

and that these would not have been sustained without the grant. Where, then, we ask, has any money been expended of late years by the Ontario Legislature that has brought in so handsome a return?

The Eastern Dairymen's Association.

This association met in convention in Brockville, on 5th January, D. Derbyshire, President, in the chair.

In his opening address, the President adverted to the splendid exhibit made by Canada at the Indian and Colonial Exhibition, and the very favorable impression which this had made upon the British public. He gave much credit to Messrs. T. Ballentyne, M. P., Stratford; D. M. McPherson, Lancaster, and Prof. J. W. Robertson, of the Ontario Agricultural College, for the strenuous efforts which they had put forth to attain this end. In the course of his admirable address he laid much stress on the necessity which existed for a more careful weeding of inferior dairy stock, and the exercising of greater care in breeding better stock of this class. He also dwelt on the necessity of employing only the best cheese-makers, and gave it as his opinion that every *ten* factories in any district should have over them a competent instructor. This suggestion was well backed up in the discussion which followed.

Hon. H. Lewis, of Frankfurt, New York, then read a paper on butter making, and the reports of the instructors, Messrs. Jas. Whitton and H. Bissell, were then read and adopted.

In the evening, Mr. A. Blue, of the Bureau of Industries, read a statistical paper, in which he made it clear that although the cheese producing qualities of the milk in the Eastern district were higher than in the West, the cheese made in the West brought a higher average in the English market.

January 6th. An address of welcome was tendered the convention by the Mayor and Aldermen of Brockville.

Professor J. W. Robertson, of the Ontario Agricultural College, resumed the subject of last evening. He spoke of the loss entailed on Canada in the British markets by lack of uniformity in product. Cheese makers should keep an official report of the details of make every day to promote uniformity. It should be the aim of makers to produce an article that would not dry out too soon. A good *rind* on a cheese costing the dairyman nothing here, put 4s. a hundred weight on the price in London. The surface of the cheese should be *oiled* immediately before boxing. *Cheese boxes* are often inferior; 20 per cent. of the boxes arriving in Britain are damaged. He would like to have cheese buyers to pass a resolution to buy no boxes not *properly* made. The wooden band of the cheese should be twice as thick.

Lessons for butter makers. Canadian butter makers have been using starchy butter-clothes, the effect of which is to give the outside of the butter a taste. He was not sure if cloth of the right kind was manufactured in Canada, but it could be got in Britain.

The inside of the tub used in shipping butter should be lined with cloth, which can be got for 3 cents per tub. When shipped in tinned tubs, the tin should be free from all breakages of surface, or rust from the tin would affect the butter. White ash tubs were second in favor. These should be uniform in size. English importers favor a firkin holding 100 lbs.—the size in favor with the English buyers, as Danish butter, much sought for in England, has been kept in such firkins. The hoops of firkins should be half-round, and of wood, as iron hoops rust and spoil the appearance of the firkins. He would recommend these packages for creameries. Dairymen should only

use the finest of salt, even though they should pay *five* prices for it. A salt should be used that will dissolve in one hour, and no dairyman should use salt that will not dissolve in 10 hours. One oz. to the pound is enough; this should be the outside limit. Butter should not be shipped made during the summer months after June. Butter dairying should gradually turn largely into winter manufacture, and could be stored for shipment at the proper time. If butter is properly preserved it will not be at its best for six months.

A paper on "The production and handling of milk" was read by Mr. P. McFarlane, of Huntingdon, P. Q. A cow producing but 2,500 lbs. of milk per year does not pay her keep. Cows might be so kept that the product could be double in three years. Cows should have food plenty, pure water, and access at all times to salt. The profit from suitable dairy cows may easily be doubled. He dwelt also on the methods of handling milk properly, and deplored the prejudice that existed amongst farmers to receiving light on the dairy and other matters.

Mr. W. W. Lynch, of Danville, P. Q., read a paper on "Pedigree and performance." Pedigree has no value unless associated with performance. Pedigree was based on performance, and Mr. Lynch traced the steps in registry, which led to the establishment of permanent herd books. Farmers should keep a farm herd book in any case, whatever his particular line of business; and he recommended that the records be kept on one plan, and dwelt upon the advisability of weighing carefully the milk obtained every day.

Mr. H. Wade, Secretary of the Agricultural and Arts Association, read a paper on "Stock raising and pedigree"—tracing the origin and progress of different breeds and families. He did not approve of cross-breeding in dairy stock, although it had done well with the beef breeds of cattle, and with sheep. His own experience had been against it. He then sketched the origin of the Shorthorns and other herd books, and gave many useful facts relating to the early importations; and sketched the work of the Shorthorn breeders in Canada. The officers for the ensuing year were then elected as below:

President, D. M. McPherson, Lancaster; 1st Vice-President, D. Vanderwater, Chatterton; 2d Vice-President, Jas. Bissell, Algonquin; Directors, Wm. Eager, South Mountain; Edward Kidd, North Gore; F. H. McCrae, Brockville; Jas. Haggarty, W. Huntingdon; Platt Hinman, Grafton, and H. Wade, Toronto.

The President elect favored in his address the asking an increased grant from the Legislature to enable the Association to send out additional instructors.

Mr. J. McDonald, Morrisburg, then read a paper on "Butter making." He dwelt on facilities for the *expansion* of the dairy interest. He enlarged on the wide field in Canada for Canadian dairy butter in Britain, if the quality were right, as it would supplant oleomargarine, so extensively used in that country.

Mr. Shaw followed with a paper on dairy barns.

Professor Robertson, in the course of a most excellent address on the dairy, dwelt mostly on the care of dairy stock. He gave as a suitable food ration for an average sized cow, 2 lbs. bran, 2 lbs. oil cake or cotton, 5 lbs. barley and oats, 7 lbs. clover hay and 30 lbs. mangolds, daily. He gave much prominence to the salting of the cows regularly, and stated, as a result of experiments made at the college, that cows salted regularly gave more milk, and that the milk kept sweet much longer. He believed they should have more than what they will lick of rock salt. At-

tention here would increase the milk flow, perhaps 450 lbs. in the season. Cheese-makers should not use home-made rennet; better use the extract prepared. Curd should be cut very small, horizontally first and then perpendicularly. Rough handling of the curd is detrimental.

A delegation was appointed, to ask of the Government an additional grant to enable the Association the more thoroughly to carry on its work. This delegation included in its number the President and ex-President of the Association. In the evening a banquet was given by the Directors, to the strangers and others, which was largely attended, and in every respect a success.

The discussions were kept up on Friday the 7th, and were very profitable. Altogether the meeting was a pleasant and useful one.

Agricultural and Arts Association.

At the Fat Stock Show in Guelph last December, the Council offered prizes for the three best reports of the show, made by students of the Agricultural College. The result is as follows:

1st prize, Clydesdale Stud Book, Vol. I., Mr. Elmer Lick; 2d, Ayrshire Herd Book, Vol. I., Mr. F. J. Sleightholm; 3d, Gallop-way Herd Book, Vol. I., J. G. Scrugham.

The Eastern Dairymen's Association have granted \$200 towards the prize list for the Provincial Show at Ottawa this year. It is to be distributed over the dairy department.

The Possibilities of the Dairyman.

THIS PAPER WAS READ BY THE EDITOR AT THE ANNUAL MEETING OF THE WESTERN DAIRYMAN'S ASSOCIATION, HELD IN WOODSTOCK, IN JANUARY, 1886.

(Continued from January.)

In turning out neck-yokes a careless workman may make nineteen good ones to one that is slighted, but not so with the careless cheese-maker. If his ignorance or inattention spoils one cheese, he spoils them all for the day. In view of these facts no factory can afford to employ an inefficient cheese-maker at any price.

This feature of cheese-making is assuming an alarming aspect. We have been told by men foremost in the business, what many of you doubtless know, that formerly farmers' sons, young men of promise, were anxious to learn cheese-making, but now they are as anxious not to learn it. This omen is most portentous, and cannot but bring mischief. If death is not in the pot, disaster is in embryo, and should at once be taken out.

We read that once in the world's history, the anvil of every smith was taken out of a certain country, from the fear that they would make good swords, and again, that all the artisans and skilled workmen were removed from the same, with a view of crippling its resources, but in both instances it was the work of foes. We never before heard of the men of any craft banishing the best of their workmen through inadequate wages, especially when a standard product could not be produced without the assistance of this class. Dairymen of Ontario, it is a suicidal act, and we ask you to stay the knife before it is too late. It is possible for every dairyman to employ good workmen, if sufficiently paid for their labor. Money will assuredly command skill.

Do not tell me that the business will not afford it, for the moment any business will not afford to pay for competent workmen, it is in the last agonies of dissolution, which we cannot believe is the case with this, one of our country's fairest industries.

In some sections there is a special reason for this state of things—less so in the west than in the east. The people have unduly multiplied factories, which of course has greatly increased the expense of manning them. A cheese-maker taking charge of a factory at only one-half its capacity will cost the same as though it made its full quota, and so of other departments of the work, so that while it is a matter of congratulation that cheese factories have, like the