

Dairy.

Ontario Dairymen's Association.

THIRD ANNUAL SESSION.

The third annual meeting of this Association was held in the City Hall, London, Feb'y 18th, 19th and 20th. There was a large meeting, many of the most eminent dairymen of Canada and the United States being present. Among others were Prof. X. A. Willard, Little Falls, N. Y.; Prof. L. B. Arnold, Ithaca, N. Y.; Robt. McAdams, Rome, N. Y.; C. E. Chadwick, Ingersoll; Hon. Harris Lewis, Frankfort, N. Y.; L. R. Richardson, Kerwood; J. C. Hegler, Sec'y, Ingersoll; E. Casswell, Ingersoll; W. Watson, Falkirk. The Treasurer, Mr. C. E. Chadwick, called the meeting to order. He called on the Vice-President, Mr. E. Casswell, to take the chair, as Mr. Ballantyne, the President, was not yet come. Mr. E. Casswell regretted the absence of the President, saying he had received from him a telegram stating that he was suffering from a severe cold. Messrs. J. Wheaton, H. S. Lossee, C. E. Chadwick, W. Hill and W. Watson were appointed a committee on the order of business.

The Secretary read a communication from Mr. A. A. Ayr, who could not be present, as he had expected, to address the meeting on "Creamery Butter," a good paper, but our space is limited.

"THE COW AND THE GRASS."

C. E. Chadwick took up the question of the cow and the grass. He said a great deal more care was required in preserving the breed of good dairy stock. The short-sighted policy of the majority of our dairymen was to be regretted. With better stock would come better care of them. The treatment of dairy stock to produce the best results is a question that is not attended to sufficiently. Kindness, attention and familiarity are needed in attention to cows. The time and quality of feeding should also be well attended to. Grass is, of course, the natural food of the cow. Speaking again of the grasses, he thought we did not appreciate enough the value of them. We should study their nature and adaptation to the purposes for which they are used. It is estimated that at least one-sixth of the plants of the earth belong to the grass family. The most useful are probably timothy and clover for dairying purposes. A little red-top is sometimes added, and then we think we have done all man can do, nothing. We never think that in some of the fine English meadows are to be found thirty different kinds of grass. The reason why our meadows so soon get exhausted is that we do not pay that attention we should. In order to test the real merits of our hay agricultural chemistry is found of great value. He then referred to the advantage to cereal cultivation from an increase of grass land. He hoped a greater attention would be paid to this point in future. He asked in conclusion that more attention be paid to the cows and grasses in future, and he would feel well repaid for preparing his paper.

Hon. Harris Lewis regretted that in such a valuable essay, blue grass—without which the Canadian dairyman could not exist in dry weather—was not mentioned. Having been asked for a little information about this, he said in reply that this was the same as what was known as Kentucky blue grass. About the middle of June was generally the best time to sow. He would mix it with orchard grass for his pasture. Grasses are social in their habits of growth. If you want a perfect seed, sow these two and you will secure it. Corn fodder: this was good enough when you have nothing better. It fills a splendid niche—that is, when you have nothing else. (Laughter.) In reply to a question he said the long leaved grasses are the best for milk. Clover is one thing when it has its sap in and another thing when it is not sap-headed. He would sow the grasses in the proportion of one of Kentucky blue grass and from eight to ten lbs. of the orchard grass. With this they could get two crops. In seeding for pasture he would put a bushel each of orchard grass and Kentucky blue grass and then mix a little of every kind of leaf you can get. Hon. Mr. Lewis said he had tried Lucerne, and did not succeed very well.

Prof. Arnold—I believe the young grass produces more milk, more flesh and more butter than if cut later on.

Rev. W. F. Clarke said he was an enthusiast in regard to red clover. It was the only crop that leaves the land better than it finds it. It also

benefits the land by maturing its seed. Although those things are contrary to analogy of nature in other crops, there was not the slightest doubt but it was true. Still there seems to be a great prejudice against it. It is said it taints the butter, that it makes poor hay. This is a mistake. He believed red clover would be found preferable to subsoiling in improving the soil. While the subsoiler only went down a few inches, the clover would go down several feet and improve the soil generally. As a fodder, clover seed was far ahead of sweet turnips. He earnestly recommended the red clover seed, not only for its fodder purposes, but also for its efficiency in renewing the soil.

Prof. Arnold—If red clover derived all its growth from the atmosphere, could the land do such a thing as "clover sickness?"

Rev. Mr. Clarke—Certainly there can. There is a natural rotation of crops that must be followed in all crops. Many followed the high pressure style of farming, of never giving the land a change. This should be discontinued.

EVENING SESSION.

At the evening session, Prof. Arnold gave an address on "The Profits of the Dairy," which will be found on page 54.

THURSDAY MORNING SESSION.

The convention opened at 9 o'clock on Thursday morning. The President in the chair.

IMPROVING THE BREED OF CATTLE.

The Rev. W. F. Clarke offered some interesting remarks to dairymen. He spoke of the necessity for the formation of a National Society of Dairymen. The principal objects of this Society would be to test relative worth of the various breeds of cattle for butter and cheese making, and to obtain and encourage dairymen and farmers in raising an improved breed.

BUTTER AND BUTTER-MAKING.

Prof. Lewis referred to three kinds of classes: good butter, poor butter, and oleomargarine butter. He had found that in all herds individual cows gave poorer milk than others, and the cream from this poorer milk deteriorated from the quality of butter made by others and good cows in the same herd. In the production of first-class butter the food and treatment of the cow played important parts. Where a cow was cruelly treated and poorly fed she would not give as good milk if properly cared for and fed. He found that long-leaved grasses alone or mixed, with one quarter clover, formed the best food for producing butter. Milking was also an important thing to be considered in butter making. The butter making powers of many cows' milk were spoiled by improper milking; shallow pans had been substituted for deep ones, and they had also the centrifugal method of raising cream. The application of heat underneath and cold over the pans would assist in cream raising, but the currents must be steady to be effective. He had uniformly found that the best butter was obtained from shallow raised cream. To make butter from sweet cream no acids should be allowed. If sweet cream butter was desired, acid should be allowed to develop before churning. He regarded butter made from sweet cream as possessing the most delicious flavor, but less butter could be obtained from the same quantity of milk, and it would lack the keeping quality of that made from sour milk. If made from sour cream the cream should be skimmed as soon as the acids developed. Of all the kinds of churns with which he had met he found the old-time dasher churn, if properly constructed, to be the best and superior to all of recent invention. The churn and all wooden implements should be scalded after using, to remove all particles of acids, etc. With regard to the temperature, the churn should be stopped when the butter came into small globules, and temperature reduced. After the butter had been washed he took it out and placed it on an inclined slab, V-shaped, and put about one ounce and a half of salt to a pound of butter. For the general market three-fourths of an ounce of salt to a pound of butter was sufficient. In seaboard districts and to foreign residents, less salt was required than in inland districts and among the active Canadians. The butter made now seemed to require the old Welch tub for packing purposes. White oak, thoroughly deodorized, he regards as the best wood for butter purposes, but spruce and hemlock were good for butter if wanted for keeping. The butter should be packed firm and solid in the tubs as soon as possible after leaving the churn. Butter will keep longer and better at a temperature of 55

degrees if it was to be subjected afterwards to the difference of our climate, and if he could always keep his milk at 60 degrees he would be very glad. It was also necessary to be very particular in milking not to allow any impurities to get into the milk. He also related many amusing anecdotes of his apprenticeship, which kept his audience in the best of humor. Poor butter, he said, was produced by many. He also advised dairymen not to eat onions whilst butter making, as it tainted the butter; even if their breath did not smell, the scent percolated through the pores of the skin, and was thus communicated to the butter. With regard to oleomargarine butter, he asked them to remember that one pound of this grit, fat butter, was equal to sixteen ounces of good butter. Were this butter sold for what it really is, it might be legal and just from a commercial point, but unfortunately it was sold for pure butter, and thus robbed hundreds of dairymen of an honest profit.

Prof. Willard read an interesting paper upon the same subject, dealing with the recent inventions for butter-making. After referring to the great information derived from the display of novelties at the late International Exhibition, he proceeded to give a description of the construction and principles of the leading implements displayed there. The centrifugal machine attracted great attention, and astonished the butter-makers, demonstrating the possibility of separating cream from the milk within a few minutes, and it was also claimed that it cleaned the cream from impurities. The "Excelsior Creamery," of Canadian manufacture; "Butler's Cabinet Creamer," "Clarke's Revolution Plan," "Ferguson's Bureau Creamer," were also commented upon.

With regard to the raising of cream, the speaker advocated raising the cream at the farm as preferable to sending the milk to the factory to be skimmed. By adopting this method the cream was raised better, quicker, and in larger amounts per gallon of milk than by the other.

It was moved, seconded, and carried, that this association take the earliest opportunity of petitioning the Dominion Legislature for the removal of duty on cheese and butter cotton bndags, and that the chairman appoint a committee for drafting out a petition for the carrying out of the same.

AFTERNOON SESSION.

The Convention met pursuant to adjournment at 2 o'clock. The meeting having been called to order,

ELECTION OF OFFICERS.

The report of the Committee on nominations, wherein they recommended the appointment of the following officers for 1880, was read and adopted: President, E. Casswell, Ingersoll; 1st Vice-President, L. R. Richardson, Strathroy; 2nd Vice-President, John Wheaton, London; Directors, Rev. W. F. Clarke, Guelph; Adam Spiers, Cais-torville; H. L. Lossee, Norwich; Wm. Hill, Seaforth; Thos. Ballantyne, M. P. P., Stratford; Wm. Thompson, Arkona; C. P. Perkins, Barrie. Auditors, Wm. Watson, Falkirk; J. S. Scarrif, Woodstock.

Prof. L. B. Arnold read an interesting address upon "Arnold's Process of Cheese Making," which will appear in another issue.

FRIDAY—MORNING SESSION.

The chairman stated that the finances of the Association were in a better state this year than ever. He had heard from an unofficial source that the Government had appropriated \$1,500 towards the Association. They had enough money now to supply all the patrons with a copy of the report.

The Executive Committee were empowered to publish extra copies of such portions of the transactions or addresses as they may deem advisable for distribution among the patrons throughout the Province, and that each cheese and butter factory send the secretary the number of patrons belonging or connected with it, and that the manager of each factory applying for copies send at the same time the approximate number of cows usually supplying their factory, and that the returns be made by the 1st of March.

Mr. Weld offered to publish and distribute free to all patrons of the factories and others the report of the Convention if furnished to him.

Mr. Weld asked Prof. Brown whether he had ever heard of the existence of pleuro pneumonia, hog cholera, or of foot and mouth diseases in Canada.

Prof. Brown replied to Mr. Weld, and said he had never known that any of above named diseases had existed at any time in Canada.