

Trim the Corners of the Wick.

Editor "The Farmer's Advocate":

I noticed where a subscriber was telling how to prevent lantern glasses breaking. I had the same difficulty myself until I solved the problem by the manner in which I trimmed the wick. After cutting the wick off squarely, clip the corners slightly. I have found, by this method, that we have a nicer, fuller blaze, and have never lost a glass by overheating since. Try it.

Kent Co., Ont.

E. C. McGEACHY.

THE DAIRY.

Outlook for Butter and Cheese Industries.

At the recent Dairymen's Convention, J. A. Ruddick, Dominion Dairy and Cold-storage Commissioner, again discussed the outlook for our Canadian butter-and-cheese-making industries. In these days of improved transportation, with trade routes established which bring the ends of the earth together, it is absolutely necessary, he claims, that we should know what is being done in other countries, if we are to determine with any degree of accuracy as to the best policy for the future of the industry in Canada, said Mr. Ruddick, in opening his address.

The hot, dry weather which prevailed in Great Britain and on the Continent of Europe the past summer caused a great shortage in milk, thus the output of cheese and butter was reduced, and the imports from France and Belgium fell off one-half. The production in Canada showed a shrinkage, and the unexpected decrease in shipments from New Zealand resulted in very high market prices. The United States sent over 16,000,000 pounds of cheese to Britain. This caused a surprise, as it was thought they would soon be importers, but stocks of butter and cheese are now very light in the United States, and there has already been an advance in prices, which are now too high for export trade, and the home trade has increased because of the low prices, so that the quantity exported from the States during this year will likely be very much smaller than it was in 1911.

The total quantities of different dairy products, including cheese, butter, casein, cream, fresh and condensed milk exported from Canada was practically the same for 1911 as for 1910.

The value of Canadian exports in 1911 was nearly a million dollars more than in 1910, being \$24,716,967, and we exported 168,256,026 pounds of cream, 9,753,386 pounds of butter, 1,172,268 pounds of casein, 6,209,162 pounds of condensed milk, 291,250 pounds of fresh milk, and 1,073,765 gallons of cream.

Owing to the low prices in the United States, the exports of cream have been much less than they were in 1910, but with normal conditions again prevailing, the United States demand for cream may easily reach, or even exceed, its former proportions.

The total value of our exports has shown an annual increase for the past three years, and for the year ending Nov. 30th last, it is under seven million dollars less than it was for the record year of 1903.

Against this decrease we have the increase in home consumption, which is at least \$25,000,000 a year more now than it was in 1903. This would leave a net increase of over \$18,000,000 in the annual production. It is said that the number of milch cows is less in Ontario than it was a few years ago. There has been a very great improvement in the average yield of milk; there is more milk now being produced in Ontario than ever before. This is due, in part, at least, to the Cow-testing movement.

Australia and New Zealand are likely to be our greatest competitors in dairy products. In 1903 these countries shipped 10,628 tons of butter to the United Kingdom, and in 1911, 60,247 tons, showing an increase, in eight years, of 49,619 tons (one ton equals 2,240 pounds).

About 75 per cent., or, to be exact, 44,395 tons of butter came from Australia in 1911, as against only 1,053 tons in 1903.

In cheese, there is the same story to tell. In 1902 these countries exported to Britain 2,710 tons and in 1911, 20,873 tons, an increase of 18,163 tons. Practically the whole of the cheese comes from New Zealand, Australia having sent only 1,655 tons during the whole ten years covered by the table.

In 1902 Canada sent 76,297 tons of cheese to the United Kingdom, and in 1911, 76,457 tons; and the figures of the entire period show a de-

crease in Canadian exports, from 1904-1910, of 18,645 tons, while New Zealand's exports increased 18,540 tons.

Mr. Ruddick said that he believed that Australasia is destined, in the not distant future, to take first place in the international trade in dairy products; or, in other words, that the combined exports of butter and cheese from Australia and New Zealand will exceed in value, before many years, the exports from any other country. The old practice of sheep-ranching is giving way to dairying in those countries, mechanical refrigeration is aiding the industry, and the slow growth of population makes it possible, with the rapid increase in production, to export enormous quantities. The rapid growth of population in Canada, most of which does not go into dairying, has had the effect of increasing our home market and decreasing our exports. Mild winters in Australia favor heavy winter production, and the long pasturing period is also favorable. Of course, in a bad season, cattle suffer much from drouths.

The imports of cheese into the United Kingdom were the smallest last year since 1908, and amounted to 110,709 long tons. If we take into account this decrease in the imports, along with the big shortage in the production in England and Scotland, on account of the prolonged drouth last summer, it would seem as though the statistical position of cheese was very strong for the coming season. The United Kingdom is, next to the United States, the largest producer of cheese in the world. The home production exceeds the total importation by many thousands of tons, and, therefore, a small percentage of shrinkage amounts to a large quantity in the aggregate.

The imports of butter, on the other hand, have increased as much or more than the decrease in cheese, if both were reduced to their equivalents in milk. It may be of interest to state that the annual importation of butter into the United Kingdom is from 200,000 to 220,000 long tons.

Germany is now an importer of dairy products. Canada's home trade must increase over \$2,000,000 yearly, including milk and all its products. This means that our home market absorbs probably \$25,000,000 more of the dairy production than it did ten years ago. The total home trade, including milk, cannot be far from \$80,000,000 a year, and, therefore, it is much the most important market that we have.

The United Kingdom absorbs more dairy products yearly, the home market in Canada is expanding with the increase of population, and the likelihood is that the United States will soon be importing; the quality of the products is improving, and all points to a greater future for the business.

The most outstanding feature of the dairy trade at the present moment is the growing demand for milk for the larger towns and cities. It is quite as noticeable in Canada as elsewhere. Winnipeg is now obliged to obtain a large quantity of milk daily from such a distant point as St. Paul, Minn. The demand in Vancouver is closing many of the creameries in the Fraser Valley. The same thing is occurring in other parts of the country.

The increased per capita consumption of milk and cream is very large, not only in Canada, but in all countries where these articles are included in the daily dietary of the people. The improved sanitary conditions surrounding the production and distribution of market milk have given a great stimulus to its use, and there is still much to be accomplished in that direction.

The conditions do not point to any danger of overproduction, and the outlook for dairying in Canada, said Mr. Ruddick, is as good as, if not better, than it ever was, and it seems to be particularly bright for the coming season.

NEW ZEALAND'S CHEESE, AND CANADIAN TRADE.

New Zealand cheese begins to arrive in England a little after the close of the manufacturing season in Canada, so it supplies, to some extent, the demand which formerly existed for Canadian cheese during the winter months.

The point Mr. Ruddick emphasized was this: When the quantity of New Zealand cheese becomes large enough to supply the consumptive demand during the time it comes on the market, say from November to June, Canadian cheese will have to be consumed very largely during the period in which it is produced. The effect of this is already felt to a limited extent. Our cheese are needed more than ever for immediate consumption. That being the case, they should be well cured before we put them on the market. They should be more mature now than was necessary under the old conditions, when they were held much longer in storage.

New Zealand cheese is all cool-cured, and is landed in cold weather. Canadian cheesemakers, by adopting the cool-curing principle, can meet this advantage on even terms. The process of shipping green cheese is suicidal. They must be more mature. A good reputation for quality of product is essential, and our cheesemakers must be careful to put out the best possible.

What Cow-Testing Has Done and Will Do.

"If each cow in the herd does not pay, the fault lies in ourselves not in the cows," said Chas. F. Whitley, at the Eastern Ontario Dairymen's Convention, speaking of the present value of cow-testing. This being true, the remedy is obvious. Give cow-testing a trial. The work is simple. It requires less than ten minutes a month for each cow in the herd to take samples and keep weight records. The avenue of success lies through the gate of decision, and along the main road of endeavor and persistence our mental ear should be unstopped and alert to this call of modern common-sense dairying.

What is the paying basis for a cow? If we agree that it takes \$40 to feed a cow, then with milk at \$1 per 100 lbs., the mature animal must give over 4,000 lbs. before she returns a profit of even one cent. Do all your cows give over 4,000 lbs.? On examining the records of 1,600 cows for the last year, he found that 35 gave less than 4,000 lbs.; that is, 7 out of every 20 cows scattered over several counties could not be said to yield any profit above the cost of feed.

CONTRAST BETWEEN TWO ONTARIO HERDS.

11 cows (Lanark).
Average yield, 3,794 lbs. milk.
3.4 test; 131 lbs. fat.
Total yield, 41,737 lbs. milk.
1,445 lbs. fat.
\$5 profit per cow.

5 cows (Oxford).
Average yield, 12,068 lbs. milk.
3.3 test; 400 lbs. fat.
Total yield, 60,340 lbs. milk.
2,003 lbs. fat.
\$80 profit per cow.

Note that the 5 cows gave nine tons of milk and a quarter of a ton of fat more than the 11 cows.

Every time the 11 cows filled one factory milk can the 5 cows filled not one but three similar cans.

The 11 cows gave a bare profit over cost of feed, averaging only \$5, but the 5 cows gave an average profit of eighty dollars, thus one good cow equals sixteen of the poorer kind.

Dairy records show that some cows produce milk at a cost of 65 cents per 100 lbs., while others under the same roof run the cost up to \$1.20. "Cow-testing is of great immediate value, because for one thing it enables us to individualize, to detect unerringly the useless animated machine that does not produce milk economically. We don't want the kind that only turns out \$35 worth, while in the next stall is one keyed up to the tune of \$80 or \$100," said Mr. Whitley. The record system insures more intimate and analytical examination of cows, transferring the unit of value from the herd to the individual. "I have addressed this Association on this topic for seven consecutive years, and had the initial remarks been heeded even only three years ago, any dairy farmer might now be keeping cows, giving at least 300 pounds of butter or 6,000 or 7,000 pounds of milk," was Mr. Whitley's decisive statement.

Handling poor cows is a serious waste of energy. In milking alone, cutting the 35% of poor cows down to 20%, and allowing 60 hours per cow for 10 months' milking, it means a waste every year of 30 million hours in milking unprofitable cows. This is energy equal to that used in horse power for plowing 375,000 acres of land. A stupendous waste, which must be stopped. Testing is the remedy. It is the substitution of definite knowledge for mere guess work. Cow testing has increased the milk yield in Ontario 128 per cent.; in Quebec, 91 per cent.; in Nova Scotia, 278 per cent.; in New Brunswick, 70 per cent.; in Prince Edward Island, 300 per cent., and in British Columbia, 100 per cent.; and the present yield per cow in these Provinces, respectively, is: 8,000 lbs., 5,520 lbs., 7,835 lbs., 5,800 lbs., and 6,180 lbs. This shows that there is everything to gain from cow-testing. Cow-testing pays, and is of increasing value yearly. The factory patron wants the business cow, the "old reliable," that month after month rolls up a good record; one good cow will make more profits than can come from six poor cows. There is a sum of over twenty million dollars a year lying dormant in undeveloped cow quality in Canada. Cow-testing will make a good part of this direct profit to the milk producers. The practice will lengthen the factory season; will cause the stock and milk to be better cared for; will advertise the district; will increase cash income, and advance the estimation of the maker and progressive dairy practice.