway, Belgium and France, where he was sent by the province to study the question of agriculture, with the view of improving the condition of the farmers of this province. The principal reason the cheese of this province was not as much in favor in England as it ought to be was on account of the irregularity of the make. He urged the manufacturers to try and improve the quality. He said it was owing to this irregularity that the cheese made in Ontario sold for nearly one-half cent more than that made in Quebec. He strongly advised more attention be paid to butter-making. He gave a good idea of the requirements of the different markets he had visited, and said that England offered good markets for such products as poultry, pork, apples, hay, etc., provided they were prepared to suit the market to which they were sent. He called particular attention to the way the farmers in Norway cared for the manure; also to the care taken to destroy bad weeds.

J. C. Chapais, Assistant Dominion Dairy Commissioner, delivered a very practical address of which the principal points are here given: Dairymen of the Province of Quebec, though they can congratulate themselves on the success they had last year at the Chicago exhibition, must look forward and work again with all their might for the improvement of the dairy industry. Farmers must get better pastures, good succulent winter food for their cattle, take the best care of their cows, and aim to have the best dairy cattle possible by discarding all bad cows and improving by selection the French Canadian breed, which is one of the best dairy breeds for our province. The composition of good rations is one of the important points they have to consider. Cheese and butter makers must learn all they can learn in their trade; keep their factories very clean; receive only good milk. Never sell green cheese of three or four days' make. In butter-making they must look carefully to every detail; have first-class salt, and never hold their butter, but sell it fresh. Cheese and butter buyers ought to give all facilities to the patrons and makers of whom they buy the goods, and be very particular in weighing these goods. They should always pay a better price for good cheese than for poor cheese and never tamper with the local brands put on cheese. The Dairymen's Association itself was going to give as good help as possible and had decided to hold in different districts of the province local meetings, to promote the work and extension of syndicates. It would also favor the organization of an association for the making and improving of public roads in our province which are so important for our dairy trade.

Ed. A. Barnard, secretary to the Council of Agriculture, read a paper on the "Production of Lean Pork," fit for bacon and hams in the English market. He showed that while the total amount paid for imported cheese in Great Britain is about \$25,000,000 annually, the sum paid for its importations of bacon and hams amounts to about \$57,000,000. Moreover, the price obtained for this meat is so high that the laborer of Great Britain cannot afford to make it his staple food. In Canada fresh pork, wholesale, sells at

a much lower price than cheese, and no laborer would dream of making cheese his staple food. We can produce lean pork at even a lower cost than beef or mutton, of which we now export four millions of dollars worth annually. Salted pork can be carried to England for a great deal less than live cattle; it can be produced at a lower cost by the dairymen, whose skimmed milk and whey form the basis of lean pigs' rations, and therefore, there is now an immense opening for this trade, an opening which every Canadian statesman should study and help to increase as one of the best means of increasing to, perhaps, a wonderful extent our Canadian export trade of agricultural production. Mr. Barnard then shows what must be done in order to obtain full success in the raising and fattening of such pork. Animals of good conformation, long bodied and with the smallest offal, should be selected, such as the improved Yorkshire. They should be raised, if possible, in liberty, so as to build for them a good constitution. They must be fed regularly, with a sufficiency of digestible food, which can be raised on the farm and need not be expensive, as fat pork is undesirable, in fact the animal is in its best state for the market when it carries about $\frac{1}{2}$ (7 lb.) inch of fat on the back. Then Mr. Barnard goes on to advise the formation of rations based on scientific principles, such as the best practitioners have adopted, as the most profitable and successful. He shows that even whey can be so treated as to become a good foundation for the ration. It contains mainly carbohydrates. To these it will be necessary to add a sufficiency of protein, fat and a supply of mineral matter, of which a handful of wood ashes is recommended. He shows that in the preparation of rations mistakes are often made, to the extent of losing 33 per cent. of the food. So that a ration badly concocted which would be necessary for 2 pigs may easily be so arranged as to supply the proper elements of food to fatten three hogs. Of this he gives an example: If a pig be fattened on potatoes alone, and another on a rich grain ration, both pigs will waste elements of food which if properly mixed together might have been a sufficient ration for three similar animals. Mr. Barnard was asked if he could give any information about the new cattle food—molasses specially prepared for the use of cows, horses and swine. In reply, he said he could strongly recommend it, and thought that the farmers could not do better than use it—it was cheap, and a very little was sufficient.

J. A. Fisher, of Knowlton, also spoke in favor of this molasses feed; although he had not yet commenced to use it he had a supply on hand and would commence as soon as he got home. (1)

C. D. Tylee, of Ste. Therese, said he had been using it for some time and was more than satisfied. When put in the cows' ration everything was eaten up clean. It was a good feed for pigs.

Gloster cheese.—The cheese we mentioned some time ago, v. p. 184 October No., as expected from one of the tenants of the editor's brother, arrived, in good condition, on the 27th October. Monsieur Taché, who tasted it, thought it hardly so rich as it might be, and, with the perspicacity which distinguishes him, asked if the cows that furnished it were not of the "Dairy-shorthorn" breed: as they are.

(1) See p. 11 of this number.