

Mr. Hoard thought it might be due to a want of fat, which aided in retaining moisture in the cheese.

Mr. Caswell asked if it was not a fact that the Scotch and English cheese did not crack.

Mr. Robertson, jr., who has been the instructor for Wightonshire, Scotland, for the last three years, said that cracking had been observed to some extent in both Scotch and English Cheddars, and it was generally considered to be caused by a loss of moisture.

Mr. H. A. Hodgson—The trouble might arise from the curd being too cold when put to press.

Mr. Robertson said Mr. Hodgson's remark was quite correct, but there were other causes of cheese cracking in the rind—too much stirring, too much acid, or too much salt. One other objection to our Canadian cheese last season was the want of a pure flavor and that mellowness of quality which is so much sought after in fine cheese. In fact they are not fine cheese now, unless they have that mellow character and sweetness of flavor which a fine Cheddar cheese must have to bring the highest price.

Mr. Hoard—Have they in Scotland our promiscuous factory system?

Mr. Robertson, jr.—No, they have dairies from 40 to 120 cows; the average dairy consists of about 80 cows; the cheese are all made on the farms where the milk is produced.

Mr. Hoard—The milk supply is under more perfect control; that is a most important point.

Mr. Hoard—Is not the ruling character of the water supply there purer than ours? Yes.

Mr. Hoard—That's it; not so many stinking pond holes. On another point cheesemakers might as well own up to it; they did not always incorporate all the fat.

Mr. Young did not often get milk too rich, but he could incorporate it pretty well.

Mr. Hoard advised that every cheese factory should become a local school for dairy education, where the patrons could meet and see the process of manufacture and discuss dairy matters and be encouraged to read dairy literature, so as to get posted in all the improvements of the day.

Mr. John Robertson, jr., said there was no such thing in Scotland as testing milk for its butter fat, but on an average thought it would run about 4 per cent., from which the finest goods can be made. The absolute cleanliness of the Scotch dairy rooms and the purity of their milk is the great secrets of the superiority of their cheese when properly manufactured.

The subject of milk inspection was discussed by Mr. B. Hopkins, who said that some of the reports left at factories by inspectors were not very definite.

Mr. Robertson said he never left such reports, but always gave the exact figures of every sample tested; but he found some boards of directors not very definite in their actions when they got the reports for fear of stirring up a little feeling in the factory or losing a patron or two. (Applause.) Mr. Robertson's inspection last summer showed an average of 4.02 per cent. of butter fat from 3,125 samples tested, which showed the milk on an average to be of such quality as make a first-class quality of cheese. The faults with our cheese are from other causes, and many of them preventable.

Mr. H. A. Hodgson, London, moved, seconded by Mr. J. A. James, Nilestown, and it was carried, "That this convention desires the President and Directors of this Association to engage as soon as possible four (six if possible) competent cheese inspectors and instructors to be engaged for the season, and being competent speakers so as to attend the annual meetings of all factories possible, and giving the patrons the benefits of suggestions tending to improve the milk and cheese."

Mr. Lockhart asked if the employment of inspectors would be compulsory, as some factories might object, as Mr. Harris had not given satisfaction last season as inspector. The President said the matter would be entirely optional. On motion of Mr. J. S. Pearce, London, seconded by Mr. J. M. Butchard, it was

Resolved: "that the Dominion Government be urged to extend the work of the Dairy Commissioner, Prof. J. W. Robertson, by the establishment of branch experimental dairies in the different provinces, for the purpose of carrying

on investigation into the principles and practice of cheesemaking in summer and butter-making in winter, in order to the establishing of the latter trade, and also aiding in the work of educating farmers, patrons and others who might visit and observe the working of these stations, and by the spread of valuable information, the Secretary to forward a copy to the Dominion Minister of Agriculture."

Some discussion took place as to the advisability of forming county unions of cheesemakers, who could discuss matters relating to their own business in their own way, and could, through their delegates, bring any matter before the convention in a systematic way, which was approved of by the convention.

Mr. Geary, Vice-President, thanked the convention for the honor they had bestowed on him, and for the marked attention given all through the sessions, and closed the convention.

Aerating Milk.

The New York Dairy Commissioner says that milk can be sent farther and will be in a better state for use when aerated down to the temperature of the atmosphere than when chilled and sent on ice.

The process is very simple, and consists in allowing the milk to run from one receptacle to another in fine streams, so as to come thoroughly in contact with the air. It should not be done in the barn or stable, but out of doors where the air is purest. If nothing better is at hand, let it run through an old colander two or three times. A better arrangement is a set of perforated milk pans one above the other, through which the milk may run in fine streams. It is held that tyrotoxicin poison is generated in cream for want of proper aeration, and that un-aerated milk is the great enemy of infants and the great cause of cholera infantum.

Eastern Dairymen's Association.

The 14th annual convention of the Eastern Ontario Dairymen's Association, at Brockville, on January 7 and 8, was the most successful in point of interest and attendance of any ever held under the auspices of the Association. Mr. J. T. Warrington, President, of Belleville, occupied the chair, and among the speakers were Hon. John Dryden, Ontario Minister of Agriculture; Hon. W. D. Hoard, of Wisconsin; Prof. Jas. W. Robertson, Dominion Dairy Commissioner; S. Fisher, M. P.; O. Bush, M. P. P.; Dr. Preston, M. P. P.; F. T. Frost, D. Derbyshire, Mayor of Brockville; D. M. McPherson, President of the Dominion Dairymen's Association; A. A. Ayer, of Montreal; Thos. Ballantyne, M. P. P., and others. In the discussions special attention was paid to winter dairying, continued improvement in the quality of cheese as the main stay of Canadian summer dairying, butter making in winter, the breeding of a better class of dairy cows, better and more economical feeding. The reports of the inspectors and instructors showed that a great deal of adulteration had been carried on in some districts last season, fines having been imposed in 111 cases in one inspectorate amounting to \$1,507, showing the necessity for continued vigilance, in order to prevent skimming and stripping, which are the chief offences, though in a few instances watering was practised. The Treasurer's statement showed a balance on hand of over \$400. Resolutions were passed in favor of dairy schools as dairy experiment stations. Officers were elected as follows:—President, Wm. Eager, Morrisburg; First Vice-President, Platt Hinman, Grafton; Second Vice-President, W. Bissel, Algonquin; Directors, E. Kidd, North Tower; John McTavish, Vancamp; R. G. Murphy, Elgin; D. Vandewater, Chatterton; J. B. Carlow, Warkworth; and H. Wade; Secretary, Harford Ashley, Belleville; Treasurer, P. R. Daly, Foxboro; Auditors, J. G. Foster, Moira, and M. K. Everetts, Easton's Corners.

Experimental Dairy Stations.

The report of the Ontario Creameries' Association in the ADVOCATE for February, foreshadowed the establishment of Experimental Dairy Stations throughout Canada, probably two in Ontario and one at least in each of the other provinces, under direction of the Dairy Commissioner, Prof. Jas. W. Robertson, whose outline of the scheme we append. It was approved by the Minister of Agriculture, and on January 31st sanctioned by the Dominion Government, it being decided to make the necessary grant. In addition to organization Prof. Robertson hoped to accomplish something practically useful this season. It is one of the most important steps ever taken in the interest of Canadian dairying:—

To the Honorable the Minister of Agriculture:—This memorandum is submitted as outlining the plan which I would propose for the establishment of Branch Dairy Experiment Stations in the several provinces of the Dominion.

THE NEED.

I. The magnitude of the dairy interests of Canada is unequalled by any other single branch of agriculture or manufacture in the Dominion. The success of the cheese trade in Ontario and Quebec has been satisfactory to the farmers. The other provinces, in many respects, are as well adapted for the prosecution of this industry, but a little outside encouragement is needed to set it going in them.

I would cite the case of Prince Edward Island, which is admirably suited for the development of dairying upon a large scale. Over twelve years ago several cheese factories were established; they were managed with such ill success that now the farmers are doubtful as to whether there is not some inherent condition in their situation, soil, cattle or circumstances which prevents them from succeeding.

A branch Experiment Station there would serve for direction, illustration and demonstration, and thus help both manufacturers and farmers.

II. Then the milk from cows in Quebec is different in quality from milk in Ontario. Investigations into the best methods of carrying on the business in each of the provinces would furnish valuable guidance for the dairymen of each. As an instance of the need of this, let me refer to the experience of one brief trip to the Saguenay district last summer. One cheesemaker drove sixty miles to receive one day's instruction from me at a factory at Ha! Ha! Bay. His patrons reported afterwards that the cheese from his factory sold for one cent per pound relatively higher than they did before. A branch Dairy Experiment Station could be visited at least once a year by a large number of cheesemakers.

III. Then the instructors of the cheesemakers in the several provinces would acquire uniformity in their methods, from having the privilege of visiting these stations. That would do away with the differing qualities and the names—as "Ontario Cheese," "French Cheese," and give us a better reputation for uniformly fine "Canadian Cheese."

IV. Then the manufacture of small, fancy varieties of cheese, which are in great demand in England—as well as in home markets—could be introduced into Canada through these Experiment Stations. A few trial shipments of these to foreign markets would furnish useful data for the guidance of dairymen and the promotion of trade.

V. Then the farmers in sections are now beginning to turn their attention to winter dairying. The export butter trade of Canada has almost clean gone from us, and in my opinion the only way to build up a large trade in butter is to encourage the manufacture of it during the winter.

No endeavor will be made or should be made to displace the cheese industry by a butter one. Our country is exceptionally well fitted for the production of cheese during the summer, even if