

proved so successful after several years experience in the past, that there is no need of enforcing it here. It is an evidence of the lack of dairying facilities on a proper scale, as well as a striking illustration of the conservatism of Canadian farmers, in some quarters at least, that they have continued so long making dairy butter at home, when they could have disposed of their milk profitably and with but little labor and expense at the cheese factories. The manufacture of cheese is now an established industry here and cannot fail to command increasing patronage year by year, from the dairymen of Canada. But it would not be advisable for all the milk to be made into cheese, for if the market were overstocked low prices might result. The better plan perhaps, would be for dairymen to support liberally the cheese factories already in operation, and to establish butter creameries in localities where there is no cheese factory.

The total outfit for a butter factory, including building, churns, milkpans and other necessary appliances, will cost about one thousand dollars. This is, perhaps, the smallest sum for which a creamery, equipped to manufacture the milk of 300 cows and worked by horse-power, can be started. If steam power be employed, the outlay will be increased by the cost of the boiler. There are many creameries which cost more than that, although \$1,000 covers all necessary expenditure. One butter factory in the county of Huntingdon, cost nearly three thousand dollars, but it has a very large and handsome building, and all the machinery necessary for manufacturing the milk of 500 cows, including boiler and ice-house. Every creamery should have an ice-house, and commodious storeroom for the butter; and the latter should be dry, cool and well ventilated, for the preservation of the rich, creamy flavor in the butter depends greatly upon the purity and cleanliness of the storeroom.

This factory is managed by a joint stock company of farmers, and pays a dividend of about ten per cent. per annum upon the capital invested. They charge the patrons three and a half cents per pound for making the butter and furnishing the salt and tinnets, and make one pound of butter from twenty-five pounds of milk throughout the season. The butter sold for 23½c., netting the patrons twenty cents per pound, after paying expenses. They also get back the skimmed and butter milk, which is valuable to them for feeding young stock and much superior to whey. In two neighbouring creameries, which cost only \$1,000 each, is charged four cents per pound for manufacturing, and the butter netted the patrons

21c. per pound, last season, better sales having been made than in the first factory.

The managers of a Western creamery offered the dairymen of an adjoining township, to start a creamery for them, if they would furnish 300 cows, and to pay them twenty cents per pound for the butter throughout the whole season, free of all expense to them for manufacturing or package. But this offer, will it be believed, was not accepted. It is unaccountable that farmers will thus refuse to take twenty cents for their butter, free of expense for labor or tinnets, preferring to have their wives and daughters make it at home, and then perhaps sell it at ten to fifteen cents per pound, or at six to ten cents in a season like the present.

A large shipper, just returned from England, states that butterine has completely superseded ordinary Canadian butter in the British markets. He visited the retail stores in the principal cities there, trying to sell his Canadian butter, and he found them stocked with medium butter which was selling very slowly. He saw them retailing butterine in large quantities, and was told that they sold ten packages of butterine to one of common butter; the former being preferred because of its more nutritious qualities. Butterine is on the table in all the ordinary eating houses as well as butter, and is frequently used in preference to it. The commission merchants are receiving butterine weekly, fresh from the factories, and have orders from the consignors to sell immediately on arrival, at the current prices, and on no account to hold it for a better market. The reason for such peremptory orders is that butterine, when held any time, goes entirely out of condition. We hear of a lot now going a begging in a British port at 30/- per hundred. Butter makers would do well to adopt the above course in selling their produce, for one great cause of so much inferior butter is the pernicious custom farmers have of holding back their butter from market in anticipation of higher prices until it has deteriorated in quality and lost its flavor and value. The best quality of butterine sells for about 90/- in the English market, the second for 75/-, and the third for 60/-. From this it appears that, in order to suit the English markets and compete with butterine, we must make butter that will bring 100/- and over, which only creamery made and choicest dairy will do. Let us by all means have butter factories and cheese factories established throughout the country, and do away with the unprofitable dairy made butter. Creameries have been energetically founded as far west as Omaha, and Canadians must bestir themselves to produce as

good an article as is now sent from these far western regions.

THE COAL TRADE.

Great Britain, whose total out-put of coal in 1876 was 133,344,000 tons, valued at £46,670,000, exported in 1877, 19,000,000 tons, or about fourteen per cent., supposing the production of the two years named to be equal. The United States, with an out-put of 49,000,000 tons in 1876, exported in that year 568,000 tons, and last year, when her output was greater, 740,456 tons. Of this last total, 223,267 tons of bituminous and 309,272 tons of anthracite went to Ontario and Quebec, while 6,207 tons bituminous and 33,950 of anthracite to the maritime Provinces, and about 1,000 tons in all to Newfoundland, Labrador and British Columbia. Thus, practically about 573,700 tons or 77.4 per cent. of the exports of United States coal were to the Dominion. These figures, and much other information of an interesting nature upon the subject, we obtain from a review of the coal trade for 1877 of Mr. F. E. Saward, editor of the *Coal Trade Journal*.

"Nova Scotia," says the authority named, "took a step forward during last year, and is in a fair way of regaining its position among the coal-producing countries of the globe." Her production was smaller in 1876 than it had been for four years previously, being 634,207 tons, while that of 1877 was 687,065 tons. Mr. Poole, the Inspector of Mines for that Province, gives the total coal sales of Nova Scotia from 1785 to 1870 as 10,069,143 tons; while from 1871 to last year, inclusive, they were 5,040,632. During these last seven years the quantity raised was 5,726,606, which would indicate a stock on hand of 685,974 tons at close of last year.

The counties which sold the most in 1877, compared with the previous three years, were Cumberland and Cape Breton, Pictou not having increased in quite the same ratio. A comparison of the markets to which Nova Scotia coal found its way last year, with the three previous years, shows that an increased amount has been taken by Nova Scotia herself, by New Brunswick, by the United States (excepting 1874, which was greater) and by Great Britain, while the purchases of P. E. Island have been steady, and those of Quebec, Newfoundland, the West Indies and South America have been smaller for 1877.

We find the coal area of Vancouver's Island, the westernmost part of our Pacific Province, estimated at 390 square miles, and the production of coal, which finds its market largely in San Francisco, has grown