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JANUARY 12, 1911

## THE FARMER'S ADVOCATE.

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States to the end of November last, was equivalent to 150,000 boxes of cheese. This should be properly added to our exports for the year. The home consumption of milk, butter, cheese and ice cream is increasing at the rate of over \$2,000,000 a year.

There is, unfortunately, a tendency to measure the progress of the dairy industry by the export trade. The export trade is only about twenty-five per cent. of our total production of milk. There is now a very large quantity of both butter and cheese going to the Western Provinces, whereas only a few years ago they were shipping both butter and cheese from these Provinces, and they have trebled and quadrupled their output during that time. The home consumption in the East is growing very largely. Such cities as Montreal and Toronto alone require an enormous increase every year to satisfy their needs.

The high price of meats caused our people to turn their attention more to butter and cheese, which they have found to be of more value as a food than meat; they also possess the advantage of being always ready for the table, as they require no cooking.

References to the decline in the Canadian cheese trade by Old Country merchants are often given a wrong interpretation. The impression is given that Canadian trade is declining because of the increase in New Zealand imports, while the converse is true. As a matter of fact, the decline in the exports of Canadian cheese is the thing that encouraged the shipments from New Zealand, and the shipments from that country are just about equal to the decline in the Canadian. I hereby extend the thanks of the Association to the Hon. J. S. Duff, Minister of Agriculture for the Province of Ontario, and the Hon. Sydney Fisher, Minister of Agriculture for the Dominion, for the able assistance they have given the dairy industry of this Province.

Honorary President Senator followed with an able address, in which attention to the individual cow and individual farmer were emphasized.

In the free-for-all discussion which followed, among other subjects brought up was that of widening the markets for dairy goods. Attention was drawn to the fact mentioned in the President's address, that cream to the value of \$1,250,000 had been exported to the United States last season; that carloads of fresh milk for Boston were leaving the country three times per week, and that even cheese had been sent over, and a duty of six cents per pound paid on it.

The following resolution, by John Hyatt, Prince Edward Co., seconded by Jas. Anderson, of the same County, was unanimously carried, viz.: That the Dominion Government be respectfully but most strongly urged, in the negotiations now pending between Canada and the United States, to provide for complete reciprocal free trade between the two countries in all lines of dairy products.

The place of J. A. Ruddick, Dairy and Cold-storage Commissioner, who sent regrets at being unable, through illness, to be present, was taken by his assistant, W. W. Moore, Chief of Markets Division, who came in his stead, and spoke on "Transportation of Perishable Products."

Safe and careful handling of cheese, butter and fruit is most important, as great loss results from deterioration, however brought about.

Transportation facilities are now reasonably good, which was not the case ten or fifteen years ago. As late as 1901 the export cheese trade was in a precarious condition. In 1902 the Dominion Government started the cold-storage-in-transit movement, and for several years past have had six inspectors in Montreal, and five in Great Britain, seeing after the handling, storing and unloading of cheese boxes and other packages.

Inspection has resulted in much improvement, both in the methods of handling employed, and in the temperatures of the chambers in which cargo is sent. The inserting of thermographs in the cargo, which record temperatures during voyage, has been the means of much greater care being taken by vessel men to keep even and low temperatures in the rooms. Cheese boxes, which were often crushed during loading, are now handled in much better fashion. Special watch is kept by inspectors the last night of loading.

Many breakages, at one time due to teamsters, are now avoided by trains being run alongside sheds, though some teaming is still done.

During the past season there were shipped from Montreal 1,890,357 boxes of cheese, 480,000 in cooled-air chambers, and 1,409,000 in ordinary storage.

Very few cases of heated cheese in transit are now heard of, and when such do occur, the responsibility can usually be promptly placed, and the Department sees to it that the innocent are protected.

### COMMON SENSE IN THE CATTLE STABLE.

Prof. G. E. Day, O. A. C., Guelph, in speaking of the common-sense treatment of cattle, touched on a good many phases of the subject, and got a most attentive hearing by the large number who were present.

Breeds.—Touching first on the breeds, he said that the cry is heard through the land, "Which is the best dairy breed?" There is no one

breed which in every respect outshines all others. Had there been, that breed would by this time have displaced all others. There are good and indifferent animals in every breed, and he who fails with one breed is not likely to make a success of another.

Feeding.—Feeding should be generous. "A cow is no worker of miracles." To be a large producer, she must be a large consumer, though, on the other hand, a large consumer is not necessarily a large producer. Again, "the milk of the individual cow is fairly constant in composition." If, therefore, food be given her which is deficient in any element, the composition of the milk will remain the same, but the quantity will be reduced. This fact should be borne in mind when feeds are being purchased, and it becomes the farmer to study up this question of balanced rations.

Stables.—Mangers and water troughs should be so constructed that they can be cleaned, and plenty of light should be afforded. A few minutes' exercise each day, and good stable ventilation, Prof. Day thought to be essential to health.

Tuberculosis.—This disease is present in our herds, and is contagious, but yet can be controlled and checked. By repeated testing and segregation, a herd reduced in numbers, but entirely free from the disease, may be secured. Experience with the College herd verified this.

The average farmer can scarcely afford to do the like without Government aid.

### COW-TESTING ASSOCIATIONS.

C. F. Whitley, of the Dairy Commissioner's staff, Ottawa, showed, from figures received at the office, that in an average Ontario dairy herd, from 20 to 35 per cent. are kept at a loss. The benefit of the cow-testing associations is that these



Henry Glendinning, Manilla, Ont.

Re-elected President Eastern Ontario Dairymen's Association.

unprofitable specimens are discovered. Many instances were given to show that it is possible to greatly increase the annual milk yield. In some cases cited, increases of from 1,500 pounds to 5,000 pounds per cow had been reached in five years. Testing, weeding out poor specimens, and feeding, accomplished this. If an increase of but 1,000 pounds per cow yearly could be made throughout Ontario, it would add \$20,000,000 to the annual income. Therefore, take up cow-testing.

At the evening meetings, which were presided over, the one by Senator Derbyshire, and the other by J. R. Dargavel, M. L. A., the Honorary Presidents of the Association, the trade question was again touched upon. Provincial Treasurer Col. Matheson, and Hon. Jas. Duff, Minister of Agriculture, spoke against making any bids for reciprocity with the United States. The home market had so developed, and so much of the produce of the farm was now consumed in the country—from 75 to 85 per cent., said Mr. Duff—that, in their opinion, we had better let well enough alone.

The Convention was right royally welcomed to Perth by Mayor F. W. Hall and Reeve C. J. Foy, a flowery address on a silk banner being presented through the chairman.

N. P. Hull, President of American Dairy

Farmers' Association, in a most entertaining way, emphasized the importance of building up a dairy herd, and of good feeding and care. A man should lie awake at nights to study how to get cows to eat, more, not less. The more a good cow eats, the more profitable she is.

### HOPE FOR OLD ONTARIO.

Addresses by Deputy Minister of Agriculture C. J. James and Dr. Creelman, President O. A. C., Guelph, were also features of the evening sessions. We sometimes hear the question asked, said Mr. James, "What is to become of the old Province of Ontario?" In 1909, the yields of agricultural produce from the three Provinces of Manitoba, Saskatchewan and Alberta almost equalled that of Ontario, but in 1910 the field products of Ontario were worth \$203,000,000; those of the three Western Provinces, \$155,000,000. What can be done to maintain this lead? Several hopeful features are evident: (1) A better demand for pure-bred live stock; (2) the extreme prices for poultry and eggs. Should not the production of these be doubled? (3) The widening market for fruit. Not only may the Western demand be expected to increase to four or five times what it is at present, but there will certainly spring up in Northern Ontario a growing demand, also. And the old stand-by, the oversea trade, does not lessen. Western Ontario is planting apple orchards; should not Eastern Ontario do likewise? (4) The great dairy industry holds its pre-eminence as the largest single industry in the Province. Some claim that the difference between the retail price and the price the producer receives is too great. City people are alarmed, and farmers complain. To the whole problem, people of every class should devote serious study. An increased income for farmers of from \$100 to \$1,000 is quite possible, Mr. James believed.

### EDUCATION NECESSARY.

President Creelman, O. A. C., believed in more education, rather than less, for farmers. He was pleased to be able to report the College full to overflowing. Students from many of the countries of the world were coming to them. Farmers were being "taken in," not because they knew too much, but because of ignorance. We should urge on the good work of advanced education.

### PROMPT COOLING OF MILK.

Geo. H. Barr, Chief of the Dairy Division, repeated by request the story of his experiments in the care of milk, by which it was demonstrated that, from milk promptly cooled and covered, cheese of much finer quality in both texture and flavor was manufactured than when milk had been aired only, or both cooled and aired. His lantern views, showing the appearance of curd from milk treated in different ways in a long series of experiments, are convincing. He also showed views of special dairy cows, etc., and of two pioneers in the cheese industry, Harvey Farrington, who made the first cheese in Oxford County, and Hon. Thos. Ballantyne, of Stratford.

"Reasons for the Care and Cooling of Milk," was the subject of a paper by Dr. M. T. Connell, Bacteriologist, Queen's University, Kingston. By care, the entrance of taint-producing bacteria can be largely prevented. Cleanliness in milking and in the after-handling of the milk, and milk vessels, will prevent the entrance of bacterial germs that no after-care can eliminate. For their development, most bacteria require a certain amount of warmth. Prompt cooling will retard their multiplication. Morning's milk sometimes shows more bacteria after five hours than milk of the evening previous that had been treated properly. A test of milk that had been quickly chilled showed only 45 per cent. as much bacteria as when it had been slowly cooled. There is very little bacterial growth over night in milk that has been promptly cooled.

One of the greatest sources of bacteria in milk is manure and manure dust. Other dust and flies also carry these injurious germs. Milk once seeded with germs becomes itself a source of infection.

Cleanliness in milking, and care of milking vessels, protection of milk after milking from dust, dirt and flies, and cooling, will prevent the entry or hinder the growth of taint-producing bacteria, will improve vastly the quality of the milk, and the value of the product made therefrom.

### G. G. PUBLOW'S REPORT FOR EASTERN ONTARIO.

From the report of Chief Dairy Instructor G. G. Publow we cull a few figures: Instructors, the same as last year; factories in operation, 933; new factories built, 15; improved, 581; total number of visits paid by instructors, 7,200. Sanitary condition of factories improved. Total output of cheese, 97,253,407 pounds; increase over last year, more than 7,000,000 pounds; factories pasteurizing whey, 125; making whey butter, 133; shipping cream and casein to the United States, 41; paying by test, 93; average milk per cow for six months, 3,253 pounds; increase over last year, 390 pounds.

A. A. Ayer, of Montreal, cheese exporter, thought that farmers should pay more attention to increased production than to prices, which they