

The Canadian Dairying Industry

The total number of creameries and factories operating in 1916 is reported as 3,446

By ERNEST H. GODFREY, F.S.S.

In days when circumstances call insistently for accurate statistics of all descriptions of food production, the issue of a report on the manufacture of butter and cheese comes opportunely to supplement the estimates of other staple foods of prime importance. A natural function of the central statistical office of any country, and especially of a country under the federal form of government, is the combination of local statistics into national totals and their publication for the use of the country as a whole.

A task of this character has already been carried out by the Census and Statistics Office in connection with the education statistics of the provincial governments, and now a further effort of similar character has culminated in the publication of a report on the butter and cheese production of Canada for the years 1915 and 1916. The statistics given in this report have been furnished, on a uniform schedule issued by the Census and Statistics Office, by each of the nine Provincial Departments of Agriculture, and they embrace the following particulars as collected in the first instance from the creameries and cheese factories of Canada; number of establishments and patrons; deliveries of milk and cream; quantities and values of creamery butter and factory cheese, and the wholesale prices of these commodities. In addition, the report discusses the data available for estimating the total dairy production of Canada and presents tables showing the dairying imports and exports over a series of years.

INTRODUCTION OF THE FACTORY SYSTEM.

Butter and cheese have been made in Canada from the earliest times, and there were over one million cows in British North America in 1861. The home market was then supplied with Canadian-made butter and to a certain extent with cheese; but the imports of cheese were largely in excess of the exports until after the introduction of the factory system. This gave a new impetus to milk production, and has rendered possible the establishment of a constantly-extending export trade in butter and cheese, especially the latter. The system of making cheese in factories, on this side of the Atlantic, originated, according to Mr. J. A. Ruddick's Report on the Dairying Industry in Canada, in the County of Herkimer, New York State, about the year 1851. In 1864, Harvey Farrington, a successful cheese maker of Herkimer County, started the first cheese factory in Canada on the farm of G. V. deLong, in the township of Norwich, Oxford County, Ontario. Other factories followed soon after it became apparent that the initial enterprise was a success, and it was estimated that by the year 1867 there were over 200 factories in the province. Probably the first creamery in Ontario was that started by John Inglis at Teeswater in 1875; but in 1873 the first creamery in Canada was started at Athelstan, Huntingdon County, Quebec. The importation from Denmark in 1882 of the centrifugal cream separator marked an important epoch in connection with the production of creamery butter, and from the date of the first mechanical separation of cream, the industry on the factory system has continued to make rapid progress.

OFFICIAL STATISTICS OF BUTTER AND CHEESE.

Statistics of home-made butter and cheese have been collected by the agricultural decennial census, and those of the factory production have formed part of the census of manufactures; but the latter have been limited to the numbers of employees, to the values of capital, salaries, wages, raw materials and products, and they have not separately distinguished between butter and cheese. The first attempt to take a comprehensive census of the Canadian dairying industry was made by the Census and Statistics Office in 1907, when the results of a special postal census, published as a bulletin, showed that the production of creamery butter was 45,930,294 lbs., of the value of \$10,949,062, as compared with 36,066,739 lbs., of the value of \$7,240,972 in 1900. The production of factory cheese was by the same census returned as 204,788,583 lbs., of the value of \$23,597,639, as compared with 270,833,269 lbs., of the value of \$22,221,430 in 1900.

BUTTER AND CHEESE PRODUCTION IN 1915 AND 1916.

The total production of creamery butter in Canada in 1916 is returned, according to the recent cen-

sus report, as 82,564,130 lbs., of the value of \$26,966,355, as compared with 83,991,453 lbs., of the value of \$24,385,052 in 1915, whilst the production of factory cheese in 1916 was 192,968,597 lbs., of the value of \$35,512,622, as compared with 183,887,837 lbs., of the

value of \$27,097,176, in 1915. The accompanying table shows the total production and value of creamery butter and factory cheese, by provinces, for the two years, 1915 and 1916.

Provinces.	1915.		1916.	
	lb.	\$	lb.	\$
Prince Edward Island	539,516	151,065	613,880	184,164
Nova Scotia	1,240,483	346,011	1,586,679	505,000
New Brunswick	776,416	231,838	709,932	236,193
Quebec	36,621,491	10,899,810	34,323,275	11,516,148
Ontario	26,414,120	7,534,653	24,680,109	8,031,997
Manitoba	5,839,667	1,693,503	6,574,510	2,038,109
Saskatchewan	3,811,014	1,055,000	4,310,669	1,338,180
Alberta	7,544,148	2,021,448	8,521,784	2,619,248
British Columbia	1,204,598	451,724	1,243,292	497,316
Total	83,991,453	24,385,052	82,564,130	26,966,355

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	lb.	\$	lb.	\$
Prince Edward Island	2,260,000	327,700	2,121,736	409,495
Nova Scotia	125,580	18,837	94,727	17,051
New Brunswick	1,165,651	168,086	1,185,664	210,693
Quebec	54,217,113	7,571,691	61,906,750	11,245,104
Ontario	125,001,136	18,831,413	126,015,870	23,312,935
Manitoba	726,725	109,008	880,728	158,931
Alberta	381,632	68,441	745,122	154,453
British Columbia	10,000	2,000	18,000	3,960
Total	183,887,837	27,097,176	192,968,597	35,512,622

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From this table it is apparent that the two principal dairying provinces of Canada are Quebec and Ontario, the former leading in the production of creamery butter and the latter in the production of factory cheese. Out of a total of 3,446 creameries and cheese factories in Canada in 1916, 1,984 are in Quebec and 1,165 are in Ontario; Alberta ranking third with 64. The total number of patrons, or dairy farmers supplying milk and cream was, in 1916, 221,192, of whom 79,145 were in Quebec, and 87,325 in Ontario, Alberta being again third with 18,236. The size of the factories are smaller in Quebec than in Ontario, the average number of patrons in Quebec being 40 per establishment as against 75 per establishment in Ontario.

The statistics given in the table relate entirely to creamery butter and factory cheese, and it must not be assumed that these products represent the whole of the Canadian output. Creamery butter, indeed, represents only the smaller proportion of the total production. There are no recent statistics as to the production of home-made or dairy butter; but the census returns of 1911 showed that home-made butter was 68 per cent of the total. If this proportion holds good at the present time then the total quantity of butter produced in Canada may be placed roughly at about 258 million lbs. In the case of cheese only a very small proportion is home-made—less than one per cent, according to the census returns of 1911. If we allow one per cent of the total for home-made cheese we get a total cheese production of about 195 million lbs.

CONSUMPTION OF WHOLE MILK IN CANADA.

To arrive at any complete statement of the Canadian dairying industry we have also to consider the consumption of whole milk, as well as the minor products of condensed milk, cream, etc. There are no statistics of milk production, except for the census years, and we can only, therefore use the data that are available for the establishment of approximate conclusions. These data embrace the estimated number of milch cows, the average yield of milk per cow, the statistics of butter and cheese production, and the export and import returns. Calculations set forth in the census report indicate a total milk production in Canada of between 9 and 10 billion lbs. per annum. Allowing for imports, the manufacture of cheese, butter and condensed products, and the exports of fresh milk and cream, there remains a balance for consumption as whole milk, ice cream, etc., estimated for 1915 to amount to 2,051,876,000 lbs., and for 1916 to 1,791,091,000 lbs. These figures represent, for a population of eight millions, a per capita consumption of whole milk of 25.65 gallons per annum, or 0.56 pint per diem in 1915, and 22.40 gallons per annum,

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diem; so that apparently the consumption of fresh milk, cream, etc., is considerably higher on this side of the Atlantic. It is well known that the consumption of ice cream in the United States and Canada is much more than it is in the United Kingdom, and it would not appear unreasonable to suggest that the curtailment of this luxury might be one of the minor directions which the advocated economizing of the national food supplies might take.

EXPORT TRADE AND FUTURE DEVELOPMENTS.

It has sometimes been rather too hastily assumed from examination of the export returns that the dairying industry during recent years has, in some measure, declined. The exports of cheese from Canada attained their maximum in 1904, with 233,980,716 lbs., but fell to as low as 137,601,661 lbs. in 1915. Similarly, the exports of butter, which were as high as 34,031,525 lbs. in 1906 fell to only 828,323 lbs. in 1913. But the fact is that the years of the twentieth century up to the outbreak of the war witnessed such a heavy tide of immigration, much of it directed to the cities and towns, that milk and milk products were required for home consumption, and the surplus available for export dwindled in consequence. The effects of the war have brought about a decided increase in the exports of cheese and butter, and by reason of the high prices, the value of cheese exported reached in 1917 the record total of \$36,721,136. Owing to the conditions in Europe there appear now to be excellent prospects for an increase in the cheese trade between Canada and the United Kingdom and for the permanent establishment of a larger export trade in butter. Recent legislation of the western provinces, designed to facilitate the introduction of mixed farming by the provision of rural credit, should lead to a great development of the factory system in those provinces, where, though a good beginning has been made, the dairying industry is as yet only in its infancy.

THE AMERICAN FACE.

The chief thing that struck you was their faces (of U. S. soldiers in London.) They looked grim and however loud the cheering by the way and however racy the London greetings, there was never a smile to be seen. The Americans seemed to be tremendously conscious of being on show—so different from the British soldier on a march out, who always gives the crowd as good as he gets in the way of repartee and never allows himself to be betrayed into solemnity.

This unyielding appearance seemed especially to impress the volatile French and Belgian soldiers among the spectators. Every one said they looked like business—these men with set, rather hard, faces, strong jawed and close lipped. — Manchester Guardian.