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CANADA—DEPARTMENT OF TRADE AND COMMERCE
DOMINION BUREAU OF STATISTICS
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Food Products, Beverages, Rubber, Tobacco and Miscellaneous Manufactures Based on Vegetable Products 1917-27

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OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

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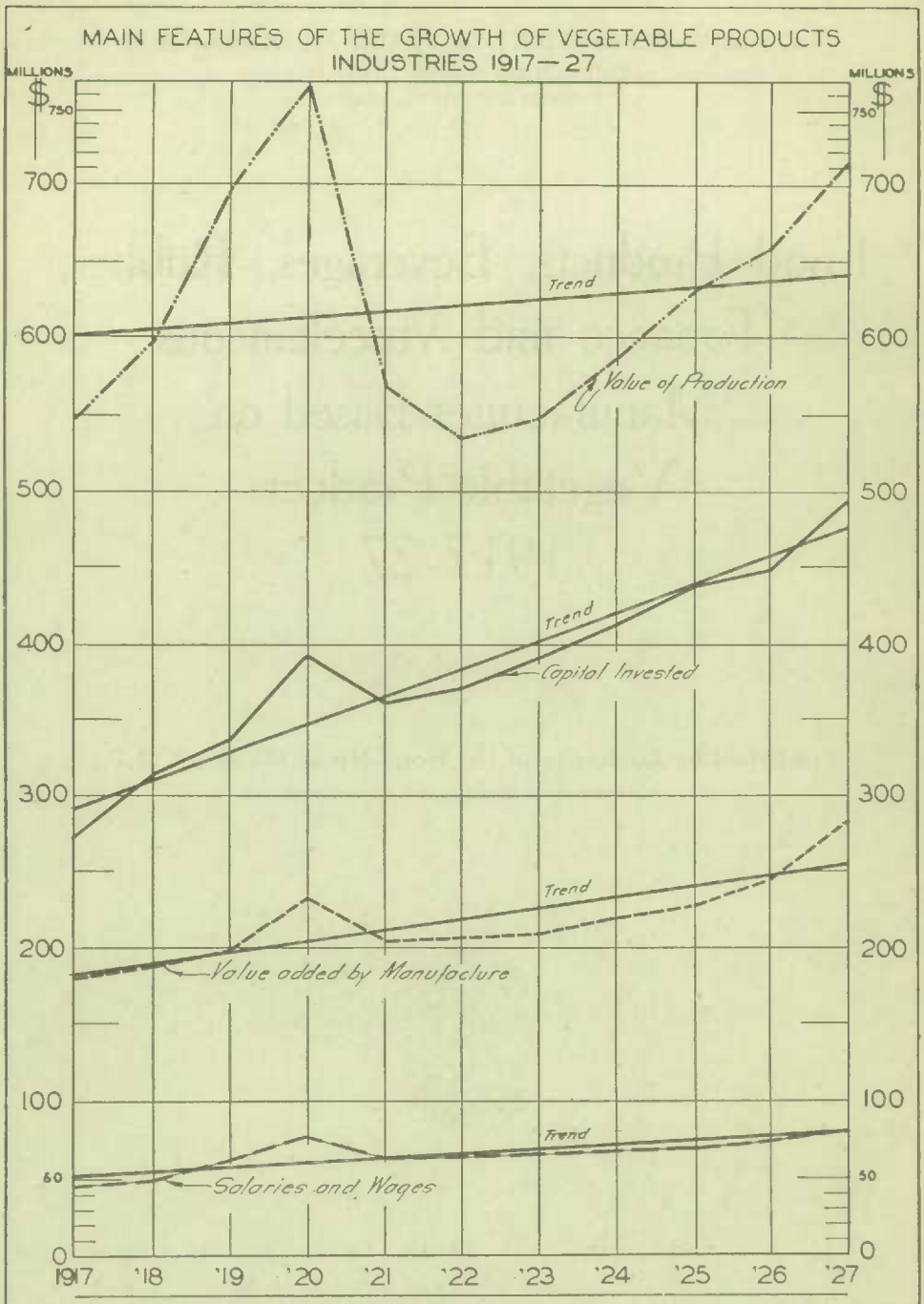

NOTE: The extraordinary high values of Production, etc., in the years 1919 and 1920 are due to the prevailing inflation of that period which affected the vegetable products industries to a greater extent than almost any others.

The secular trend has been computed by the principle of least squares by correlating the data with time, by means of the formula $\frac{\Sigma y}{\Sigma x}$.

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PREFACE

The purpose of the present report is to give a general review of the development of the industries manufacturing food products, beverages, rubber, tobacco and other manufactures based on vegetable products, during the period 1917-27. It may be explained that the scheme of classification used in the Census of Manufactures divides the country's industries into ten main groups, the basis of classification being the chief component raw materials used by each industry. The object of this report is to deal only with those industries whose chief raw materials are of vegetable origin, exclusive of fibres, which are included in the "Fibres, Textiles and Textile Products" group of industries.

The industries comprising the vegetable products group manufacture a variety of products without specific relation to each other, other than that their chief raw materials are of vegetable or agricultural origin—e.g., flour, canned vegetables, sugar, wine, rubber and tobacco. In order to secure homogeneity in subject matter, the report has been divided into two parts; in the first part a general review is given of all the industries included, while in the second part each industry is treated separately under the following scheme of classification:—

FOOD PRODUCTS

Flour and Cereals:
- Flour mills
- Feed and grist mills
- Malt mills

Miscellaneous Prepared Grain Foods and Confectionery:
- Bread and other bakery products
- Biscuits, confectionery and chewing gum
- Macaroni and vermicelli
- Ice cream cones
- Starch and glucose
- Miscellaneous food products

Fruit and Vegetable Preparations:
- Fruit and vegetable canning, evaporating and preserving
- Pickles, vinegar and cider

Coffee, Cocoa and Spices:
- Cocoa and chocolate
- Coffee and spices

Sugar:
- Sugar refineries
- Maple syrup and sugar
- Syrups

BEVERAGES

- Breweries
- Distilleries
- Wine and grape juice

RUBBER

- Rubber footwear
- Rubber tires and other rubber goods

TOBACCO

- Tobacco, chewing, smoking and snuff
- Cigars and cigarettes

MISCELLANEOUS PRODUCTS

- Linseed oil and oil cake
- Miscellaneous vegetable products

It should be borne in mind that this report does not cover all industries producing food products or beverages, but only those industries that use as their chief raw materials products of vegetable origin.

The present report was compiled and written by Mr. A. Cohen, B. Com., in the Industrial Statistics Branch of the Dominion Bureau of Statistics, of which Mr. J. C. Macpherson is chief.

R. H. COATS,
Dominion Statistician.

Food Products, Beverages, Rubber, Tobacco and Miscellaneous Manufactures based on Vegetable Products 1917-27

PART I

CHAPTER I

GENERAL REVIEW

Importance of the Vegetable Products Industries.—As Canada is primarily an agricultural country, the development of the industries which are dependent on agricultural products for their raw materials is of first importance to the general economic well-being of the country as a whole.

To particularize: The flour milling industry, which began with the first settlement of the country, received a great impetus during the war, and its expansion has continued up to the present. In 1910 its gross production amounted to $82,494,821; in 1927 it has increased to $191,741,470. Even after account is taken of the rising prices, the development is phenomenal. At the present time, Canada is the second largest exporter of flour in the world, being exceeded only by the United States. During the crop year ending July 31, 1927, Canada exported 9,237,000 barrels of flour as compared with 13,463,000 exported by the United States, while in the previous year Canada's exports amounted to 10,897,000 barrels, compared with 9,570,000 barrels exported by the United States.

The rubber industry is another industry which has experienced a remarkable development since the war. This is illustrated by the figures for the importation of raw rubber, which rose from 8,800 tons in 1919 to 29,600 tons in 1927, while the exports of manufactured rubber goods shows a more striking increase from $2,911,505 in 1919 to $28,000,932 in 1927, an increase of about 960 p.c. At the present time Canada is the fifth largest importer of raw rubber in the world, ranking after the United States, the United Kingdom, France and Germany.

Comparison of Vegetable Products Industries with all Industries.—Statistics of the vegetable products industries in comparison with all industries are given in Table 1 for 1927. These industries comprise 20·9 p.c. of all establishments and employ 11·4 p.c. of the capital and 12·7 p.c. of the employees. They also manufacture 20·8 p.c. of the products and contribute 17·3 p.c. of the value added by manufacture.

As may be seen from the figures given, the average size of establishment in this group is smaller than that for all manufacturing industries, the average capital and number of employees per establishment being only $103,104 and 16·3 respectively as compared with $189,919 and 27·0. Also the wages paid by the group as a whole are much lower, the average being $900 compared with $997 for all industries; the salaries paid, however, are a little higher viz. $1,945 compared with $1,899 for all groups.

Table 1.—Comparison of Vegetable Products Industries with all Industries, 1927

—		Vegetable products group	All groups	Percentage of vegetable group to all groups
Establishments	No.	4,793	22,936	20·9
Capital employed	$	494,176,054	4,337,631,558	11·4
Average capital per establishment	$	103,104	189,919	.....
Average capital per employee	$	6,311	7,008	.....
Total number of employees	No.	78,300	618,933	12·7
Salaries and wages	$	81,830,734	693,932,228	11·8
Salaried employees	No.	10,902	85,483	12·7
Male	No.	8,456	65,886	12·8
Female	No.	2,446	19,597	12·5
Salaries	$	21,201,169	162,348,978	13·1
Wage-earners	No.	67,398	533,450	12·6
Male	No.	46,169	413,634	11·2
Female	No.	21,229	119,816	17·7
Wages	$	60,629,565	531,583,250	11·4
Employees per establishment	No.	16·3	27·0	.....
Average annual wages	$	900	997	.....
Average annual salaries	$	1,945	1,899	.....
Cost of materials used	$	429,325,105	1,789,574,604	
Gross value of products	$	712,700,080	3,425,498,540	20·8
Gross value of products per employee	$	9,102	5,535	.....
Gross value of products per establishment	$	148,696	149,350	.....
Value added by manufacture	$	283,374,975	1,635,923,936	17·3
Value added by manufacture per employee	$	3,619	2,643	.....
Value added by manufacture per establishment	$	59,123	71,326	.....

GROWTH OF THE VEGETABLE PRODUCTS INDUSTRIES

The principal statistics of the vegetable products group of industries for the period 1917-27, are given by provinces in Table 2. From a study of this table, the following significant facts of growth are noted. The number of establishments increased from 3,816 to 4,793 and capital invested from $274,722,765 to $494,176,054. The number of employees and the salaries and wages paid rose from 61,288 and $44,780,320 to 78,300 and $81,830,734 respectively, while production increased from $546,556,066 to $712,700,080 and the value added by manufacture from $181,072,143 to $283,374,975. The industries of this group are centred in the provinces of Ontario and Quebec, these two provinces employing 77 p.c. of the capital, 82 p.c. of the employees and producing 77 p.c. of the gross value of production.

Number of Establishments.—The number of establishments engaged in the manufacture of vegetable products increased gradually year by year, having risen from 3,816 in 1917 to 4,793 in 1927. In the latter year the establishments were distributed among the provinces as follows:—Ontario 2,162, Quebec 1,444, British Columbia 318, Alberta 215, Manitoba 215, Saskatchewan 178, Nova Scotia 118, New Brunswick 113 and Prince Edward Island 30. Not only has the number of establishments increased, but also the size of establishment as measured by capitalization, rose from an average capital per establishment of $71,992 to an average of $103,104. The average number of employees per establishment, however, remained practically unchanged at 16·3. All the provinces, with the exception of Prince Edward Island, showed an increase in the number of establishments during the eleven-year period, Ontario and Quebec leading, with increases of 392 and 384 respectively, followed by British Columbia, the Prairie Provinces and the Maritime Provinces, with increases of 95, 71 and 35 respectively.

Capital.—The amount of capital employed in the vegetable products industries in 1927 was $494,176,054, of which Ontario supplied $244,739,578, Quebec $137,988,392, the Prairie Provinces $52,574,536, the Maritime Provinces $30,314,023 and British Columbia $28,559,525. The capital employed showed an increase in every year with the exception of 1921, having risen from $274,722,765 in 1917 to $494,176,054 in 1927, an increase of about 80 p.c. All provinces, with the exception of Prince Edward Island, which showed a drop of some $4,000, shared in the increase. Ontario led, with an increase of $115,859,201, followed in order by Quebec with $60,367,903, British Columbia $14,138,945, Alberta $11,191,701, New Brunswick $6,855,072, Nova Scotia $5,012,116, Manitoba $4,476,937, and Saskatchewan $1,547,680.

Table 2—Vegetable Products Industries: Principal Statistics by Provinces, 1917-27

—	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salries	Male	Female	Wages					
1917	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
Canada	3,816	274,722,765	8,572[1]	.....	11,270,397	52,716[1]	.....	33,509,932	.....	.....	365,483,923	546,556,066	181,072,143
Prince Edward Island	40	276,302	18	.....	16,970	126	.....	58,137	.....	.....	661,996	885,375	203,379
Nova Scotia	100	7,655,824	162	.....	176,028	1,880	.....	898,385	.....	.....	9,335,451	12,837,137	3,501,686
New Brunswick	86	10,510,975	166	.....	233,783	1,183	.....	595,453	.....	.....	11,979,369	14,646,278	2,666,909
Quebec	1,060	77,620,489	2,615	.....	3,436,382	18,741	.....	9,955,463	.....	.....	97,400,823	165,936,043	68,535,220
Ontario	1,770	128,880,377	4,020	.....	5,311,930	24,503	.....	17,278,846	.....	.....	170,194,572	252,119,360	81,924,788
Manitoba	171	16,242,736	537	.....	755,596	2,077	.....	1,510,208	.....	.....	29,674,624	38,539,049	8,864,425
Saskatchewan	187	6,772,312	299	.....	309,526	867	.....	718,517	.....	.....	12,753,610	15,179,173	2,425,563
Alberta	179	12,343,170	345	.....	444,049	1,103	.....	868,740	.....	.....	18,581,001	25,035,299	6,454,298
British Columbia and Yukon	223	14,420,580	410	.....	586,133	2,236	.....	1,626,183	.....	.....	14,902,477	21,398,352	6,495,875
1918													
Canada	3,824	310,556,340	8,652[1]	.....	12,284,467	54,545[1]	.....	37,504,304	.....	.....	409,813,120	597,822,775	188,009,655
Prince Edward Island	39	383,666	19	.....	10,070	89	.....	56,883	.....	.....	565,474	844,414	278,940
Nova Scotia	108	7,947,715	161	.....	170,180	1,638	.....	819,543	.....	.....	8,344,103	11,880,322	3,536,219
New Brunswick	92	11,368,285	244	.....	377,753	1,187	.....	602,696	.....	.....	10,565,486	14,194,077	3,628,591
Quebec	1,071	88,454,555	2,627	.....	3,650,868	18,700	.....	11,080,586	.....	.....	97,461,518	164,087,810	66,626,292
Ontario	1,842	150,490,117	4,109	.....	5,924,644	26,688	.....	19,734,413	.....	.....	202,143,748	290,536,938	88,393,190
Manitoba	156	15,928,062	433	.....	697,176	2,057	.....	1,622,735	.....	.....	32,982,386	41,967,115	8,984,729
Saskatchewan	142	7,850,881	259	.....	337,015	753	.....	664,528	.....	.....	15,927,616	19,127,916	3,200,300
Alberta	163	9,567,907	297	.....	432,310	1,104	.....	982,211	.....	.....	21,408,365	27,544,025	6,135,660
British Columbia and Yukon	211	18,565,152	503	.....	684,451	2,329	.....	1,940,709	.....	.....	20,414,424	27,640,158	7,225,734
1919													
Canada	3,964	336,730,861	9,972[1]	.....	15,360,744	59,808[1]	.....	47,184,872	.....	.....	497,887,117	697,672,132	199,785,015
Prince Edward Island	34	230,606	7	.....	8,030	82	.....	51,036	.....	.....	571,679	851,505	279,826
Nova Scotia	111	9,441,295	181	.....	259,849	1,899	.....	1,316,475	.....	.....	14,209,227	18,604,079	4,394,852
New Brunswick	85	12,457,524	326	.....	473,378	1,369	.....	993,862	.....	.....	22,904,085	28,425,242	5,521,157
Quebec	1,196	103,068,408	3,087	.....	4,994,129	20,275	.....	13,936,144	.....	.....	137,410,281	207,560,273	70,149,992
Ontario	1,874	161,082,385	4,980	.....	7,302,358	29,899	.....	24,885,035	.....	.....	233,148,793	328,518,075	95,369,282
Manitoba	153	16,473,788	453	.....	787,699	2,109	.....	1,848,837	.....	.....	31,563,913	38,810,323	7,246,410
Saskatchewan	129	6,133,042	275	.....	392,062	816	.....	773,928	.....	.....	16,413,444	19,609,103	3,195,659
Alberta	163	11,641,508	290	.....	473,302	1,144	.....	1,173,073	.....	.....	21,824,702	26,996,214	5,171,512
British Columbia and Yukon	219	16,202,305	373	.....	669,937	2,215	.....	2,206,482	.....	.....	19,840,993	28,297,318	8,456,325
1920													
Canada	4,219	394,123,233	8,434	2,384	18,649,038	41,747	19,815	57,046,492	9,176,369	223,675	532,484,195	766,801,722	234,317,527
Prince Edward Island	35	274,342	4	 1	8,700	60	3	37,547	6,796	768	538,431	805,842	267,411
Nova Scotia	102	10,031,384	127	68	264,245	1,124	683	1,653,332	458,154	4,137	18,515,223	22,051,396	3,536,173
New Brunswick	102	18,837,308	225	66	566,194	938	599	1,107,132	386,038	3,814	25,405,883	35,501,050	10,095,167
Quebec	1,266	119,973,762	2,839	552	6,147,874	12,380	7,843	16,342,494	2,315,905	46,489	132,772,247	219,267,496	86,495,249
Ontario	1,984	187,342,152	3,984	1,434	8,944,662	22,351	9,102	30,612,580	4,789,806	141,627	249,297,900	355,425,509	106,127,609
Manitoba	154	17,114,771	408	67	913,207	1,618	537	2,276,113	376,965	9,922	33,182,778	42,841,350	9,658,572
Saskatchewan	144	5,429,610	229	56	433,742	645	106	820,227	190,580	2,936	16,416,176	19,388,625	2,972,449
Alberta	189	14,683,298	257	57	540,515	967	270	1,482,857	210,695	8,699	23,450,381	29,871,194	6,420,813
British Columbia and Yukon	243	20,439,606	361	83	829,899	1,664	672	2,714,210	441,450	5,283	32,905,176	41,649,260	8,744,084

[1]Includes females

Table 2.—Vegetable Products Industries Principal Statistics, by Provinces, 1917-27—Concluded

—	Number of establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
		$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1921													
Canada	3,946	360,945,194	8,258	2,155	18,509,048	35,193	15,555	44,621,845	7,450,516	171,190	[1] 364,123,395	569,571,721	205,448,326
Prince Edward Island	41	274,998	6	3	11,600	67	6	44,643	7,795	888	363,048	584,443	221,395
Nova Scotia	97	9,607,342	139	58	303,680	1,033	683	1,286,297	383,136	4,367	7,718,274	12,135,616	4,417,342
New Brunswick	97	12,858,272	163	51	461,980	717	429	937,631	440,417	4,810	15,942,047	18,156,621	2,214,574
Quebec	1,085	116,090,100	2,807	547	6,049,773	11,245	7,060	13,159,179	2,083,274	41,440	105,046,592	184,927,407	79,880,815
Ontario	1,928	170,422,636	3,665	1,288	8,514,752	17,431	6,045	22,471,298	3,394,180	95,472	159,567,060	249,907,744	90,340,684
Manitoba	153	14,916,776	495	66	1,055,226	1,497	475	2,239,215	362,966	7,431	25,586,748	33,616,377	8,029,629
Saskatchewan	133	4,945,790	258	35	537,046	675	44	737,592	208,191	5,070	13,878,596	17,234,116	3,355,520
Alberta	190	13,344,194	290	50	660,507	1,008	227	1,422,115	182,349	6,926	16,568,434	24,762,629	8,194,195
British Columbia and Yukon	222	18,485,086	435	57	914,484	1,520	586	2,323,875	388,208	4,786	19,452,596	28,246,768	8,794,172
1922													
Canada	4,355	371,361,682	8,742	2,243	19,325,777	35,931	16,301	45,099,145	7,452,987	233,447	330,589,052	537,535,801	206,946,749
Prince Edward Island	47	375,934	14	4	19,200	92	3	56,820	10,857	1,047	423,158	708,343	285,185
Nova Scotia	106	10,083,542	171	64	276,923	983	679	1,171,019	410,495	6,835	10,448,560	15,221,861	4,773,301
New Brunswick	115	12,120,892	224	69	601,053	955	464	1,088,140	481,729	5,179	18,090,147	22,935,223	4,845,076
Quebec	1,308	121,200,974	3,074	529	6,586,721	11,289	6,914	13,245,698	2,056,210	62,442	91,473,610	174,913,011	83,439,401
Ontario	2,021	176,549,607	3,774	1,280	8,777,240	17,953	6,964	23,018,066	3,429,115	121,742	148,136,437	236,047,717	87,911,280
Manitoba	164	13,964,189	424	95	973,625	1,407	369	2,041,799	292,003	12,793	20,537,669	27,709,155	7,171,486
Saskatchewan	145	5,356,747	315	46	540,422	624	48	760,098	220,570	6,600	10,502,309	14,242,663	3,740,354
Alberta	195	14,385,557	320	78	683,325	1,065	184	1,400,047	188,358	9,459	12,710,819	18,959,915	6,249,096
British Columbia and Yukon	254	17,324,240	426	78	867,268	1,563	676	2,317,458	363,650	7,350	18,266,343	26,797,913	8,531,570
1923													
Canada	4,427	385,725,299	8,454	2,233	19,884,124	37,813	16,895	47,557,502	6,946,588	257,176	337,790,150	547,674,286	209,884,136
Prince Edward Island	43	328,488	11	4	18,900	87	5	56,187	9,784	880	303,434	567,737	264,303
Nova Scotia	106	9,804,954	123	43	288,723	828	661	1,106,550	366,539	7,725	11,616,616	16,157,265	4,540,649
New Brunswick	123	14,928,084	226	90	618,824	912	473	1,127,190	394,058	5,522	17,772,165	23,525,115	5,752,950
Quebec	1,271	123,683,254	2,987	526	6,869,532	11,891	7,301	14,083,461	1,860,272	64,060	90,158,804	172,482,727	82,323,923
Ontario	2,051	187,047,433	3,783	1,314	9,163,427	19,522	7,113	25,067,348	3,285,791	141,041	156,218,716	248,540,301	92,321,585
Manitoba	190	14,027,891	444	94	1,027,806	1,449	378	1,856,775	317,990	12,306	20,156,042	27,376,018	7,219,976
Saskatchewan	181	4,927,327	240	42	485,415	637	53	742,495	189,961	6,830	8,078,572	11,159,258	3,080,686
Alberta	209	13,031,182	269	51	630,882	1,098	171	1,391,803	213,597	10,751	13,100,112	19,007,683	5,907,571
British Columbia and Yukon	253	17,946,686	371	69	780,615	1,389	740	2,125,693	308,596	8,061	20,385,689	28,858,182	8,472,493
1924													
Canada	4,414	414,922,612	7,805	2,112	18,379,524	38,795	17,471	52,258,780	6,580,906	258,719	365,614,854	585,945,602	220,330,748
Prince Edward Island	39	359,006	8	4	15,570	92	5	66,582	13,151	778	406,174	631,474	225,300
Nova Scotia	98	9,627,904	81	61	238,061	892	710	1,099,627	270,375	4,997	8,998,607	12,929,430	3,930,823
New Brunswick	115	14,800,458	219	76	635,489	903	474	1,128,670	311,585	5,358	16,678,761	21,548,427	4,869,666
Quebec	1,278	122,484,548	2,674	480	6,000,988	12,010	7,026	14,601,386	1,709,021	59,349	93,984,526	172,173,085	78,188,559
Ontario	2,043	207,363,254	3,465	1,221	8,440,857	19,753	7,852	28,279,662	3,116,836	146,448	176,673,412	279,210,686	102,537,274
Manitoba	176	16,799,513	400	81	939,740	1,589	379	2,203,600	397,915	13,936	21,943,821	32,860,244	10,916,423
Saskatchewan	177	5,851,297	245	30	499,300	684	61	834,807	181,740	7,286	10,380,985	13,923,136	3,542,151
Alberta	213	15,807,008	288	62	660,818	1,166	167	1,516,204	212,372	11,798	15,661,236	23,296,452	7,635,216
British Columbia and Yukon	275	21,829,624	425	97	948,701	1,706	797	2,528,242	367,911	8,769	20,887,332	29,372,668	8,485,336

[1] Estimate

1925													
Canada	4,558	439,490,764	7,685	2,104	18,584,887	42,282	19,964	54,211,770	7,033,646	266,709	404,684,887	632,211,264	227,526,377
Prince Edward Island	40	328,487	8	4	14,335	95	6	68,127	12,545	831	423,953	647,009	223,056
Nova Scotia	111	12,120,133	104	68	258,548	1,175	829	1,214,442	388,776	5,904	10,042,687	14,123,467	4,080,780
New Brunswick	108	15,601,279	174	77	570,722	902	502	1,208,428	386,746	5,194	19,779,962	24,954,295	5,174,333
Quebec	1,363	127,209,794	2,604	500	6,211,000	12,862	7,352	15,667,282	1,906,978	61,472	104,544,989	186,985,950	82,440,961
Ontario	2,104	218,015,548	3,383	1,199	8,429,593	21,820	9,384	28,801,769	3,130,709	149,389	195,119,697	299,254,574	104,134,877
Manitoba	179	17,876,378	426	76	922,952	1,691	447	2,248,756	407,784	15,082	24,850,006	34,773,930	9,923,924
Saskatchewan	166	6,450,929	233	27	514,936	689	58	829,806	180,709	7,399	11,889,754	15,093,279	3,203,525
Alberta	211	18,927,500	315	54	678,905	1,231	174	1,582,071	234,961	11,889	18,399,652	26,779,905	8,380,253
British Columbia and Yukon	276	22,960,716	438	99	983,896	1,817	1,212	2,591,089	384,438	9,549	19,634,187	29,598,855	9,964,668
1926													
Canada	4,529	449,259,094	7,654	2,155	19,479,894	43,622	20,477	55,869,692	7,031,894	267,643	414,316,414	658,320,716	244,044,302
Prince Edward Island	30	262,165	6	5	18,529	93	5	63,641	10,582	528	357,789	549,143	191,354
Nova Scotia	111	11,952,574	175	77	394,074	1,148	814	1,330,344	373,225	5,724	9,131,530	13,408,431	4,276,901
New Brunswick	107	16,620,863	141	60	538,055	1,110	508	1,310,970	421,652	5,462	20,262,612	25,381,872	5,119,260
Quebec	1,366	129,819,260	2,568	545	6,468,881	13,324	7,750	16,263,381	1,932,461	62,214	99,101,026	188,894,546	89,793,520
Ontario	2,089	220,061,046	3,278	1,189	8,655,158	22,069	9,217	29,120,628	3,143,100	148,429	206,345,399	313,188,148	106,842,749
Manitoba	179	18,419,371	465	80	1,091,253	1,815	470	2,277,240	365,585	14,880	23,826,861	35,120,818	11,293,957
Saskatchewan	160	7,428,127	240	29	528,463	748	57	926,077	224,916	7,995	13,538,324	18,445,511	4,907,187
Alberta	203	18,555,073	330	58	754,526	1,300	182	1,560,736	194,999	12,255	19,948,764	29,332,100	9,383,336
British Columbia and Yukon	284	26,140,615	451	112	1,030,955	2,015	1,474	3,016,675	365,374	10,156	21,804,109	34,000,147	12,196,038
1927													
Canada	4,793	494,176,054	8,456	2,446	21,201,169	46,169	21,229	60,629,565	6,940,596	280,170	429,325,105	712,700,080	283,374,975
Prince Edward Island	30	280,036	6	5	23,861	108	5	64,511	10,671	638	396,991	617,606	220,615
Nova Scotia	118	12,667,940	172	82	511,862	1,043	873	1,239,807	324,119	6,228	9,127,551	13,345,837	4,218,286
New Brunswick	113	17,366,047	166	74	548,301	1,040	609	1,225,651	348,480	5,189	17,615,596	23,687,790	6,072,194
Quebec	1,444	137,988,392	2,831	640	6,890,827	13,902	8,061	17,476,689	1,831,737	64,577	104,278,528	206,575,850	102,297,322
Ontario	2,162	244,739,578	3,871	1,352	9,907,484	23,976	9,670	32,289,097	3,220,616	154,950	213,472,961	344,311,615	130,838,654
Manitoba	215	20,719,673	451	81	1,089,781	1,818	469	2,427,214	376,002	15,892	24,064,836	35,571,852	11,506,996
Saskatchewan	178	8,319,992	231	31	493,712	805	67	985,545	230,523	8,748	15,648,182	21,140,595	5,492,413
Alberta	215	23,534,871	361	69	782,788	1,387	226	1,726,611	220,867	13,645	21,298,119	30,711,039	9,412,920
British Columbia and Yukon	318	28,559,525	367	112	952,553	2,090	1,249	3,194,440	377,581	10,303	23,422,321	36,737,896	13,315,575

Employees, Salaries and Wages.—In 1927 there were 10,902 salaried employees and 67,398 wage-earners engaged in these industries who received $21,201,169 and $60,629,565 in salaries and wages respectively. The average salary in Ontario was $1,897 and in Quebec $1,985, while in the case of wages, the average paid in Ontario was $960 and in Quebec $796. The lower salaries and higher wages in Ontario are due to the fact that in that province 26 p.c. of the salaried employees and 29 p.c. of the wage-earners were females, as compared with 18 p.c. and 37 p.c. respectively in Quebec. The lower wages in Quebec are not alone due to the higher proportion of female wage-earners, but also to the prevailing lower rates of wages which are paid in Quebec in almost all other industrial groups. A steady increase in employment took place every year with the exception of 1921, when a sharp drop was experienced. The number of persons employed increased from 61,288 in 1917 to 78,300 in 1927.

Gross Value of Products.—The figures for production show tremendous increases, due to two causes: first, an increase in the physical volume of production itself and secondly, an increase in the general level of prices. In 1917 the gross value of production amounted to $546,556,066, which increased to $766,801,722 at the peak of inflation in 1920, an amount which has not since been attained. The following year a sharp decline took place and production dropped to $569,571,721, with a further decrease of about $32,000,000 in 1922. Since then, however, production has increased steadily until a new maximum of $712,700,080 was reached in 1927. Ontario and Quebec produced 77 p.c. of the 1927 value of production, followed by the Prairie Provinces with 12 p.c., the Maritime Provinces 6 p.c. and British Columbia 5 p.c.

Value Added by Manufacture.—The value added by manufacture is obtained by subtracting the raw materials from the gross value of products. This difference represents the value added to the raw materials by labour, and it is this value which the employer of labour uses to pay for the labour itself, overhead expenses, profits, etc.

The value added by manufacture in the vegetable products industries increased from $181,072,143 in 1917 to $283,374,975 in 1927. On referring to Table 2 it will be seen that, with the exception of 1921, when a decrease took place, the annual increase in value added was gradual, while the cost of materials and gross value of products, showed rather marked changes. It is interesting to note that since 1917 the value added by manufacture per employee increased from $2,954, to $3,619 and that the average salary and wage rose from $731 to $1,045.

Comparative summary statistics per establishment and per employee of the vegetable products industries for the years 1917, 1920, 1921 and 1927 are given in Table 3. No further comment is necessary as the figures are self-explanatory and the more important facts have already been noted.

Table 3.—Summary Statistics of the Vegetable Products Industries for the Years 1917, 1920, 1921 and 1927

—		1917	1920	1921	1927
Establishments	No.	3,816	4,219	3,946	4,793
Capital	$	274,722,765	394,123,233	360,945,194	494,176,054
Average capital per establishment	$	71,992	93,416	91,471	103,104
Average capital per employee	$	4,482	5,445	5,902	6,311
Average capital per wage-earner	$	5,211	6,402	7,113	7,332
Total employees	No.	61,288	72,380	61,161	78,300
Average per establishment	No.	16	17	15	16·3
Total salaries and wages	$	44,780,329	75,695,530	63,130,893	81,830,734
Average per establishment	$	11,735	17,941	15,999	17,073
Average per employee	$	731	1,046	1,032	1,045
Employees on salaries	No.	8,572	10,818	10,413	10,902
Average per establishment	No.	2·2	2·6	2·6	2·3
Total salaries	$	11,270,397	18,649,038	18,509,048	21,201,169
Average per salaried employee	$	1,315	1,724	1,778	1,945
Employees on wages	No.	52,716	61,562	50,748	67,398
Average per establishment	No.	13·8	14·6	12·9	14·1
Wages	$	33,509,932	57,046,492	44,621,845	60,629,565
Average per wage-earner	$	636	927	879	900
Cost of materials	$	365,483,923	532,484,195	364,123,395	429,325,105
Average per establishment	$	95,777	126,211	92,277	89,573
Average per employee	$	5,963	7,357	5,954	5,483
Value added by manufacture	$	181,072,143	234,317,527	205,448,326	283,374,975
Average per establishment	$	47,713	55,540	52,065	59,123
Average per employee	$	2,954	3,237	3,359	3,619
Gross value of products	$	546,556,066	766,801,722	569,571,721	712,700,080
Average per establishment	$	143,227	181,750	144,342	148,696
Average per employee	$	8,918	10,594	9,313	9,102
Power employed	h.p.	.....	223,675	171,190	280,170
Average per establishment	h.p.	.....	53	46	58·4
Average per wage-earner	h.p.	.....	3·6	3·4	4·2

Table 4.—Principal Statistics of the Industries Composing the Vegetable Products Group, 1927

Industry	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
Flour and Cereals—													
Flour mills	431	56,366,699	881	212	2,111,720	3,921	134	4,446,589	511,254	83,948	143,255,728	167,597,325	24,341,597
Feed and grist mills	884	5,695,314	23	9	41,157	1,203	1	773,204	86,288	33,457	20,456,869	24,144,145	3,687,276
Rice mills	6	1,402,285	24	3	74,721	51	.....	52,477	572	580	1,588,168	1,994,813	406,845
Malt and malt mills	5	5,437,053	49	4	119,630	124	.....	196,544	141,166	2,655	3,382,740	4,787,879	1,405,139
Total	1,326	68,901,351	977	228	2,347,228	5,299	135	5,468,814	739,280	120,640	168,683,505	198,524,162	29,840,657
Prepared Grain Foods and Confectionery—													
Bread and other bakery products	2,443	40,559,259	598	248	1,342,088	11,786	1,782	14,726,059	1,518,293	11,353	35,779,690	68,726,262	32,946,572
Biscuits, confectionery and chewing gum	294	46,448,311	1,559	564	3,901,618	4,433	5,930	7,497,976	557,305	18,654	25,149,428	53,128,888	27,979,460
Macaroni and vermicelli	11	1,239,819	42	12	81,748	130	121	161,501	10,555	974	970,402	1,547,359	576,957
Ice cream cones	10	694,902	6	2	22,290	56	30	60,873	25,314	70	114,246	451,228	336,982
Starch, glucose, etc	4	5,121,901	40	19	155,769	418	16	456,124	249,822	1,945	3,379,075	4,936,025	1,556,950
Miscellaneous food products	53	8,470,618	168	70	444,595	504	245	757,410	103,903	4,328	4,820,894	9,878,350	5,057,456
Total	2,815	102,534,810	2,413	915	5,948,108	17,327	8,124	23,659,943	2,465,192	37,324	70,213,735	138,668,112	68,454,377
Fruit and Vegetable Preparations—													
Fruit and vegetable canning, evaporating and preserving	212	26,807,630	367	141	777,960	2,155	3,894	2,144,768	252,194	10,403	13,103,786	21,623,071	8,519,285
Pickles, vinegar and cider	60	7,104,602	143	45	301,471	604	440	824,189	103,514	1,909	4,108,813	8,710,951	4,602,138
Total	272	33,912,232	510	186	1,079,431	2,759	4,334	2,968,957	355,708	12,312	17,212,599	30,334,022	13,121,423
Coffee, Cocoa and Spices—													
Cocoa and chocolate	4	5,319,652	123	32	336,221	249	271	424,371	34,669	3,132	2,931,913	4,757,969	1,826,056
Coffee and spices	61	13,593,564	407	129	1,201,015	648	420	991,683	36,073	2,918	20,392,675	26,288,506	5,895,831
Total	65	18,913,216	530	161	1,537,236	897	691	1,416,054	70,742	6,050	23,324,588	31,046,475	7,721,887
Sugar—													
Sugar refineries	8	50,039,122	290	56	993,896	2,253	112	2,845,592	1,408,407	18,565	47,138,854	60,502,664	13,363,810
Maple syrup and sugar	6	362,800	14	3	44,448	33	2	32,337	7,591	92	877,249	1,294,662	417,413
Syrups	8	213,805	17	6	28,264	21	19	28,395	3,416	36	249,309	355,167	105,858
Total	22	50,615,727	321	65	1,066,608	2,307	133	2,906,324	1,419,414	18,693	48,265,412	62,152,493	13,887,081
Beverages—													
Breweries	73	62,358,117	755	100	1,996,084	3,763	44	4,440,636	605,761	19,977	17,471,299	51,528,024	34,056,725
Distilleries	17	37,528,954	209	49	513,873	916	227	1,381,211	423,024	6,862	6,351,689	25,660,985	19,309,296
Wine and grape juice	30	4,405,027	57	10	160,064	162	17	163,057	14,324	431	1,526,018	2,531,227	1,005,209
Total	120	104,292,098	1,021	159	2,670,021	4,841	288	5,984,904	1,043,109	27,270	25,349,006	79,720,236	54,371,230

Table 4.—Principal Statistics of the Industries Composing the Vegetable Products Group, 1927—Concluded

Industry	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
Rubber—													
Rubber tires and other rubber goods	34	51,205,543	892	239	2,129,263	6,146	1,048	8,485,736	498,483	37,052	35,520,816	65,016,087	29,495,271
Rubber footwear	10	15,060,521	565	204	1,114,725	3,705	2,266	4,891,819	151,409	13,985	9,203,686	26,397,643	17,193,957
Total	44	66,266,064	1,457	443	3,243,988	9,851	3,314	13,377,555	649,892	51,037	44,724,502	91,413,730	46,689,228
Tobacco—													
Cigars and cigarettes	79	34,371,252	994	253	2,486,827	1,773	3,227	3,390,041	72,641	2,257	17,350,343	55,801,338	38,450,995
Tobacco, chewing, smoking and snuff	36	9,772,145	184	29	684,802	730	975	1,042,526	38,034	921	6,689,777	15,323,167	8,633,390
Total	115	44,143,397	1,178	282	3,171,629	2,503	4,202	4,432,567	110,675	3,178	24,040,120	71,124,505	47,084,385
Miscellaneous Products—													
Linseed oil and oil cake	8	2,341,733	28	5	87,659	205	1	220,943	23,580	1,850	4,840,168	5,839,314	999,146
Miscellaneous vegetable products	6	2,255,426	21	2	49,261	180	7	193,504	63,004	1,816	2,671,470	3,877,031	1,205,561
Total	14	4,597,159	49	7	136,920	385	8	414,447	86,584	3,666	7,511,638	9,716,345	2,204,707
Grand Total	**4,793**	**494,176,054**	**8,456**	**2,446**	**21,201,169**	**46,169**	**21,229**	**60,629,565**	**6,940,596**	**280,170**	**429,325,105**	**712,700,080**	**283,374,975**
Food products	4,500	274,877,336	4,751	1,555	11,978,611	28,589	13,417	36,420,092	5,050,336	195,019	327,699,839	460,725,264	133,025,425
Beverages	120	104,292,098	1,021	159	2,670,021	4,841	288	5,984,904	1,043,109	27,270	25,349,006	79,720,236	54,371,230
Rubber	44	66,266,064	1,457	443	3,243,988	9,851	3,314	13,377,555	649,892	51,037	44,724,506	91,413,730	46,689,228
Tobacco	115	44,143,397	1,178	282	3,171,629	2,503	4,202	4,432,567	110,675	3,178	24,040,120	71,124,505	47,084,285
Miscellaneous products	14	4,597,159	49	7	136,920	385	8	414,447	86,584	3,666	7,511,638	9,716,345	2,204,707
Grand Total	**4,793**	**494,176,054**	**8,456**	**2,44**	**621,201,169**	**46,169**	**21,229**	**60,629,565**	**6,940,596**	**280,170**	**429,325,105**	**712,700,080**	**283,374,975**

Principal Statistics of the Industries Composing the Vegetable Products Group: The principal statistics of the vegetable products group for 1927, by industries are given in table 4. The most important industry from the point of view of value of production is the flour milling industry with a total production of $167,597,325, followed in order of their importance by bread and other bakery products with $68,726,262, rubber tires and other rubber goods $65,016,087, sugar refineries $60,502,664, cigars and cigarettes $55,801,338, biscuits, confectionery and chewing gum $53,128,888, breweries $51,528,024, rubber footwear $26,397,643, coffee and spices $26,288,506 and distilleries $25,660,985. The above are the ten industries of major importance, producing among them about 84 p.c. of the production of the whole group.

The rank of these ten industries, as measured by their capitalization, is somewhat different; the first being breweries with an investment of $62,358,117, followed by flour mills with $56,366,-699, rubber tires and other rubber goods $51,205,543, sugar refineries $50,039,122, biscuits, confectionery and chewing gum $46,448,311, bread and other bakery products $40,559,259, distilleries $37,528,954, cigars and cigarettes $34,371,252, rubber footwear $15,060,521 and coffee and spices $13,593,564. Among them they utilize about 82 p.c. of the total capital employed.

From the point of view of value added by manufacture, the following is the order of importance of the above mentioned ten industries which contributed about 86 p.c. of the total value added by manufacture:—cigars and cigarettes $38,450,995, breweries $34,056,725, bread and other bakery products, $32,946,572, rubber tires and other rubber goods $29,495,271, biscuits, confectionery and chewing gum $27,979,460, flour mills, $24,341,597, distilleries $19,309,296, rubber footwear $17,193,957, sugar refineries $13,363,810 and coffee and spices $5,895,831.

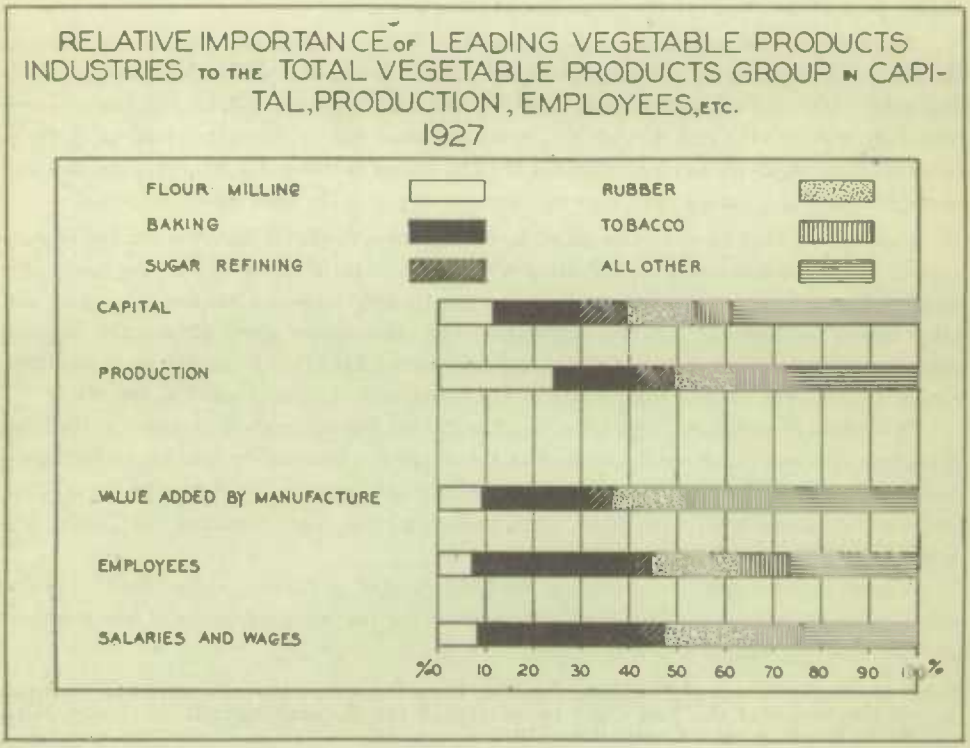
In number of people employed, the bread and other bakery products industry is the most important with an average employment of 14,414 employees, followed by biscuits, confectionery and chewing gum with 12,486, rubber tires and other rubber goods 8,325, rubber footwear 6,740, cigars and cigarettes 6,247, flour mills, 5,148, breweries 4,662, sugar refineries 2,711, coffee and spices 1,604 and distilleries 1,401.

A synoptic view of the importance of the gross value of production, capital invested, value added by manufacture and number of employees of the ten main industries of the vegetable products group in 1927 is given in table 5.

Table 5.—Gross Values of Products, Capital, Value Added by Manufacture and Number of Employees of the Ten Chief Industries of the Vegetable Products Group, with Their Rank in each Comparison, 1927.

—	Gross value of products	Rank	Capital	Rank	Value added by manufacture	Rank	Number of employees	Rank
Flour mills	167,597,325	1	56,366,699	2	24,341,597	6	5,148	6
Bread and other bakery products	68,726,262	2	40,559,259	6	32,946,572	3	14,414	1
Rubber tires and other rubber goods	65,016,087	3	51,205,543	3	29,495,271	4	8,325	3
Sugar refineries	60,502,664	4	50,039,122	4	13,363,810	9	2,711	8
Cigars and cigarettes	55,801,338	5	34,371,252	8	38,450,995	1	6,247	5
Biscuits, confectionery and chewing gum	53,128,888	6	46,448,311	5	27,979,460	5	12,486	2
Breweries	51,528,024	7	62,358,117	1	34,056,725	2	4,662	7
Rubber footwear	26,397,643	8	15,060,521	9	17,193,957	8	6,740	4
Coffee and spices	26,288,506	9	13,593,564	10	5,895,831	10	1,604	9
Distilleries	25,660,985	10	37,528,954	7	19,309,296	7	1,401	10

Summary Statistics.—Summary statistics of the industries of the Vegetable Products Group for 1927 are given in Table 6. In average capital per establishment, Sugar Refineries come first with $6,254,890, followed by Distilleries with $2,207,586, Rubber Footwear $1,506,052, Rubber Tires and Other Rubber Goods $1,506,045, while Feed and Grist Mills and Bread and Other Bakery Products have the low average capital of $6,443 and $16,602 respectively. The order is somewhat changed in the case of average number of employees per establishment. Rubber Footwear has the highest average of 674·0 employees, followed by Sugar Refineries with 338·9, Rubber Goods 244·9, Cocoa and Chocolate 168·7, Starch and Glucose 123·2, with Feed and Grist Mills and Bread and Other Bakery Products lowest with 1·8 and 5·9 employees respectively.



On comparing the average wages paid in each industry it is found that in some industries, such as "Biscuits and Confectionery," "Chewing and Smoking Tobaccos," "Cigars and Cigarettes," the wages paid are lower than the average in most of the other industries. In each case, this is due to the larger proportion of females in these industries as compared with other industries where the wages paid are higher. This may be seen from the employment figures given in Table 8. The low wages in the Fruit and Vegetable Canning Industry are also due to the seasonal nature of the industry; the majority of such factories work only a few months in the fall of the year. The low wages in the Feed and Grist Mills, however, are not due to the number of females, since very few are employed, but rather to the fact that probably not more than 40 or 50 mills work on full time the whole year round. Most of them work only a few days a week and in some cases only a few hours a day.

On comparing the average net product per employee with the average wage paid to wage-earners, a relation is found to exist, which with few exceptions follows the empirical rule that wages are high or low in proportion to the high or low relative amount of net product per employee. This is true of the majority of the industries, although the relation does not follow in exact proportion, since there are many other factors besides net product which enter into the determination of the amount of wages paid.

In 1927, "Breweries" had the highest average net product per employee of $13,783, and the second highest average wage of $1,208, while the "Fruit and Vegetable Canning Industry" had the lowest net product per employee of $1,299 and the lowest average wage of $355. The average salary, wage and net product per employee for all the other industries are shown in table 6.

In table 6a and the accompanying chart is shown the proportion of the value added by manufacture paid out in salaries and wages by the various industries comprising the vegetable products group.

Table 6.—Summary Statistics of the Industries Composing the Vegetable Products Group, 1927

Industry	Average capital per establishment	Average number of employees per establishment	Average salary	Average wage	Average net product per employee	Average number of horse power per wage-earner
	$		$	$		
Flour and Cereals—						
Flour mills	130,781	11·9	1,932	1,097	4,728	20·7
Feed and grist mills	6,443	1·8	1,286	642	2,983	27·8
Rice mills	233,714	13·0	2,767	1,029	5,213	11·4
Malt and malt mills	1,087,411	35·4	2,113	1,585	7,939	21·4
Prepared Grain Foods and Confectionery—						
Bread and other bakery products	16,602	5·9	1,586	1,086	2,286	0·8
Biscuits, confectionery and chewing gum	157,987	42·5	1,838	724	2,241	1·8
Macaroni and vermicelli	112,711	27·7	1,450	643	1,892	3·9
Ice cream cones	69,490	9·4	2,786	708	3,585	0·8
Starch, glucose, etc	1,280,478	123·2	2,640	1,051	3,158	4·5
Miscellaneous food products	159,825	18·6	1,868	1,011	5,124	5·8
Fruit and Vegetable Preparations—						
Fruit and vegetable canning, evaporating and preserving	126,451	30·9	1,531	355	1,299	1·7
Pickles, vinegar and cider	118,410	20·5	1,604	789	3,736	1·8
Coffee, Cocoa and Spices—						
Cocoa and chocolate	1,329,913	168·7	2,169	816	2,705	6·0
Coffee and spices	222,845	26·3	2,241	929	3,676	2·7
Sugar—						
Sugar refineries	6,254,890	338·9	2,873	1,203	4,929	7·9
Maple syrup and sugar	60,466	8·7	2,615	924	8,027	2·6
Syrups	26,726	7·9	1,229	710	1,680	0·9
Beverages—						
Breweries	854,221	63·9	2,335	1,166	7,305	5·2
Distilleries	2,207,586	82·4	1,992	1,208	13,783	6·0
Wine and grape juice	146,834	8·2	2,389	911	4,086	2·4
Rubber—						
Rubber tires and other rubber goods	1,506,045	244·9	1,883	1,180	3,543	5·1
Rubber footwear	1,506,052	674·0	1,450	819	2,551	2·3
Tobacco—						
Cigars and cigarettes	435,079	79·1	1,994	678	6,155	0·5
Tobacco, chewing, smoking and snuff	271,448	53·3	3,215	611	4,501	0·5
Miscellaneous Products—						
Linseed oil and oil cake	292,717	29·9	2,656	1,073	4,180	9·0
Miscellaneous vegetable products	375,904	35·0	2,142	1,035	5,741	9·7
All Vegetable Products Industries	103,104	16·3	1,945	900	3,619	4·2

Table 6a.—Vegetable Products Industries: Percentage of Total Net Value of Production Paid in Salaries and Wages, 1927

Industry	Value added by manufacture	Salaries paid	Wages paid	Percentage of salaries to value added	Percentage of wages to value added	Percentage of total salaries and wages to value added
	$	$	$			
Flour and Cereals—						
Flour mills	24,341,597	2,111,720	4,446,589	8·7	18·3	27·0
Feed and grist mills	3,687,276	41,157	773,204	1·1	21·0	22·1
Rice mills	406,645	74,721	52,477	18·4	12·9	31·3
Malt and malt mills	1,405,139	119,630	196,544	8·5	14·0	22·5
Prepared Grain Foods and Confectionery—						
Bread and other bakery products	32,946,572	1,342,088	14,726,059	4·1	44·7	48·8
Biscuits, confectionery and chewing gum	27,979,460	3,901,618	7,497,976	14·0	26·8	40·8
Macaroni and vermicelli	576,957	81,748	161,501	14·2	28·0	42·2
Ice cream cones	336,982	22,290	60,873	6·6	18·1	24·7
Starch, glucose, etc.	1,556,950	155,769	456,124	10·0	29·3	39·3
Miscellaneous food products	5,057,456	444,595	757,410	8·8	15·0	23·8
Fruit and Vegetable Preparations—						
Fruit and vegetable canning, evaporating and preserving	8,519,285	777,960	2,144,768	9·1	25·2	34·3
Pickles, vinegar and cider	4,602,138	301,471	824,189	6·6	17·9	24·5
Coffee, Cocoa and Spices—						
Cocoa and chocolate	1,826,056	336,221	424,371	18·4	23·2	41·6
Coffee and spices	5,895,831	1,201,015	991,683	20·4	16·8	37·2
Sugar—						
Sugar refineries	13,363,810	993,896	2,845,592	7·4	21·3	28·7
Maple syrup and sugar	417,413	44,448	32,337	10·6	7·7	18·3
Syrups	105,858	28,264	28,395	26·7	26·8	53·5
Beverages—						
Breweries	34,056,725	1,996,084	4,440,636	5·9	13·0	18·9
Distilleries	19,309,296	513,873	1,381,211	2·7	7·2	9·9
Wine and grape juice	1,005,209	160,064	163,057	15·9	16·2	32·1
Rubber—						
Rubber tires and other rubber goods	29,495,271	2,129,263	8,485,736	7·2	28·8	36·0
Rubber footwear	17,193,957	1,114,725	4,891,819	6·5	28·5	35·0
Tobacco—						
Cigars and cigarettes	38,450,995	2,486,827	3,390,041	6·5	8·8	15·3
Tobacco, chewing, smoking and snuff	8,633,390	684,802	1,042,526	7·9	12·8	20·7
Miscellaneous Products—						
Linseed oil and oil cake	999,146	87,659	220,943	8·8	22·1	30·9
Miscellaneous vegetable products	1,205,561	49,261	193,504	4·1	16·1	20·2
Total, All Industries 1927	**283,374,975**	**21,201,169**	**60,629,565**	**7·5**	**21·4**	**28·9**
1926	**244,004,302**	**19,479,894**	**55,869,692**	**8·0**	**22·9**	**30·9**

Capital Invested.—The capital employed by the vegetable products group of industries from 1920 to 1927 is shown in table 7 under two heads: fixed capital, comprising land, buildings, machinery and tools and working capital, comprising inventories, stocks in process, cash, trading and operating accounts.

The capital invested in fixed assets rose from $189,612,934 in 1920 to $271,735,851 in 1927 an increase of 43 p.c. while working capital increased from $204,510,299 to $222,440,203 or 9 p.c.

Of the fixed capital employed in 1927 amounting to $271,735,851, $41,426,121 was invested in breweries, $33,300,414 in flour mills, $32,509,770 in factories producing bread and other bakery products, $28,583,385 in biscuit, confectionery and chewing gum factories and $28,304,567 in factories manufacturing rubber tires and other rubber goods. These five industries accounted for 60 p.c. of the total fixed capital employed by the industries of the vegetable products group.

The ratio between fixed and working capital also changed since 1920 as follows:—

	1920	1927
Fixed capital	48·0	55·0
Working capital	52·0	45·0
Total	100·0	100·0

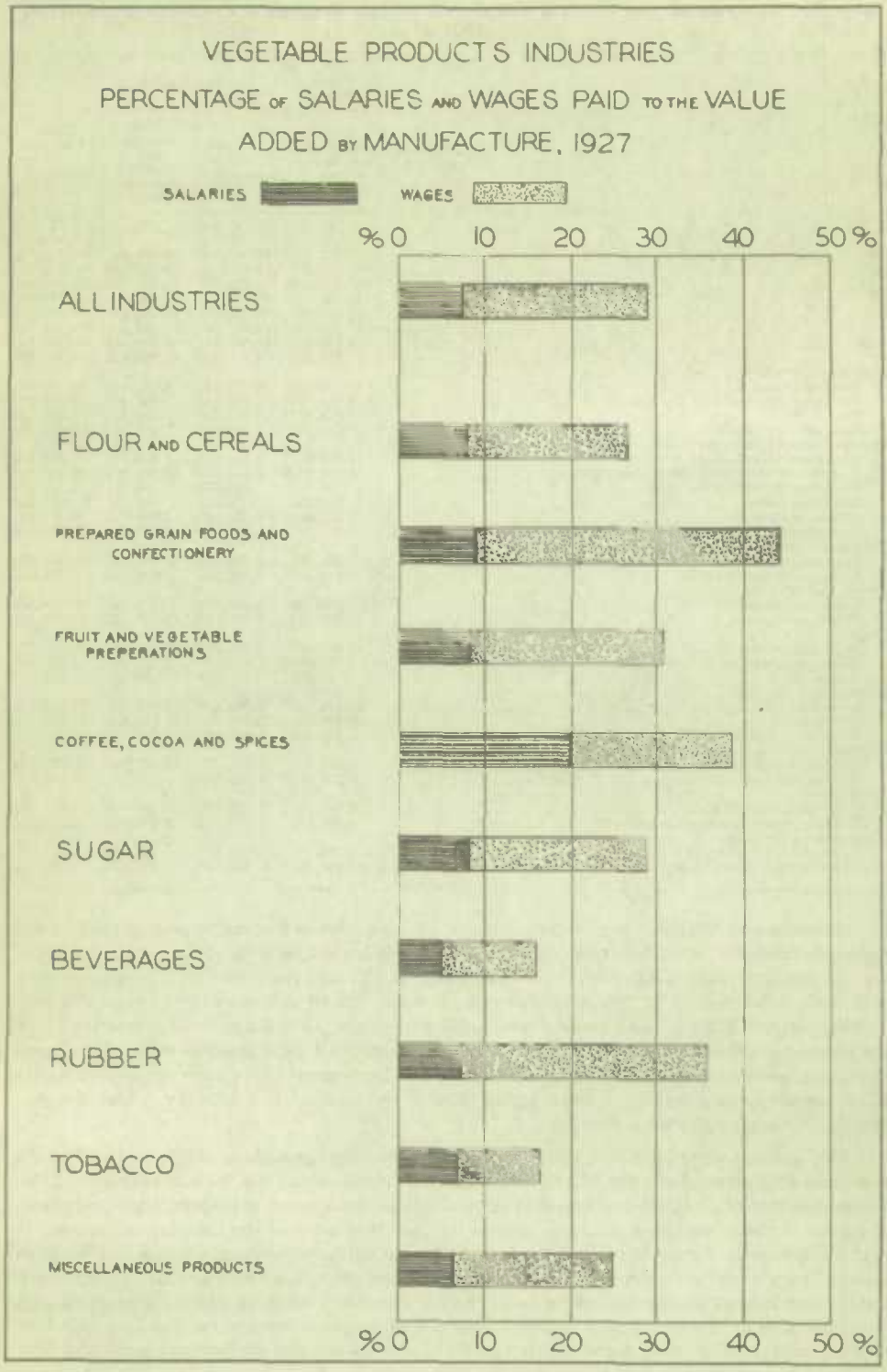

VEGETABLE PRODUCTS INDUSTRIES
PERCENTAGE OF SALARIES AND WAGES PAID TO THE VALUE ADDED BY MANUFACTURE, 1927
SALARIES
WAGES
% 0
10
20
30
40
50 %
ALL INDUSTRIES
FLOUR AND CEREALS
PREPARED GRAIN FOODS AND CONFECTIONERY
FRUIT AND VEGETABLE PREPERATIONS
COFFEE, COCOA AND SPICES
SUGAR
BEVERAGES
RUBBER
TOBACCO
MISCELLANEOUS PRODUCTS

Table 7.—Analysis of the Capital Employed in the Vegetable Products Industries, 1920-27

—	Fixed Capital	Working Capital		Total Capital
	Land, buildings, machinery and tools	Inventories, stocks in process, etc.	Cash, trading and operating accounts, etc.	
	$	$	$	$
1920	189,612,934	131,841,102	72,669,197	394,123,233
1921	203,157,977	91,050,599	66,736,618	360,945,194
1922	208,825,506	90,034,693	72,501,483	371,361,682
1923	226,299,747	87,327,141	72,098,411	385,725,299
1924	237,447,086	100,438,616	77,036,910	414,922,612
1925	246,196,266	112,055,229	81,239,269	439,490,764
1926	252,153,333	114,667,443	82,438,318	449,259,094
1927	271,735,851	128,831,608	93,608,595	494,176,054
Flour and Cereals—				
Flour mills	33,300,414	13,786,919	9,279,366	56,366,699
Feed and grist mills	4,439,973	604,963	650,378	5,695,314
Rice mills	594,933	557,157	250,195	1,402,285
Malt and malt mills	3,500,793	1,798,868	137,392	5,437,053
Prepared Grain Foods and Confectionery—				
Bread and other bakery products	32,509,770	3,505,958	4,543,531	40,559,259
Biscuits, confectionery and chewing gum	28,583,385	7,331,655	10,533,271	46,448,311
Macaroni and vermicelli	796,702	208,253	234,864	1,239,819
Ice cream cones	581,496	70,681	42,725	694,902
Starch, glucose, etc	2,922,966	1,022,807	1,176,128	5,121,901
Miscellaneous food products	4,109,109	1,419,743	2,941,766	8,470,618
Fruit and Vegetable Preparntions—				
Fruit and vegetable canning, evaporating and preserving	13,263,715	11,538,349	2,005,566	26,807,630
Pickles, vinegar and cider	3,244,905	3,230,535	629,162	7,104,602
Coffee, Cocoa and Spices—				
Cocoa and chocolate	2,936,187	1,427,818	955,647	5,319,652
Coffee and spices	3,421,031	6,243,910	3,928,623	13,593,564
Sugar—				
Sugar refineries	31,423,368	8,963,517	9,652,237	50,039,122
Maple syrup and sugar	171,989	122,900	67,911	362,800
Syrups	65,433	71,016	77,356	213,805
Beverages—				
Breweries	41,426,121	8,909,120	12,022,876	62,358,117
Distilleries	12,774,461	19,403,307	5,351,186	37,528,954
Wine and grape juice	1,506,220	2,184,601	714,206	4,405,027
Rubber—				
Rubber tires and other rubber goods	28,304,567	12,333,773	10,567,203	51,205,543
Rubber footwear	9,209,195	3,182,186	2,669,140	15,060,521
Tobacco—				
Cigars and cigarettes	7,067,399	15,797,151	11,506,702	34,371,252
Tobacco, chewing, smoking and snuff	2,801,572	3,994,061	2,976,512	9,772,145
Miscellaneous Products—				
Linseed oil and oil cake	1,338,866	689,040	313,827	2,341,733
Miscellaneous vegetable products	1,441,281	433,320	380,825	2,255,426

Salaries and Wages.—Sex distribution and average salaries and wages paid in 1927 by the vegetable products industries are given in Table 8. The highest salaries were paid by the chewing and smoking tobacco industry, the average being $3,215 ,and the lowest by the feed and grist mills with an average of $1,286, while the average salary for all industries of the vegetable products group was $1,945. As a general rule, high average salaries occur in those industries where the percentage of male employees is high. This is the case in all the industries with a few exceptions, such as the starch and glucose industry, where the percentage of male employees is only 67·8, yet the average salary is much higher than in the flour milling industry, where the percentage of male employees is 80·6.

The average wage paid was $900, or 46 p.c. of the average salary. Malt and malt mills came first with an average of $1,585 and fruit and vegetable-canning last with an average of $355. As previously explained, the low wages in the latter industry are due to the very high proportion of female workers, viz. 64·4 p.c., and also to the fact that most of the establishments operate only a few months during the fall of the year. On comparing the average salaries and wages in each industry a marked difference is found which in some cases is as much as four to one. Such a difference cannot be ascribed alone to the higher remuneration paid salaried employees as a class, but also to the fact that a higher proportion of wage-earners are females and also that salaried employees are more permanently employed and are not laid off for short periods of time like wage-earners.

A study has been made of the few selected industries to ascertain whether higher salaries and wages are paid in the smaller or larger establishments. The result is shown in Table 9, from which it would appear that with a few exceptions the employees of the larger establishments receive the higher remuneration. In the case of the rubber industries the great majority of persons are employed in establishments employing 501 employees and over, and the average paid to each employee is $27 higher than the average for the whole industry; with only one exception, the average decreases as the establishments become smaller. The concentration of employees in larger factories is not so marked in the biscuit and confectionery industry. The highest amount of $955 was paid in the largest group and the wages paid in the other groups decreased with the size of the establishment. In the Breweries, however, the higher salaries and wages are not paid in the largest factories. The highest average of $1,525 was paid in the medium-sized establishments and the lowest amount of $1,109, in the second largest group. The average amount paid in the Fruit and Vegetable Canning Industry also increases with the size of the establishment. The highest average amount of $675 was paid the largest factories and it was $229 more than the average for the whole industry. This is no doubt due to the steadier employment in the larger factories.

Table 8.—Vegetable Products Industries: Sex Distribution and Average Salaries and Wages, 1927

Industry	Employees on Salaries				Employees on Wages			
	Male	Female	Percentage of males among salaried employees	Average salary	Male	Female	Percentage of males among wage-earners	Average wage
Flour and Cereals—				$				$
Flour mills	881	212	80·6	1,932	3,921	134	96·7	1,097
Feed and grist mills	23	9	71·9	1,286	1,203	1	99·9	642
Rice mills	24	3	88·9	2,767	51	.....	100·0	1,029
Malt and malt mills	49	4	92·5	2,113	124	.....	100·0	1,585
Prepared Grain Foods and Confectionery—								
Bread and other bakery products	598	248	70·7	1,586	11,786	1,782	86·9	1,086
Biscuits, confectionery and chewing gum	1,559	564	73·4	1,838	4,433	5,930	42·8	724
Macaroni and vermicelli	42	12	77·8	1,450	130	121	51·8	643
Ice cream cones	6	2	75·0	2,786	56	30	65·1	708
Starch, glucose, etc	40	19	67·8	2,640	418	16	96·3	1,051
Miscellaneous food products	168	70	70·6	1,868	504	245	67·3	1,011
Fruit and Vegetable Preparations—								
Fruit and vegetable canning, evaporating and preserving	367	141	72·2	1,531	2,155	3,894	35·6	355
Pickles, vinegar and cider	143	45	76·1	1,604	604	440	57·9	789
Coffee, Cocoa and Spices—								
Cocoa and chocolate	123	32	79·4	2,169	249	271	47·9	816
Coffee and Spices	407	129	75·9	2,241	648	420	60·7	929
Sugar—								
Sugar refineries	290	56	83·8	2,873	2,253	112	95·3	1,203
Maple syrup and sugar	14	3	82·4	2,615	33	2	94·3	924
Syrups	17	6	73·9	1,229	21	19	52·5	710
Beverages—								
Breweries	755	100	88·3	2,335	3,763	44	98·8	1,166
Distilleries	209	49	81·0	1,992	916	227	80·1	1,208
Wine and grape juice	57	10	85·1	2,389	162	17	90·5	911
Rubber—								
Rubber tires and other rubber goods	892	239	78·9	1,883	6,146	1,048	85·4	1,180
Rubber footwear	565	204	73·5	1,450	3,705	2,266	62·1	819
Tobacco—								
Cigars and cigarettes	994	253	79·7	1,994	1,773	3,227	35·5	678
Tobacco, chewing, smoking and snuff	184	29	86·4	3,215	730	975	42·8	611
Miscellaneous Products—								
Linseed oil and oil cake	28	5	84·8	2,656	205	1	99·5	1,073
Miscellaneous vegetable products	21	2	91·3	2,142	180	7	96·3	1,035
Grand Total	8,456	2,446	77·6	1,945	46,169	21,229	53·7	[illegible]
Food products	4,751	1,555	75·3	1,900	28,589	13,417	68·1	867
Beverages	1,021	159	86·5	2,263	4,841	288	94·4	1,167
Rubber	1,457	443	76·7	1,707	9,851	3,314	74·8	1,016
Tobacco	1,178	282	80·7	2,172	2,503	4,202	37·3	661
Miscellaneous products	49	7	87·4	2,445	385	8	98·0	1,055
Grand Total	8,456	2,446	77·6	1,945	46,169	21,229	53·7	[illegible]

Table 9.—Employees and Salaries and Wages in Selected Industries of the Vegetable Products Group, 1927, Classified According to the Size of Establishment

Number of Employees per Establishment	Rubber Industries			Biscuits, Confectionery and Chewing Gum		
	Number of Employees	Salaries and Wages	Average per Employee	Number of Employees	Salaries and Wages	Average per Employee
		$	$		$	$
Fewer than 20	137	117,486	858	952	792,832	833
21-50	251	253,547	1,010	1,014	868,638	857
51-200	576	609,237	1,058	3,867	3,396,882	878
201-500	1,361	1,248,412	917	2,091	1,984,949	949
500 and over	12,740	14,392,861	1,130	4,562	4,356,293	955
Total	**15,065**	**16,621,543**	**1,103**	**12,486**	**11,399,594**	**913**

Number of Employees per Establishment	Breweries			Fruit and Vegetable Canning, etc.		
	Number of Employees	Salaries and Wages	Average per Employee	Number of Employees	Salaries and Wages	Average per Employee
		$	$		$	$
Fewer than 20	235	332,031	1,413	962	284,483	296
21-50	966	1,397,040	1,446	2,541	1,075,209	423
51-200	1,697	2,588,085	1,525	2,848	1,424,636	500
201-500	1,240	1,374,631	1,109	296	139,000	675
500 and over	524	744,933	1,422	.....	.....	.....
Total	**4,662**	**6,136,720**	**1,381**	**6,557**	**2,922,728**	**446**

Nominal and Real Salaries and Wages.—The increase or decrease in money wages paid in an industry does not in itself indicate whether the employees are better or worse off. This can be shown only by eliminating the factor of the variation in the value of money. The nominal wages have therefore been reduced to real wages as follows: First the money wages have been reduced to a percentage with 1917 as a base, the same being done with the index of the cost of living. The money wages thus reduced to a percentage were divided by the new cost of living index. The result gave the percentage increase or decrease in the real wages or salaries. As is shown by Table 10 real wages have increased by 22 p.c. during the period 1917-27 and salaries have increased 27·5 p.c. The rates of increase were different; until 1922, salaries lagged behind and from that year they have outstripped the wages. Real salaries have been increasing since 1920, while real wages after reaching a maximum of 127·6 p.c. in 1924 declined to 122 p.c. in 1927.

Table 10.—Vegetable Products Industries—Nominal and Real Salaries and Wages, 1917-27

1917 = 100

Year	Cost-of-living Index		Wage-earners			Salaried Employees		
	1913=100	1917=100	Average wage	Increase per cent	Real wages	Average salary	Increase per cent	Real salaries
			$			$		
1917	131	100·0	636	100·0	100·0	1,315	100·0	100·0
1918	149	113·7	688	108·2	95·2	1,420	108·0	95·0
1919	164	125·2	789	124·1	99·1	1,540	117·1	93·5
1920	190	145·8	926	145·6	100·0	1,722	131·0	89·8
1921	167	127·5	879	138·2	108·4	1,778	135·2	106·0
1922	153	116·8	863	135·7	116·2	1,760	133·8	114·6
1923	153	116·8	869	136·6	117·0	1,861	141·5	121·1
1924	150	114·5	929	146·1	127·6	1·853	140·9	123·1
1925	152	116·0	871	137·0	118·1	1,899	144·4	124·5
1926	153	116·8	872	137·1	117·4	1,986	151·0	129·2
1927	152	116·0	900	141·5	122·0	1,945	147·9	127·5

Annual Employment.—The average annual employment in selected industries of the vegetable products group since 1917 is given in table 11, expressed as a percentage of employment in 1917. Due to the change in method adopted in 1925 of computing the average annual employment, comparison of the last three years with earlier years becomes somewhat difficult. By the

old method, the annual employment was found by dividing by twelve the sum of the monthly employment. Since 1925, however, the annual employment is found by summing the averages of individual plants, based on the number of months in actual operation, and not the average for the calendar year. (See for illustration, the section on employment in Chap. IV.) The change in method affects greatly the seasonal industries, where establishments operate only for a few months during the year. For example, in the vegetable preparations industry employment in 1927 under the new method amounted to 7,789 while under the old method it would have been only about 5,600. However, those industries in which the establishments operate throughout the entire year, are hardly affected by the change. In view of the above the table is presented without further comments.

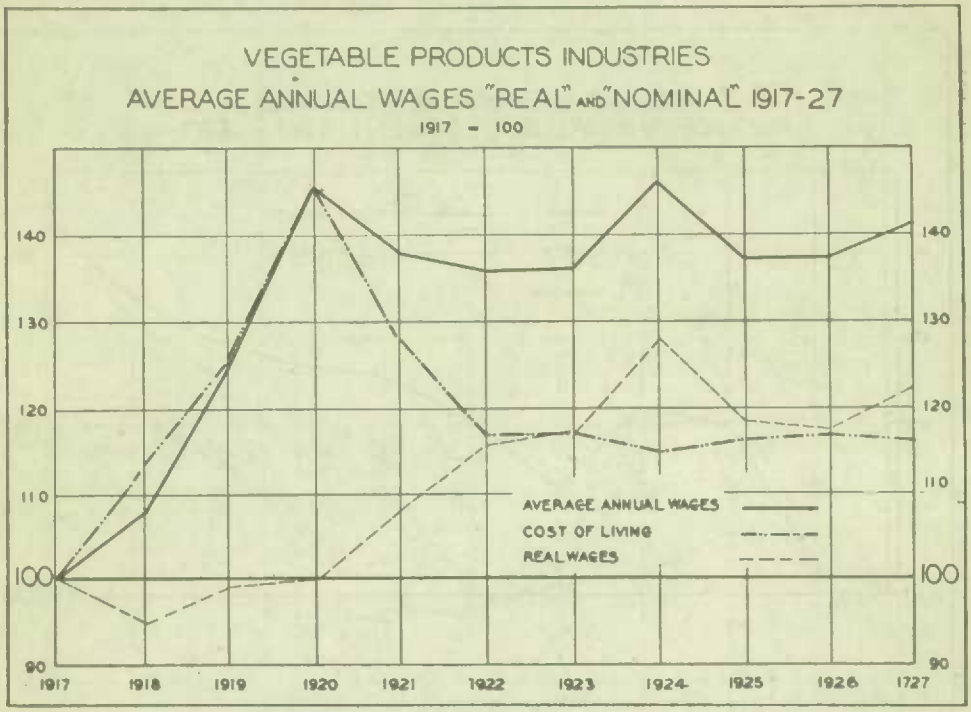
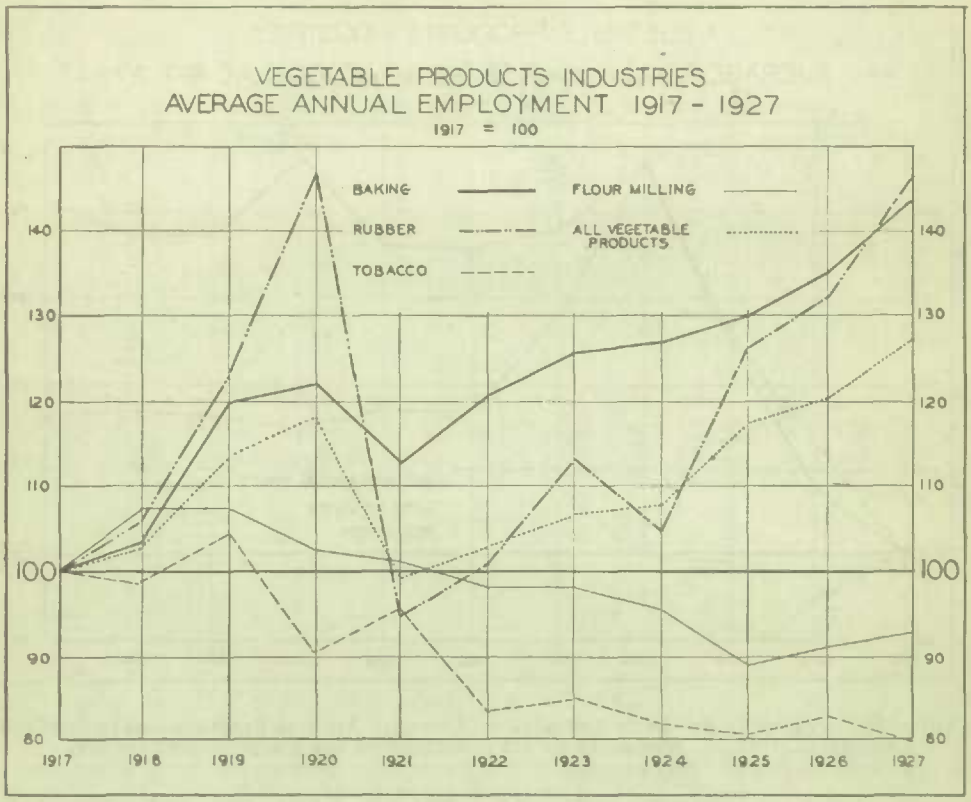


Table 11.—Vegetable Products Industries—Avereage Annual Employment in Selected Industries, 1917-27, Expressed as a Percentage of the Employment in 1917

Industry	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
1. Baking[1]	18,714	19,387	22,449	22,862	21,187	22,724	23,630	23,803	24,396	25,365	26,900
	100·0	103·6	120·0	122·2	113·2	121·4	126·3	127·2	130·4	135·5	143·7
2. Rubber	10,259	10,841	12,676	15,238	9,798	10,369	11,646	10,778	12,962	13,587	15,065
	100·0	105·7	123·6	148·5	95·5	101·1	113·5	105·1	126·3	132·4	146·8
3. Tobacco	10,235	10,143	10,683	9,276	9,806	8,551	8,689	8,378	8,223	8,455	8,165
	100·0	99·1	104·4	90·6	95·8	83·5	84·9	81·9	80·3	82·6	79·8
4. Fruit and Vegetable Preparations	4,711	5,239	5,150	5,840	3,576	4,503	4,319	5,361	8,368	7,858	7,789
	100·0	111·2	109·3	124·0	75·9	95·6	91·7	113·8	177·6	166·8	165·3
5. Flour Milling[2]	6,914	7,407	7,401	7,086	7,006	6,757	6,786	6,609	6,166	6,348	6,384
	100·0	107·1	107·0	102·5	101·3	97·7	98·2	95·6	89·2	91·8	92·3
6. Brewing and Distilling	3,710	3,330	2,946	3,709	3,484	3,170	3,509	4,626	4,907	4,991	6,063
	100·0	89·8	79·4	100·0	93·9	85·5	94·6	124·7	132·2	134·5	163·4
7. Sugar Refining	2,527	2,542	3,491	3,118	2,469	2,745	2,393	2,387	2,784	2,916	2,711
	100·0	100·6	138·1	123·4	97·7	108·6	94·7	94·5	110·2	115·4	107·3
8. All other	4,218	4,308	4,984	5,251	4,835	4,398	4,423	4,241	4,229	4,388	5,223
	100·0	102·1	118·2	124·5	114·6	104·3	104·9	100·5	100·3	104·0	123·8
Total Vegetable Products Industries	**61,288**	**63,197**	**69,780**	**72,380**	**61,161**	**63,217**	**65,395**	**66,183**	**72,035**	**73,908**	**78,300**
	100·0	**103·1**	**113·9**	**118·1**	**99·8**	**103·1**	**106·7**	**108·0**	**117·5**	**120·6**	**127·1**

1. Includes bread, biscuits, confectionery and chewing gum.
2. Includes flour and feed and grist mills.

Employment by Months and Hours Worked per Day.—The number of wage-earners employed each month during 1925, 1926 and 1927 is given in Table 12. January is the month of lowest employment and for the following three months employment is practically stationary. With the month of May employment begins to increase until the maximum is reached in October, and during November and December employment declines till the minimum is again reached in January. The variation in the monthly employment is greater for female than male workers. For example, in 1927 there was an increase of 7,828 between January and September, while in the case of the male employees the increase was only 6,853 although there are twice as many male wage-earners employed. The average number of wage earners rose from 62,246 in 1925 to 67,398



in 1927, an increase of 5,152. It should be remembered that since 1925 the average annual employment in the tables of this report is the sum of the averages of individual plants, based on the number of months in actual operation and not the average for the calendar year.

The number of hours worked per day in the month of highest employment in 1924-27 is given in Table 13, by provinces and for the Dominion. In 1924, 75 p.c. of the wage-earners in Canada, employed in vegetable products industries, worked 9 hours per day or over, the same as in 1927.

Also in 1927 in Ontario 28 p.c. worked 8 hours compared with 12 p.c. in Quebec, while only 4 p.c. in Quebec worked over 10 hours compared with 9 p.c. in Ontario. The lowest number of hours worked per day is in British Columbia, where 63 p.c. of the wage-earners worked 8 hours and only 19 p.c. worked 10 hours or over per day, compared with 25 p.c. and 38 p.c. respectively, for the whole Dominion.

Table 12.—Vegetable Products Industries: Number of Wage-earners Employed, by months, 1925-27

—	1925			1926			1927		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
January	38,404	14,915	53,319	40,113	15,944	56,057	41,277	16,150	57,427
February	38,257	15,139	53,396	40,481	16,261	56,742	41,827	16,570	58,397
March	38,877	15,295	54,172	40,493	16,172	56,665	42,392	16,776	59,168
April	39,098	15,121	54,219	40,544	15,908	56,452	42,955	16,702	59,657
May	40,399	15,853	56,252	40,940	16,092	57,032	44,066	17,220	61,286
June	41,485	16,859	58,344	42,014	17,528	59,542	44,927	18,316	63,243
July	43,020	18,568	61,588	43,662	19,366	63,028	47,369	20,794	68,163
August	42,638	19,623	62,261	44,001	20,858	64,859	46,937	21,414	68,351
September	45,982	23,630	69,612	45,559	22,966	68,525	48,130	23,978	72,108
October	44,655	22,036	66,691	45,912	22,066	67,978	49,040	23,746	72,786
November	43,305	20,319	63,624	44,692	20,087	64,779	47,143	21,009	68,152
December	42,256	18,056	60,312	43,509	18,064	61,573	44,737	19,144	63,881
Average	**42,282**	**19,964**	**62,246**	**43,622**	**20,477**	**64,099**	**46,169**	**21,229**	**67,398**

Table 13.—Vegetable Products Industries: Number of Wage-earners in Month of Highest Employment, 1924-27, Classified According to the Number of Hours Worked per Day.

Number of hours		Canada		Prince Edward Island		Nova Scotia		New Brunswick		Quebec	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
8 hours or less	1924	18,816	25	38	23	203	10	104	6	4,011	18
	1925	18,742	23	39	25	192	8	142	8	3,265	14
	1926	17,595	22	36	34	155	7	131	7	2,416	10
	1927	21,200	25	33	27	177	7	135	6	2,933	12
9 hours	1924	29,542	40	60	37	1,060	52	585	33	11,192	50
	1925	31,627	39	65	41	1,179	48	480	27	11,747	50
	1926	30,978	39	57	53	675	29	644	35	13,002	54
	1927	31,316	37	70	58	784	34	1,039	48	12,444	49
10 hours	1924	20,367	28	48	30	793	38	362	20	6,586	29
	1925	23,413	29	53	34	1,058	44	273	15	7,658	32
	1926	24,585	31	14	13	1,467	63	186	10	7,949	33
	1927	25,735	31	18	15	1,357	58	441	20	8,771	35
Over 10 hours	1924	5,100	7	16	10	6	.....	727	41	609	3
	1925	6,856	9	1	.....	9	.....	872	50	1,013	4
	1926	6,608	8	.....	.....	36	1	899	48	826	3
	1927	5,606	7	.....	.....	25	1	575	26	1,016	4

Number of hours		Ontario		Manitoba		Saskatchewan		Alberta		British Columbia	
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
8 hours or less	1924	10,344	27	1,057	47	321	37	860	54	1,878	47
	1925	10,427	24	1,091	45	316	36	1,059	58	2,211	48
	1926	9,252	23	1,007	37	178	20	960	50	3,460	65
	1927	12,375	28	1,140	41	250	26	1,227	58	2,930	63
9 hours	1924	13,496	35	853	37	243	28	479	30	1,574	39
	1925	15,240	36	1,063	44	297	34	554	30	1,002	22
	1926	13,168	33	1,229	46	329	37	698	36	1,176	22
	1927	14,034	32	1,156	41	327	34	631	30	831	18
10 hours	1924	11,248	29	309	14	263	30	239	15	519	13
	1925	12,514	29	248	10	226	26	178	10	1,205	26
	1926	13,517	33	438	16	311	35	145	8	558	11
	1927	13,487	31	459	17	332	34	219	10	651	14
Over 10 hours	1924	3,599	9	44	2	42	5	8	1	49	1
	1925	4,685	11	26	1	40	4	41	2	169	4
	1926	4,533	11	36	1	69	8	118	6	91	2
	1927	3,628	9	32	1	60	6	52	2	218	5

Trend of Wages and Hours of Work since 1920.—Statistics of number of hours worked per day and per week, number of days worked per establishment per year and wages paid from 1920 to 1927 are given in table 14. Although the average money wage dropped from $926 to $900, real wages increased by some 22 p.c. The number of hours worked per day decreased slightly, while the number of days that establishments operated on full time increased from 239 to 258 days per annum. It should be noted that throughout this report, in giving the number of days that establishments operated on full time, account has been taken of part time operation and reduction made accordingly.

Table 14.—Vegetable Products Industries: Hours Worked and Wages Paid, 1920-27

Year	Average Number of Hours Worked		Average number of days that establishments operated on full time	Wages Paid		
	per day	per week		Nominal wages	Cost of living index	Real wages
				$	1917=100	$
1920	9·0	52·0	239	926	145·0	639
1921	9·2	53·0	245	879	127·5	689
1922	9·1	52·9	241	863	116·8	739
1923	8·9	51·1	242	869	116·8	744
1924	9·2	52·5	250	929	114·5	811
1925	8·9	52·9	253	871	116·0	751
1926	9·2	52·9	256	872	116·8	747
1927	8·9	54·1	258	900	116·0	778

Outside Piece-Workers.—The number of outside piece-workers and the amounts paid from 1920 to 1927 are shown in tables 15 and 16. The highest amount of $193,463 was paid in 1921. Since then, however, payments to piece-workers have declined sharply, only $17,833 being paid out in 1927. The fruit and vegetable preparations, and tobacco and rubber industries were the only ones to employ piece workers in 1926 and 1927.

Table 15.—Vegetable Products Industries—Outside Piece-Workers, 1920-27

Year	Male	Female	Total	Earnings
	No.	No.	No.	$
1920	174	115	289	100,442
1921	399	1,859	2,258	193,463
1922	150	844	994	60,034
1923	79	505	584	21,759
1924	48	748	796	19,712
1925	55	427	482	26,199
1926	2	39	41	4,542
1927	59	445	504	17,833

Table 16—Vegetable Products Industries—Outside Piece-Workers, 1926 and 1927

Industry	1927				1926			
	Male	Female	Total	Amount paid	Male	Female	Total	Amount paid
	No.	No.	No.	$	No.	No.	No.	$
Cigars and cigarettes	1	4	5	2,748	2	.....	2	1,150
Fruit and vegetable canning, etc.	54	437	491	11,704	.....	34	34	1,043
Rubber goods	.....	4	4	197	.....	.....	.....	.....
Pickles, vinegar and cider	.....	.....	.....	.....	.....	5	5	2,349
Tobacco, chewing, smoking and snuff	4	.....	4	3,124	.....	.....	.....	.....
Total	**59**	**445**	**504**	**17,833**	**2**	**39**	**41**	**4,524**

Fuel and Electricity.—Fuel statistics by provinces and component industries for 1927 and for the Dominion from 1920 to 1927 are given in tables 17, 18 and 19. The cost of fuel in 1927 amounted to $6,940,596, of which $3,995,228 was for bituminous coal, $668,695 for oil, $513,067 for wood and the balance for gas, anthracite coal, etc. Ontario and Quebec were the largest users of fuel, having spent $3,220,616 and $1,831,737 respectively, and together using about 73 p.c. of all the fuel used in the Dominion.

The fuel bill for Canada in 1920 amounted to $9,181,418. Subsequently the amount consumed declined steadily until 1924, when it rose again so that in 1927 it amounted to $6,940,596, an increase of $359,690 over the minimum of 1924. Figures for the years prior to 1920 are not available for the vegetable products industries as a group, since previous to that time the industries were not grouped into their present classification.

In view of the drop in both the amount and value of fuel used in spite of an increase in production, it must be concluded that the tendency is toward the greater utilization of electrical power. This is practically borne out by the power installation for the eight years, which has increased from 223,938 H.P. in 1920 to 280,170 H.P. in 1927, an increase of about 25 p.c. Also, in comparing the figures for fuel and electricity for 1926 and 1927, it is found that the cost of fuel decreased by $91,298, while the amount spent on electricity increased by $142,895, or about 5 p.c.

The bread and other bakery products industry is the largest user of fuel, having spent $1,518,-293 in 1927 with sugar refineries coming a close second with an expenditure of $1,408,407. On the other hand, these industries were not the largest users of electrical power. The flour milling industry came first with an expenditure of $809,624 or about 30 p.c. of the total and the rubber tires and other rubber goods industry second with an expenditure of $447,215.

Power Installation.—The power installed in the vegetable products industries increased steadily since 1921. The figure shown for 1920 is only an estimate, for in that year all electrical motors, whether driven by purchased power or by power generated by the establishments themselves, were reported together. In order to arrive at the total power used for manufacturing purposes in 1920, a deduction had to be made for the number of motors driven by owned power since these were already included in the steam engines, oil and gasoline engines or hydraulic turbines. One third was therefore deducted from the total number of electrical motors reported. Although a drop in the power installed took place in 1921, yet it could not have been as large as the figures in Table 20 indicate.

Ontario has the largest installation of 154,950 H.P. or about 55 p.c. of the entire installation of the whole country, while Quebec comes second with 64,577 H.P. and Manitoba third with 12,001 H.P. The figures by industries and classes as well as by provinces for 1927 are given in Tables 21 and 22, while the figures for Canada for 1920 to 1927 are shown in Table 20.

Integration of Industry.

Integration takes two forms (a) horizontal combinations, where two or more firms who use the same raw materials and manufacture the same products combine for the purpose of lessening competition or for the purpose of reducing the cost of raw materials and the overhead expenses, and (b) vertical combinations, when several firms combine where the finished products of one becomes the raw materials of the other. The case of an establishment producing boots and shoes combining with a tannery or a furniture manufacturer combining with a lumber mill may be cited as good examples of vertical combinations.

In the following pages an attempt has been made to study the integration of industry from the point of view of the size of the individual establishment and not of the number of establishments under the control of one management or the control exercised through interlocking directorates. A few typical industries have been studied for 1927 in order to ascertain to what extent production is concentrated in large establishments. In order to see whether the size of the establishment is increasing or decreasing, similar studies would have to be made for previous years, from which figures the trend could be established.

The establishments have been classified according to the number of persons employed. An examination of the following tables will show that in every case a small number of large establishments manufacture the greater part of the product, and employ the greater number of employees. It is evident that in these industries large scale production is the rule.

Continued on page 32

Table 17.—Vegetable Products Industries: Fuel Used, 1920-27

Year	Bituminous coal		Anthracite coal		Lignite		Coke		Gasoline		Oil		Wood		Gas		Other fuel	Total cost of fuel	Cost of electricity
	Ton	$	Ton	$	Ton	$	Ton	$	Gal.	$	Gal.	$	Cord	$	M cu. ft.	$	$	$	$
1920	712,237	6,485,715	77,040	951,332	48,346	236,556	.....	333,089	.....	153,652	.....	221,634	.....	443,413	.....	307,779	48,248	9,181,418	.....
1921	559,279	4,634,807	70,328	893,686	40,638	238,244	.....	346,538	.....	106,761	.....	572,532	.....	372,190	.....	268,861	21,702	7,455,321	.....
1922	612,375	4,499,960	46,938	662,434	55,899	272,238	35,182	431,126	251,331	91,706	15,159,719	683,347	82,513	449,823	721,980	297,274	65,079	7,452,987	.....
1923	602,310	4,000,164	51,008	634,268	51,873	253,778	37,207	466,693	379,737	124,368	10,368,567	568,431	88,767	456,500	810,423	379,107	63,279	6,946,588	.....
1924	657,592	3,767,137	44,957	576,321	54,287	226,007	36,641	408,926	431,941	122,226	9,886,838	540,817	95,162	473,979	911,385	395,117	70,376	6,580,906	2,431,089
1925	711,807	3,940,504	43,993	524,170	49,102	198,221	39,078	431,923	535,012	158,727	13,109,046	791,321	96,983	485,984	952,086	425,428	77,368	7,033,646	2,564,399
1926	673,893	3,806,140	44,798	479,948	57,716	226,996	37,592	424,906	499,160	147,930	14,419,737	845,221	104,855	507,545	1,118,024	496,949	96,259	7,081,894	2,642,236
1927	700,424	3,995,228	45,567	463,091	32,578	161,370	37,802	413,136	284,906	85,521	10,736,660	668,695	101,648	513,067	1,283,504	536,113	104,375	6,940,596	2,785,131

Table 18.—Vegetable Products Industries: Fuel Used, by Provinces, 1927

Province	Bituminous coal		Anthracite coal		Lignite		Coke		Gasoline		Oil		Wood		Gas		Other fuel	Total cost of fuel	Cost of electricity
	Ton	$	Ton	$	Ton	$	Ton	$	Gal.	$	Gal.	$	Cord	$	M cu. ft.	$	$	$	$
Prince Edward Island	1,076	8,913	.....	.....	.....	.....	91	1,188	40	15	500	150	62	405	.....	.....	.....	10,671	1,772
Nova Scotia	8,919	56,223	771	9,913	47	422	2,089	20,714	1,864	534	4,188,295	223,753	1,345	8,780	2,927	3,780	.....	324,119	30,269
New Brunswick	50,895	299,045	537	6,579	35	352	1,082	8,754	945	295	194,273	15,066	2,389	12,464	8,017	5,325	600	348,480	24,153
Quebec	149,687	915,923	15,893	137,081	133	1,951	8,278	93,744	69,975	20,193	4,406,438	263,763	50,537	257,030	129,509	133,180	8,872	1,831,737	672,741
Ontario	370,160	2,157,112	18,455	227,012	855	9,344	22,397	243,896	167,274	49,982	1,025,922	108,412	19,743	107,787	396,891	257,554	59,517	3,220,616	1,564,706
Manitoba	31,209	190,604	5,055	49,321	8,628	58,401	926	13,374	6,939	2,232	27,367	5,381	5,616	32,796	25,198	23,509	384	376,002	136,343
Saskatchewan	22,102	137,232	215	2,192	8,547	44,795	235	3,784	13,240	4,258	32,672	7,394	4,484	20,492	55	50	10,326	230,523	84,301
Alberta	23,347	61,241	143	837	14,263	45,362	450	5,561	15,767	5,212	26,151	4,202	2,502	10,137	695,424	88,315	.....	220,867	135,200
British Columbia and Yukon	43,029	168,935	4,498	30,156	70	743	2,254	22,121	8,862	2,800	835,042	40,574	14,970	63,176	25,483	24,400	24,676	377,581	135,646
Total	**700,424**	**3,995,228**	**45,567**	**463,091**	**32,578**	**161,370**	**37,802**	**413,136**	**284,906**	**85,521**	**10,736,660**	**668,695**	**101,648**	**513,067**	**1,283,504**	**536,113**	**104,375**	**6,940,596**	**2,785,131**

Table 19.—Vegetable Products Industries: Fuel Used by Individual Industries, 1927

Industry	Bituminous coal		Anthracite coal		Lignite		Coke		Gasoline		Oil		Wood		Gas		Other fuel	Total cost of fuel	Cost of electricity
	Ton	$	Ton	$	Ton	$	Ton	$	Gal.	$	Gal.	$	Cord	$	M cu. ft.	$	$	$	$
Flour and Cereals—																			
Flour mills	61,228	331,084	812	6,852	16,839	77,134	97	866	16,392	4,786	115,310	18,943	8,328	32,326	360,172	16,920	22,343	511,254	809,624
Feed and grist mills	2,085	13,224	248	2,445	204	710	20	248	67,100	17,142	223,932	32,346	3,008	11,423	14,491	8,420	330	86,288	147,858
Rice mills	.....	.....	13	212	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	360	572	7,755
Malt and malt mills	6,664	43,865	10,924	75,483	33	118	.....	.....	.....	.....	.....	.....	.....	.....	124,370	21,700	.....	141,166	9,187
Prepared Grain Foods and Confectionery																			
Bread and other bakery products	18,669	173,569	12,239	166,936	2,490	26,383	30,215	338,300	74,687	31,140	625,175	63,090	83,375	430,433	406,935	285,983	2,459	1,518,293	294,598
Biscuits, confectionery and chewing gum	39,080	257,397	7,742	99,973	675	5,905	1,942	16,404	11,508	3,232	538,489	46,872	1,171	7,133	194,422	119,413	976	557,305	202,034
Macaroni and vermicelli	1,227	6,768	23	384	178	1,472	.....	.....	.....	.....	9,800	1,407	4	16	600	508	.....	10,555	17,610
Ice cream cones	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16,937	1,917	.....	.....	27,728	23,397	.....	25,314	1,524
Starch, glucose, etc.	41,533	238,285	1,013	5,227	.....	.....	.....	.....	.....	.....	65,950	6,310	.....	.....	.....	.....	.....	249,822	.....
Miscellaneous food products	12,156	72,601	896	11,814	8	56	287	2,639	1,152	299	107,356	8,291	73	676	7,390	6,543	984	103,903	86,466
Fruit and Vegetable Preparations—																			
Fruit and vegetable canning, etc.	28,021	187,138	1,330	14,979	.....	.....	1,665	15,275	6,847	1,705	141,305	6,306	2,230	11,637	6,881	5,474	9,680	252,194	56,134
Pickles, vinegar and cider	15,294	92,112	276	2,877	.....	.....	18	248	1,304	344	3,881	424	817	5,934	2,624	1,575	.....	103,514	11,414
Coffee, Cocoa and Spices—																			
Cocoa and chocolate	4,920	30,783	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,862	3,886	.....	34,669	37,548
Coffee and spices	1,541	11,870	414	5,306	12	180	285	3,882	5,304	1,270	.....	.....	306	1,869	11,362	11,690	.....	36,073	43,325
Sugar—																			
Sugar refineries	200,467	912,735	.....	.....	.....	.....	2,410	26,223	86	23	8,687,591	469,084	.....	.....	326	342	.....	1,048,407	117,672
Maple syrup and sugar	1,032	7,441	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	175	150	.....	7,591	518
Syrups	336	2,802	6	94	.....	.....	.....	.....	2,000	.....	520	.....	.....	.....	.....	.....	.....	3,416	806
Beverages—																			
Breweries	79,224	493,180	1,300	9,868	12,111	49,103	754	7,617	28,127	7,699	58,018	4,351	1,809	8,693	109,509	20,526	4,724	605,761	198,350
Distilleries	65,056	364,680	6,473	45,149	.....	.....	.....	.....	.....	.....	56,840	3,645	.....	.....	.....	.....	9,550	423,024	51,079
Wine and grape juice	1,424	10,029	104	1,335	12	120	25	482	5,122	1,368	250	70	6	36	1,040	884	.....	14,324	3,967
Rubber—																			
Rubber tires and other rubber goods	70,031	413,172	1,129	5,557	.....	.....	15	170	63,477	15,513	74,824	4,395	.....	.....	7,173	6,724	52,952	498,483	447,215
Rubber footwear	23,254	150,691	.....	.....	.....	.....	.....	.....	.....	.....	6,522	718	.....	.....	.....	.....	.....	151,409	132,204
Tobacco—																			
Cigars and cigarettes	9,306	64,342	470	6,273	16	189	37	411	.....	.....	.....	.....	123	606	783	803	17	72,641	35,867
Tobacco, chewing, smoking and snuff	4,456	32,378	155	2,327	.....	.....	32	371	1,800	480	.....	.....	368	1,985	464	493	.....	38,084	10,962
Miscellaneous Products—																			
Linseed oil and oil cake	3,378	22,598	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	300	3,197	682	.....	23,580	42,325
Miscellaneous vegetable products	10,042	62,478	.....	.....	.....	.....	.....	.....	.....	.....	4,480	526	.....	.....	.....	.....	.....	63,004	19,089
Total	**700,424**	**3,995,228**	**45,567**	**463,091**	**32,578**	**161,370**	**37,902**	**413,136**	**284,906**	**85,521**	**10,726,660**	**668,695**	**101,648**	**513,067**	**1,283,504**	**536,113**	**104,375**	**6,940,596**	**2,785,131**

Table 20.—Vegetable Products Industries: Power Installation, 1920-27

Year	Steam engines and turbines		Oil, gas and gasoline engines		Hydraulic turbines and water wheels		Electric motors driven by purchased power		Total power used for manufacturing		Electric motors operated by owned power		Total electric motors		Boilers installed	
	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.
1920	754	39,303	691	12,119	1,173	40,647	6,304	131,869	8,922	223,938	1,849	22,576	8,153	154,445	1,037	93,575
1921	571	43,741	497	8,912	554	39,181	5,413	79,356	7,035	171,190	2,707	39,678	8,120	119,034	1,030	89,811
1922	700	59,763	525	10,070	379	47,819	6,895	115,795	8,499	233,447	2,697	41,375	9,592	157,170	885	100,681
1923	839	59,903	680	10,224	1,022	42,107	8,366	144,942	10,907	257,176	2,177	21,930	10,543	166,872	800	99,305
1924	844	59,849	686	9,466	955	41,827	9,164	147,577	11,649	258,719	1,823	23,644	10,987	171,221	929	108,352
1925	903	60,339	740	9,738	915	40,426	10,160	156,206	12,728	266,709	1,552	23,149	11,712	179,355	880	104,051
1926	833	57,756	781	10,448	892	39,268	11,110	160,171	13,616	267,643	1,599	21,490	12,709	181,661	967	114,092
1927	747	57,526	822	11,172	881	39,275	12,594	172,197	15,044	280,170	1,859	22,905	14,453	195,102	1,136	130,173

Table 21.—Vegetable Products Industries: Power Installation, by Provinces, 1927

Province	Steam engines and turbines		Oil, gas and gasoline engines		Hydraulic turbines and water wheels		Electric motors driven by purchased power		Total power used for manufacturing		Electric motors operated by owned power		Total electric motors		Boilers installed	
	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.
Prince Edward Island	5	140	2	25	24	419	9	54	40	638	.....	.....	9	54	7	172
Nova Scotia	21	3,168	15	197	18	595	443	2,268	497	6,228	149	2,875	592	5,143	47	6,933
New Brunswick	25	3,160	7	66	20	695	192	1,268	244	5,189	199	2,006	391	3,274	32	4,269
Quebec	135	11,837	299	1,435	354	14,208	3,028	37,007	3,816	64,577	544	6,637	3,572	43,734	198	22,777
Ontario	396	25,900	377	7,316	464	23,322	6,645	98,412	7,882	154,950	860	9,932	7,505	108,344	591	67,605
Manitoba	52	3,505	28	386	.....	.....	691	12,001	771	15,892	.....	.....	691	12,001	70	6,794
Saskatchewan	37	3,626	44	737	.....	.....	271	4,385	352	8,748	10	22	281	4,407	43	4,586
Alberta	47	4,739	43	855	.....	.....	470	8,051	560	13,645	47	1,041	517	9,092	64	8,214
British Columbia and Yukon	29	1,451	7	155	1	36	845	8,661	882	10,303	50	392	895	9,053	84	8,823
Canada	**747**	**57,526**	**822**	**11,172**	**881**	**39,275**	**12,594**	**172,197**	**15,044**	**280,170**	**1,859**	**22,905**	**14,453**	**195,102**	**1,136**	**130,173**

Table 22.—Vegetable Products Industries: Power Installation, by Individual Industries, 1927

Industry	Steam engines and turbines		Oil, gas and gasoline engines		Hydraulic turbines and water wheels		Electric motors driven by purchased power		Total power used in manufacturing		Electric motors operated by owned power		Total electric motors		Boilers installed	
	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.	units	h.p.
Flour and Cereals—																
Flour mills	109	11,989	80	2,360	344	19,795	1,147	49,804	1,680	83,948	68	2,578	1,215	52,382	131	14,684
Feed and grist mills	80	3,310	233	6,287	512	16,521	316	7,339	1,441	33,457	5	107	321	7,446	45	2,393
Rice mills	.....	.....	.....	.....	4	175	9	405	13	580	.....	.....	9	405	.....	.....
Malt and malt mills	6	835	.....	.....	.....	.....	101	1,820	107	2,655	.....	.....	101	1,820	14	1,785
Prepared Grain Foods and Confectionery—																
Bread and other bakery products	16	223	426	1,471	.....	.....	2,361	9,659	2,803	11,353	.....	.....	2,361	9,659	115	3,023
Biscuits, confectionery and chewing gum	39	2,935	3	32	2	250	2,072	15,437	2,116	18,654	95	777	2,167	16,214	104	8,564
Macaroni and vermicelli	.....	.....	1	30	.....	.....	193	944	194	974	.....	.....	193	944	3	170
Ice cream cones	.....	.....	.....	.....	.....	.....	18	70	18	70	.....	.....	18	70	.....	.....
Starch, glucose, etc	6	1,945	.....	.....	.....	.....	.....	.....	6	1,945	224	2,520	224	2,520	17	2,875
Miscellaneous food products	7	259	.....	.....	8	260	434	3,809	449	4,328	.....	.....	434	3,809	24	2,084
Fruit and Vegetable Preparations																
Fruit and vegetable canning, etc.	151	5,661	50	672	1	15	496	4,055	698	10,403	48	580	544	4,635	234	19,274
Pickles, vinegar and cider	16	845	21	58	3	94	213	912	253	1,909	213	800	426	1,712	42	4,789
Coffee, Cocoa and Spices—																
Cocoa and chocolate	4	110	.....	.....	.....	.....	197	3,022	201	3,132	.....	.....	197	3,022	7	900
Coffee and spices	3	160	.....	.....	.....	.....	351	2,758	354	2,918	8	54	359	2,812	10	481
Sugar—																
Sugar refineries	89	13,494	1	5	.....	.....	257	5,066	347	18,565	842	11,658	1,099	16,724	76	25,699
Maple syrup and sugar	1	60	.....	.....	.....	.....	8	32	9	92	.....	.....	8	32	5	285
Syrups	1	10	.....	.....	.....	.....	8	26	9	36	.....	.....	8	26	3	155
Beverages—																
Breweries	128	7,202	.....	.....	.....	.....	1,381	12,775	1,509	19,977	182	1,295	1,563	14,070	130	16,803
Distilleries	48	3,912	1	227	.....	.....	510	2,723	559	6,862	81	1,429	591	4,152	40	8,543
Wine and grape juice	1	50	5	29	.....	.....	101	352	107	431	.....	.....	101	352	11	356
Rubber—																
Rubber tires and other rubber goods	23	2,390	1	1	.....	.....	1,448	34,661	1,472	37,052	2	60	1,450	34,721	48	9,142
Rubber footwear	3	435	.....	.....	7	2,165	410	11,385	420	13,985	91	1,047	501	12,432	27	4,270
Tobacco—																
Cigars and cigarettes	4	940	.....	.....	.....	.....	302	1,317	306	2,257	.....	.....	302	1,317	15	1,904
Tobacco, chewing, smoking and snuff	5	319	.....	.....	.....	.....	99	602	104	921	.....	.....	99	602	24	1,025
Miscellaneous products—																
Linseed oil and oil cake	4	17	.....	.....	.....	.....	102	1,833	106	1,850	.....	.....	102	1,833	11	909
Miscellaneous vegetable products	3	425	.....	.....	.....	.....	60	1,391	63	1,816	.....	.....	60	1,391	.....	.....
Total	**747**	**57,526**	**822**	**11,172**	**881**	**39,275**	**12,594**	**172,197**	**15,044**	**280,170**	**1,859**	**22,905**	**14,453**	**195,102**	**1,136**	**130,173**

Integration of Industry—Concluded

Rubber Industry.—In this group there were 44 establishments in 1927, 13 or 29·6 p.c. of which employed 87·0 p.c. of the total capital and 84·3 p.c. of the employees and produced 86·9 p.c. of the value of manufactured products. This industry is necessarily carried on on a large scale, in view of the large amount of capital required for the purchase of machinery and other fixed assets. The average capital for the 13 largest establishments was $4,429,860 and even the smallest establishments which employed under 20 persons had an average capital of $35,282. Of the 44 firms engaged in the production of rubber tires and rubber footwear, etc., 17 had a production of over a million dollars; while the largest firms had an average production of over $6,000,000 each and the smallest ones an average production of over $30,000. These figures are very significant in comparison with those of the Bread, Biscuit and Confectionery Industries. The figures for the rubber industries, classified by groups, are given in Table 23.

Table 23.—Rubber Industries: Classification of Establishments According to the Number of Persons Employed, 1927

Number of Employees per Establishment	Establishments		Capital Employed		Employees		Value of Products		Average capital per establishment in each group	Average number of employees per establishment in each group
	Number	Per cent	Amount	Per cent	Number	Per cent	Amount	Per cent		
			$				$		$	
Fewer than 20	14	31·8	493,947	0·7	137	0·9	472,093	0·5	35,282	10
21-50	7	15·9	1,225,861	1·8	251	1·7	1,281,682	1·4	175,123	36
51-200	6	13·6	1,878,876	2·8	576	3·8	2,659,457	2·9	313,146	96
201-500	4	9·1	5,079,726	7·7	1,361	9·3	7,579,310	8·3	1,249,931	340
501 and over	13	29·6	57,587,654	87·0	12,740	84·3	79,421,188	86·9	4,429,860	980
Total	**44**	**100·0**	**66,266,064**	**100·0**	**15,065**	**100·0**	**91,413,730**	**100·0**	**1,506,047**	**342**

Biscuit, Confectionery and Chewing Gum Industry.—In this group there were 294 establishments with a capitalization of $46,448,311, as contrasted with 44 establishments and a capitalization of $66,266,064 in the Rubber Industry. The size of establishment as well as the value of production per establishment is thus much smaller and the average number of persons employed per establishment is only 42 as compared with 342 for the rubber group. Also, there were only seven establishments employing 500 employees and over. Although these comprised but 2·4 p.c. of the number of establishments, yet they employed 41·7 p.c. of the capital and produced 37·4 p.c. of the value of production. The majority of the establishments had an average production of about $17,380 and an average capital of $14,607, while the seven largest establishments produced on an average $2,837,679 each and had an average capital of $2,769,053. Even in this case 54·3 p.c. of the products are produced by 4·8 p.c. of the establishments employing 58·2 p.c. of the capital and 53·3 p.c. of the number of employees, as shown in Table 24.

Table 24.—Biscuit, Confectionery and Chewing Gum Industry: Classification of Establishments According to the Number of Persons Employed, 1927

Number of Employees per Establishment	Establishments		Capital Employed		Employees		Value of Products		Average capital per establishment in each group	Average number of employees per establishment in each group
	Number	Per cent	Amount	Per cent	Number	Per cent	Amount	Per cent		
			$				$		$	
Fewer than 20	212	72·1	3,096,620	6·7	952	7·6	3,684,554	6·9	14,607	4
21- 50	32	10·9	2,888,276	6·2	1,014	8·1	4,037,965	7·6	90,259	32
51-200	36	12·2	13,434,535	28·9	3,867	31·0	16,556,850	31·2	373,182	107
201-500	7	2·4	7,645,506	16·5	2,091	16·7	8,985,766	16·9	1,092,215	299
500 and over	7	2·4	19,383,374	41·7	4,562	36·6	19,863,753	37·4	2,769,053	652
Total	**294**	**100·0**	**46,448,311**	**100,0**	**12,486**	**100·0**	**53,128,888**	**100·0**	**157,987**	**42**

Brewing Industry.—The typical establishment in the brewing industry is found in the group employing between 21 and 50 employees. About 40·0 p.c. of the establishments are in this group, and these employ 20·5 p.c. of the capital, 20·7 p.c. of the employees and produce

18·9 p.c. of the value of the products. Production, however, is concentrated in the larger establishments, but not to so great an extent as in the Rubber Industry. According to the figures shown in Table 25, 32·9 p.c. of the establishments employ 75·0 p.c. of the capital, 74·2 p.c. of the employees and produce 78·0 p.c. of the products. The average capital for the industry as a whole amounted to $854,221, while the capital of the largest establishment was over $5,000,000 and the average capital for the smallest group was $138,865. The six factories, comprising the largest group, employed 1,764 persons or 37·8 p.c. of all the employees engaged in the industry, while the same establishments manufactured 39·4 p.c. of the products; the average production per establishment being $3,384,521. The degree of mass production in this industry is shown by the figures for average production per establishment which amounted to $705,863 in 1927 as compared with an average gross product per establishment for all manufacturing industries of Canada of $149,350.

Table 25.—Brewing Industry: Classification of Establishments According to the Number of Persons Employed, 1927.

Number of Employees per Establishment	Establishments		Capital Employed		Employees		Value of Products		Average capital per establishment in each group	Average number of employees per establishment in each group
	Number	Per cent	Amount	Per cent	Number	Per cent	Amount	Per cent		
			$				$		$	
Fewer than 20	20	27·4	2,777,306	4·5	235	5·1	1,587,476	3·1	138,865	12
21–50	29	39·7	12,757,236	20·5	966	20·7	9,719,547	18·9	439,905	33
51–200	18	24·7	25,868,933	41·5	1,697	36·4	19,913,872	38·6	1,437,163	94
201 and over	6	8·2	20,954,642	33·5	1,764	37·8	20,307,129	39·4	3,492,440	294
Total	**73**	**100·0**	**62,358,117**	**100·0**	**4,662**	**100·0**	**51,528,024**	**100·0**	**854,221**	**64**

Fruit and Vegetable Canning Industry.—In this industry, the average size of establishment is much smaller than that of the other industries studied. The average capital for the whole industry is $126,451, while that of the largest group is only $348,367. Although the establishments are smaller, nevertheless production is still concentrated in a few of the larger establishments, as in the other industries; 17·6 p.c. of the establishments, in 1927 employed 48·1 p.c. of the capital, 46·5 p.c. of the employees and produced 56·0 p.c. of the value of production. According to Table 26, the average number of employees is 31, the lowest of all the industries under review, while the number of employees in the largest factory is a little over 200. This industry is necessarily carried on on a smaller scale, since most of the factories are located in the agricultural districts, the source of their raw materials. The typical industry employs on an average 10 persons and has an average capital of $30,000.

Table 26.—Fruit and Vegetable Canning Industry: Classification of Establishments according to the Number of Persons Employed, 1927

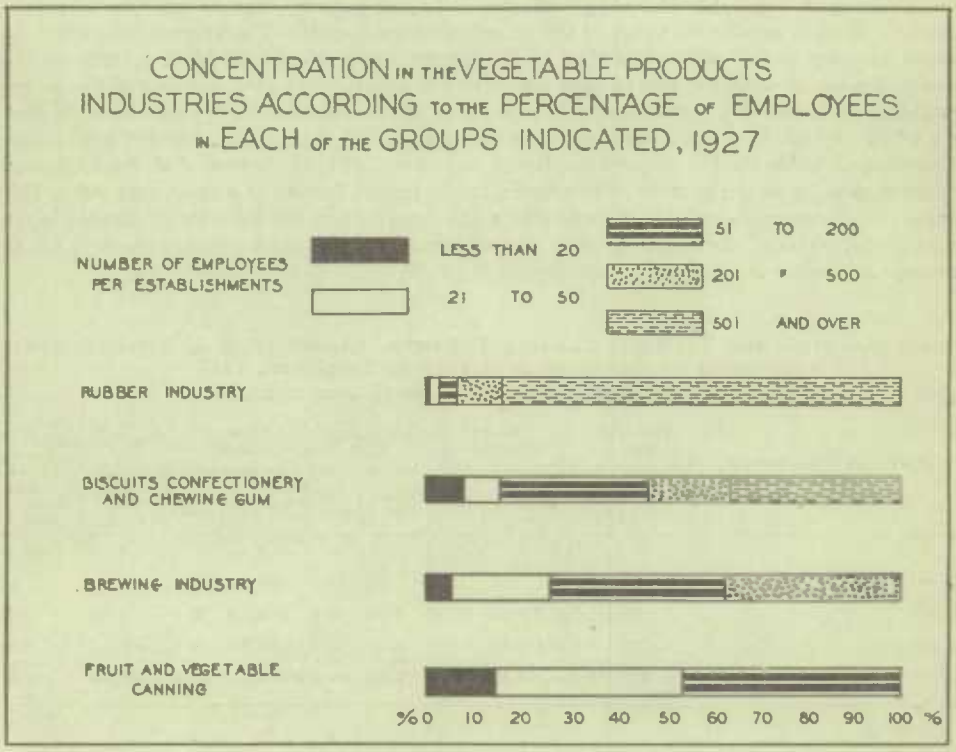
Number of Employees per Establishment	Establishments		Capital Employed		Employees		Value of Products		Average capital per establishment in each group	Average number of employees per establishment in each group
	Number	Per cent	Amount	Per cent	Number	Per cent	Amount	Per cent		
			$				$		$	
Fewer than 20	95	44·8	2,837,585	10·6	962	14·7	1,854,793	8·6	29,869	10
21–50	80	37·7	11,080,483	41·3	2,541	38·8	7,649,314	35·4	138,506	32
51 and over	37	17·5	12,889,562	48·1	3,054	46·5	12,118,964	56·0	348,367	83
Total	**212**	**100·0**	**26,807,630**	**100·0**	**6,557**	**100·0**	**21,623,071**	**100·0**	**126,451**	**31**

The Sugar Industry.—Figures similar to those in the last four tables cannot be published for the sugar refineries, since there are only one or two establishments in each group and the operation of individual establishments would thereby be disclosed. Large scale production exists in this industry to a greater degree than in any other of the vegetable products industries. There are no establishments employing less than 75 persons and the average for the largest group is 545. Also, the average capital for the whole industry is $6,254,890 and the average production of the largest firms amounted to over $12,000,000 each. The eight establishments had a production of $60,502,664 in 1927, being the fourth largest amount produced by any single industry of the whole vegetable products group.

Comparative Figures for Industries Studied.—Table 27 shows the number of establishments, and the average number of employees per establishment of each of the four industries studied. These figures and the accompanying chart illustrate the degree of concentration in each industry, as shown by the number of persons employed.

Table 27.—Comparative Statistics of the Number of Establishments and Average Number of Employees per Establishment of Certain Industries of the Vegetable Products Group, 1927, Classified According to the Number of Persons Employed.

Number of employees per establishment	Fewer than 20	21–50	51–200	201–500	500 and over	Total for the industry
Rubber Industries—						
Number of establishments	14	7	6	4	13	44
Average number of employees per establishment	10	36	96	340	980	342
Biscuits, Confectionery and Chewing Gum—						
Number of establishments	212	32	36	7	7	294
Average number of employees per establishment	4	32	107	299	652	42
Breweries—						
Number of establishments	20	29	18	5	1	73
Average number of employees per establishment	12	33	94	248	524	64
Fruit and Vegetable Canning, etc.—						
Number of establishments	95	80	36	1	.....	212
Average number of employees per establishment	10	32	79	206	.....	31



Physical Volume of Production.—An attempt has been made in Table 28 to measure the change in the volume of goods produced since 1917. The amount of production, as measured in money, does not show its volume, since the value of money does not remain constant but fluctuates from year to year. To ascertain the actual amount produced, the amount of the production shown in dollars has to be corrected for the changes in prices. At a time when prices are changing rapidly, the physical volume of production becomes of great importance in measuring the economic condition of an industry. This is an important but very intricate field of investigation, for in order to get the true volume of the commodities produced, account must be taken not only of the change in prices but also of the change in the proportion in which the goods are produced. Absolutely correct results are therefore impossible, yet tentative conclusions are better than none at all. The volume of the commodities produced by the vegetable products industries since 1917 has been estimated on the following plan: First, the gross value of production was expressed as a percentage of the amount produced in 1917. Next, a special unweighted index has been prepared of the chief products manufactured by the vegetable products industries, and this special index was reduced to a new relative with 1917 as a base. Finally the value of production, expressed as a percentage, was divided by the prices of commodities expressed as a percentage, the quotient being considered as the volume of physical production. This process will be made clearer on referring to the figures given in Table 28.

With the exception of the years 1920 and 1921, the results obtained seem to agree with the facts. As compared with the previous year, 1920 shows a drop of 6·9 p.c. in the volume of production, although the gross value recorded an increase of $77,355,910 and employment rose from 69,780 to 72,860. In 1921 the physical volume of produtcion rose to 106·7 p.c., quite contrary to expectations in view of the fact that the gross value fell by $201,127,756 and employment dropped to 61,497, a decrease of 11,363. The discrepancy for the two years is no doubt due in part to the fact that an unweighted index number was used in estimating the physical volume of production. From 1922, however, the figures are more in keeping with the other factors of production, the physical volume having gradually increased each year until in 1927 it stood at 139·8 p.c., of that of 1917.

Table 28.—Vegetable Products Industries: Physical Volume of Production, 1917-27

Year	Values		Prices		Index physical volume of production
	Gross value of production	Percentage relative to 1917	Index number principal commodities of vegetable products industries, fully or chiefly manufactured. 1913 = 100	Percentage relative to 1917	
	$				
1917	546,556,066	100·0	176·8	100·0	100·0
1918	597,822,775	109·4	208·1	117·7	92·9
1919	697,672,132	127·6	225·9	127·7	100·0
1920	775,028,042	141·8	269·3	152·3	93·1
1921	573,900,286	105·0	174·0	98·4	106·7
1922	537,535,801	98·4	155·2	87·8	112·1
1923	547,674,286	100·2	167·7	94·9	105·6
1924	585,945,602	107·2	168·7	95·4	112·4
1925	632,211,264	115·7	169·4	95·8	120·8
1926	658,320,716	120·4	165·5	93·6	128·6
1927	712,700,080	130·4	165·0	93·3	139·8

Table 29 shows the gross value of production corrected to the price changes in the principal commodities of the vegetable products industries. These figures are the same as these shown in Table 28, but are not reduced to a percentage relative to 1917.

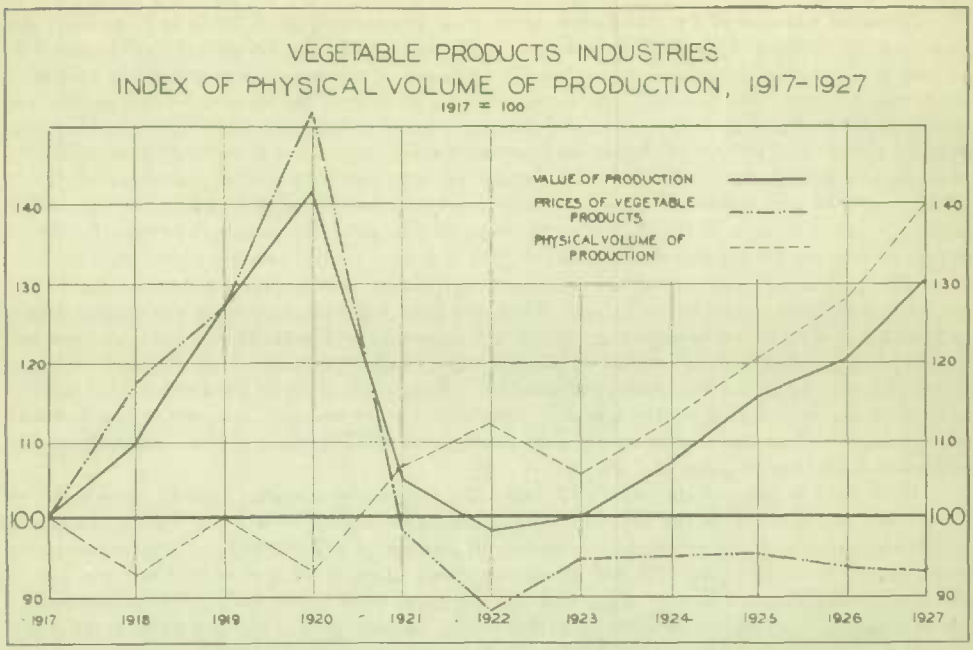


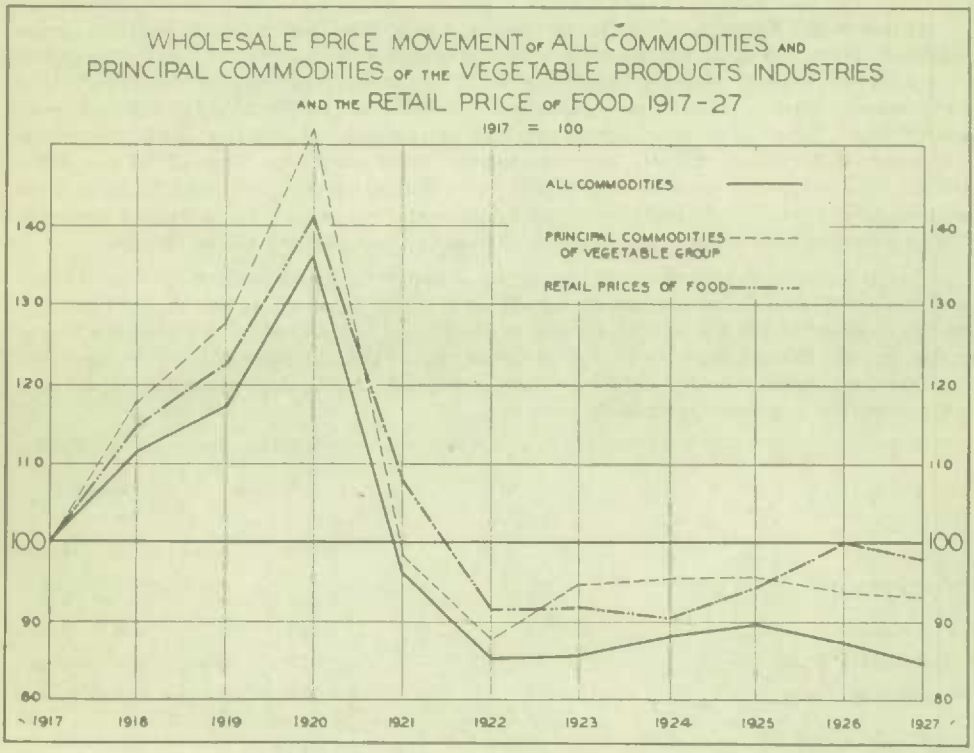
Table 29: Vegetable Products Industries: Gross Value of Production, 1917-27

Year	Gross value of production	Index number principal commodities of vegetable products industries fully or chiefly manufactured. 1917 = 100	Gross value of production corrected to price changes
	$		$
1917	546,556,066	100·0	546,556,066
1918	597,822,775	117·7	507,920,800
1919	697,672,132	127·7	546,336,846
1920	775,028,042	152·3	508,882,496
1921	573,900,286	98·4	583,232,000
1922	537,535,801	87·8	612,227,564
1923	547,674,286	94·9	577,106,750
1924	585,945,602	95·4	614,198,744
1925	632,211,264	95·8	659,928,251
1926	658,320,716	93·6	703,334,100
1927	712,700,080	93·3	763,880,043

Table 30 shows index numbers for the "wholesale prices of all commodities," "the cost of living," "the wholesale prices of the main commodities of the vegetable products group" and "the retail prices of food." For the eleven year period, the wholesale price of manufactured vegetable products dropped 6·7 p.c., compared with a drop of 15·1 p.c. for all commodities, while the cost of living rose by 16·0 p.c. and the retail price of food dropped 2 p.c. The cost of living increased more rapidly than the wholesale price of all commodities and has not dropped as fast, the latter showing a decrease of 15·1 p.c. and the former an increase of 16·0 p.c. However, the wholesale price of manufactured vegetable products and the retail price of food fluctuated more in harmony, the former dropping 6·7 p.c. and the latter 2 p.c.

Table 30.—Index Numbers of Wholesale Prices of "All Commodities," "Principal Commodities of the Vegetable Products Industries," "Cost of Living" and the "Retail Prices of Food."

Year	Index number all commodities		Index number cost of living		Index number principal commodities of vegetable products industries, fully or chiefly manufactured.		Index number retail prices of food	
	1913=100	1917=100	1913=100	1917=100	1913=100	1917=100	1913=100	1917=100
1917	178·5	100·0	131	100·0	176·8	100·0	151	100·0
1918	199·0	111·5	149	113·7	208·1	117·7	173	114·6
1919	209·2	117·2	164	125·2	225·9	127·7	185	122·5
1920	243·5	136·4	190	145·0	269·3	152·3	213	141·1
1921	171·8	96·2	167	127·5	174·0	98·4	163	107·9
1922	152·0	85·2	153	116·8	155·2	87·8	138	91·4
1923	153·0	85·7	153	116·8	167·7	94·9	139	92·1
1924	155·2	87·0	150	114·5	168·7	95·4	137	90·7
1925	160·3	89·8	152	116·0	169·4	95·8	143	94·7
1926	156·2	87·5	153	116·8	165·5	93·6	151	100·0
1927	151·6	84·9	152	116·0	165·0	93·3	148	98·0



Index numbers of security prices are presented in Table 31 for the purpose of comparing the appreciation in value of the stocks of some of the industries producing vegetable products with that of industrial securities in general. Prior to 1927 a trader's index composed of 31 industrial stocks was issued by the Bureau and in keeping with the current requirements the index numbers of security prices have been revised with 1926 as the base year at 100. The new index numbers of the general industrial stocks contain 112 stocks, that of the milling industry 5 stocks and that of the food and allied products 21 stocks. The food and allied products securities experienced the biggest advance since 1919, having increased by 85·0 p.c., while the milling securities advanced 55·3 p.c., as compared with an increase of 68·0 for all industrial securities. The salient feature of this upward movement in the prices of securities is the rapid rise in the food and allied products securities since 1924.

Table 31.—Index Numbers of Security Prices, Weighted, 1919-27

—	Index Number Milling Securities	Index Number Food and Allied Products Seucrities	Index Number General Industrial Securities
No. of Stocks:	4	6	31
1919	79·5	44·1	55·5
1920	74·5	42·9	63·7
1921	61·7	31·3	50·4
1922	67·1	35·9	55·4
1923	72·4	41·9	61·6
1924	72·1	48·0	62·7
1925	92·2	79·4	77·4
1926	100·0	100·0	100·0
1927	134·8[1]	129·1[2]	123·5[3]

[1] 5 stocks included in 1927.
[2] 21 stocks included in 1927.
[3] 112 stocks included in 1927.

Imports and Exports.—Imports and exports of agricultural and vegetable products, except chemicals, fibres and wood, are shown by classes in Tables 32 and 33 for the fiscal years ending March 31, 1918 to 1928. Imports rose from $148,927,041 in 1917-18 to $238,185,560 in 1927-28 or an increase of 60 p.c., while exports decreased from $586,941,130 to $555,110,598, a drop of $31,830,532. The value of miscellaneous vegetable and agricultural products (chiefly raw materials) exported, fluctuated violently from year to year, due in part to the boom of the war period and the subsequent depression of 1921, as well as the fluctuating demand abroad for agricultural and vegetable products. Exports of manufactured products, however, had a steadier tendency, having increased from about $142,000,000 in 1917-18 to about $144,000,000 in 1927-28.

As the following figures show, the proportion of imports and exports from the United Kingdom and the United States has appreciably changed. The imports from the United Kingdom, which amounted to 4·6 p.c. in 1917-18, rose to 21·5 p.c. in 1927-28, while that from the United States dropped from 57·3 p.c. to 42·9 p.c. On the other hand, the percentage of the exports to both the United Kingdom and the United States dropped considerably, while that exported to other countries increased accordingly.

—	Imports		Exports	
	1917-18	1927-28	1917-18	1927-28
	p.c.	p.c.	p.c.	p.c.
United Kingdom	4·6	21·5	70·0	55·9
United States	57·3	42·9	18·0	10·1
Other countries	38·1	35·6	12·0	34·0

Details of exports and imports for individual products will be found in the report for each industry.

Imports of agricultural and vegetable products, except chemicals, fibres and wood, are shown in Table 34, by main classes for the fiscal years ended March 31, 1927 and 1928, together with the rates and amounts of duty collected under the general, preferential and treaty tariffs. Of the total amount imported in 1927, 35 p.c., composed mostly of raw materials, were admitted free, while on the dutiable imports $46,423,231 was collected at an average rate of duty of 30·2 p.c. Tobacco and its products paid the highest average rate of duty, 62·4 p.c. with alcoholic beverages next with 54·1 p.c. However, the greatest revenue was produced by alcoholic beverages, followed by sugar and its products, these two items producing about 70 p.c. of the revenue collected on all agricultural and vegetable products.

Table 32.—Imports of Agricultural and Vegetable Products (Except Chemicals, Fibres and Wood), by Main Groups, for the Fiscal Years ended March 31, 1918–1928

Main Groups	1917-18	1918-19	1919-20	1920-21	1921-22	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28
	$	$	$	$	$	$	$	$	$	$	$
Milled products	1,413,327	2,305,629	1,337,860	847,761	664,469	685,895	867,365	1,017,079	834,628	824,765	1,033,055
Prepared food and bakery products	489,244	434,939	765,152	1,105,679	929,096	821,839	880,334	983,288	1,166,671	1,315,623	1,404,393
Vegetable and vegetable products	4,977,143	4,225,318	6,097,394	6,068,245	4,889,851	4,904,734	5,479,700	6,030,797	6,038,189	6,594,722	8,175,549
Cocoa and chocolate	3,008,427	3,783,426	7,626,745	3,376,661	3,192,897	2,989,002	2,707,301	2,187,674	3,344,402	3,420,950	4,788,894
Coffee and chicory	2,122,058	1,865,612	5,077,103	4,284,500	3,491,811	3,584,009	3,730,722	4,927,825	5,490,701	6,130,001	6,210,107
Spices	821,575	818,620	1,130,902	1,275,076	1,219,832	1,180,265	1,193,429	1,370,684	1,431,886	1,354,733	1,487,515
Sugar and its products	39,508,543	39,568,991	73,618,354	86,070,230	44,440,911	39,611,856	52,807,551	42,367,504	36,593,953	40,486,316	38,821,678
Alcoholic beverages	4,065,728	1,860,963	9,152,339	34,646,207	24,524,202	20,935,298	21,486,439	19,123,629	25,254,073	29,312,315	45,900,187
Rubber and its products	13,017,256	12,315,711	18,059,436	15,480,960	7,142,258	9,910,837	12,420,973	13,977,933	37,182,858	27,377,947	26,671,064
Tobacco and its products	7,875,796	11,815,350	14,673,550	14,356,294	9,947,903	7,089,461	8,404,771	7,014,539	7,525,476	7,602,013	8,201,116
Miscellaneous vegetable and agricultural products (chiefly raw materials)	71,627,944	78,500,506	104,307,313	91,919,497	72,222,293	69,950,588	76,490,100	74,584,887	78,554,594	88,678,736	95,492,002
	148,927,041	157,495,065	241,846,147	259,431,110	172,665,523	161,669,784	186,468,685	173,585,839	203,417,431	213,098,121	238,185,560
United Kingdom	6,916,127	2,823,002	17,004,533	38,724,082	27,950,425	26,666,163	28,602,525	28,265,980	34,613,364	38,254,029	51,133,838
United States	85,343,585	103,913,573	142,294,388	119,614,933	84,803,204	73,035,162	81,368,503	76,561,849	98,495,849	97,104,543	102,209,033
Other countries	56,667,329	50,758,490	82,547,226	101,092,095	59,911,894	61,968,459	76,497,657	68,758,010	70,308,218	77,739,549	84,842,689
	148,927,041	157,495,065	241,846,147	259,431,110	172,665,523	161,669,784	186,468,685	173,585,839	203,417,431	213,098,121	238,185,560

Table 33.—Exports of Canadian Agricultural and Vegetable Products (Except Chemicals, Fibres and Wood), by Main Groups for the Fiscal Years, ended March 31, 1918-1928

	$	$	$	$	$	$	$	$	$	$	$
Milled Products	104,017,591	107,445,723	104,793,347	70,728,271	57,265,926	64,045,112	68,066,304	78,318,752	76,131,574	72,464,181	64,504,395
Prepared foods and bakery products	2,035,821	5,567,174	1,778,916	1,296,483	1,142,711	613,036	897,605	1,359,419	1,882,448	2,100,327	2,260,599
Vegetables and vegetable products	19,111,996	13,015,499	12,026,783	10,983,210	4,399,463	3,520,307	5,144,543	6,050,137	12,201,585	12,512,091	10,631,983
Sugar and its products	10,080,861	3,207,549	30,695,005	15,136,525	11,621,457	20,609,316	13,019,043	9,061,074	21,443,948	16,768,728	8,407,424
Alcoholic beverages	2,121,052	1,960,923	4,683,271	3,207,632	1,790,249	5,906,326	14,854,175	16,225,533	21,207,777	24,838,053	27,287,137
Rubber and its products	2,911,505	5,629,590	10,069,963	10,839,528	4,061,809	6,932,901	9,211,238	11,358,456	20,726,859	26,695,503	28,625,951
Tobacco and its products	1,682,357	5,394,535	3,688,181	210,844	259,629	367,114	525,841	879,369	1,180,540	2,726,347	2,302,601
Miscellaneous vegetable and agricultural products (chiefly raw materials)	444,979,947	146,065,675	248,084,669	369,737,951	237,037,719	305,765,980	319,213,401	320,046,137	451,283,941	416,888,932	411,090,508
	586,941,130	288,286,668	415,820,135	482,140,444	317,578,963	407,760,092	430,932,150	443,298,877	606,058,672	574,994,162	555,110,598
United Kingdom	410,071,031	172,727,439	249,409,394	141,169,556	196,199,365	268,828,862	244,838,591	264,629,910	357,051,044	330,070,229	310,210,731
United States	105,663,853	35,973,230	55,735,692	146,539,883	47,587,209	41,891,873	51,337,733	42,587,129	65,964,214	59,956,933	56,099,402
Other countries	71,206,246	79,585,999	110,675,049	194,431,005	73,792,389	97,039,357	134,755,826	136,081,838	183,043,414	184,967,000	188,800,465
	586,941,130	288,286,668	415,820,135	482,140,444	317,578,963	407,760,092	430,932,150	443,298,877	606,058,672	574,994,162	555,110,598

Table 34 —Imports of Agricultural and Vegetable Products (Except Chemicals, Fibres and Wood), under the General, Preferential and Treaty Tariffs and the Duty Collected, for the Fiscal Years Ended March 31, 1927 and 1928

Main Groups	Dutiable	Free	Total	Duty collected	Average rate of duty on dutiable imports	Under General Tariff		Average rate of duty	Under Preferential Tariff		Average rate of duty	Under Treaty Tariffs		Average rate of duty
						Amount	Duty collected		Amount	Duty collected		Amount	Duty collected	
	$	$	$	$	p.c.	$	$	p.c.	$	$	p.c.	$	$	p.c.
1926–27														
Milled products	818,335	6,430	824,765	75,560	9·2	805,055	73,542	9·1	13,126	1,995	15·2	154	23	14·9
Prepared foods and bakery products	1,207,988	107,635	1,315,623	270,163	22·4	860,744	210,677	24·5	303,864	52,349	17·2	43,380	7,137	16·5
Vegetables and vegetable products	6,562,594	32,128	6,594,722	1,608,146	25·4	5,746,101	1,529,192	26·6	332,531	74,046	22·3	483,962	64,908	13·4
Cocoa and chocolate	2,191,402	1,229,548	3,420,950	259,477	11·8	2,104,318	240,579	11·4	48,428	10,311	21·3	38,656	8,587	22·2
Coffee and chicory	4,202,811	1,927,190	6,130,001	541,799	12·9	4,166,938	538,276	12·9	35,873	3,523	19·8	.....	.....	.....
Spices	592,395	762,338	1,354,733	97,801	16·5	214,170	38,959	18·2	372,569	57,681	15·5	5,656	1,161	20·5
Sugar and its products	38,712,745	1,773,571	40,486,316	10,640,774	27·5	16,979,133	8,595,259	50·6	21,651,604	2,016,697	9·3	82,008	28,818	35·1
Alcoholic beverages	29,312,315	.....	29,312,315	16,422,608	56·0	24,107,271	12,391,397	51·4	2,631,793	1,370,887	52·1	2,573,251	2,660,324	103·4
Rubber and its products	3,111,983	24,265,964	27,377,947	859,333	27·6	2,511,283	758,847	30·2	567,948	92,928	16·4	32,752	7,558	23·1
Tobacco and its products	1,128,846	6,473,167	7,602,013	717,046	63·5	1,128,846	717,046	63·5	.....	.....	.....	.....	.....	.....
Miscellaneous vegetable and agricultural products (chiefly raw material)	45,521,183	43,157,553	88,678,736	9,008,000	19·8	29,671,662	6,354,966	21·4	12,817,974	2,260,011	17·6	3,031,547	393,023	13·0
Total	**133,362,597**	**79,735,524**	**213,098,121**	**40,560,707**	**30·4**	**88,295,521**	**31,448,740**	**35·6**	**38,775,710**	**5,940,428**	**15·3**	**6,291,366**	**3,171,539**	**50·4**
1927–28														
Milled products	1,029,425	3,630	1,033,055	98,999	9·6	991,162	91,810	9·3	38,168	7,176	18·8	95	13	13·7
Prepared foods and bakery products	1,253,978	150,415	1,404,393	278,017	22·2	876,445	212,368	24·2	339,902	58,287	17·2	37,631	7,362	19·6
Vegetables and vegetable products	8,135,212	40,337	8,175,549	2,064,389	25·4	7,142,353	1,895,779	26·5	369,258	82,088	22·2	623,601	86,522	13·9
Cocoa and chocolate	3,537,213	1,251,681	4,788,894	348,108	9·8	2,836,751	266,567	9·4	15,325	3,085	20·1	685,137	78,456	11·5
Coffee and chicory	4,124,739	2,085,368	6,210,107	603,103	14·6	4,085,866	598,685	14·7	38,873	4,418	11·4	.....	.....	.....
Spices	593,755	893,760	1,487,515	100,485	16·9	221,783	41,770	18·8	364,563	57,324	15·7	7,409	1,391	18·8
Sugar and its products	36,477,294	2,344,384	38,821,678	6,677,272	18·3	9,566,512	4,301,014	45·0	26,782,105	2,331,932	8·7	128,677	44,326	34·4
Alcoholic beverages	45,900,187	.....	45,900,187	24,818,083	54·1	36,791,301	18,897,647	51·4	4,139,101	1,984,429	47·9	4,969,785	3,936,007	79·2
Rubber and its products	3,433,450	23,237,614	26,671,064	953,421	27·8	2,771,256	841,188	30·4	617,275	101,810	16·5	44,919	10,423	23·2
Tobacco and its products	1,182,236	7,018,880	8,201,116	737,905	62·4	1,182,236	737,905	62·4	.....	.....	.....	.....	.....	.....
Miscellaneous vegetable and agricultural products (chiefly raw materials)	48,095,247	47,396,755	95,492,002	9,743,449	20·3	31,532,793	6,894,654	21·9	13,018,120	2,412,259	18·5	3,544,334	436,536	12·3
Total	**153,762,738**	**84,422,824**	**238,185,562**	**46,423,231**	**30·2**	**97,998,458**	**34,779,387**	**35·5**	**45,722,690**	**7,042,808**	**15·4**	**10,041,588**	**4,601,036**	**45·8**

Table 35.—Alphabetical List of Products Manufactured by the Industries Classified under the Vegetable Products Group, 1927

—	Unit of measure	Quantity	Value of quantity	Total value
A				
Alcohol, denatured	Proof gallon	238,921	188,516	188,516
Alcohol, non-potable	"	2,458,987	1,181,196	1,181,196
Almond paste	Pound	102,390	50,571	50,571
Almonds, ground	.....	.....	.....	2,700
Apple butter	Pound	77,761	8,178	8,178
Apple chop and waste	"	1,102,553	32,371	32,371
Apples, evaporated	"	3,030,712	317,587	317,587
Aprons, rubber, baby pants, etc	.....	.....	.....	326,453
Atomizers	.....	.....	.....	77,477
B				
Bags, shopping	.....	.....	.....	11,064
Balls, golf and other	.....	.....	.....	199,692
Bands, rubber	.....	.....	.....	103,442
Barley, pot and pearl	.....	.....	.....	145,654
Bathing caps	.....	.....	.....	2,825
Beer, ale, stout and porter (full strength)	Gallon	53,976,181	49,664,596	49,664,596
Beer, ale, stout and porter (under full strength)	"	935,847	846,495	846,495
Beer, ginger and root	.....	.....	.....	39,372
Beet pulp	Ton	16,896	256,650	256,650
Belting, rubber	Pound	4,885,422	2,322,421	2,322,421
Belts	.....	.....	.....	17,732
Belts, fan	.....	.....	.....	63,650
Benzine	.....	.....	.....	4,620
Bibs, infant	.....	.....	.....	1,127
Biscuits, plain and fancy	Ton	50,813	16,465,732	16,465,732
Bran	"	285,682	7,485,281	7,485,281
Brassieres	.....	.....	.....	3,597
Bread	Pound	785,763,344	54,386,305	54,386,305
Breakfast foods (See Cereals).				
Buns	.....	.....	.....	2,565,439
Butter	.....	57,201	23,382	23,382
C				
Catsup (See Sauces).				
Cement, rubber	Gallon	182,754	220,830	220,830
Cereals	.....	.....	.....	7,205,376
Chemical products, n.o.s	.....	.....	.....	34,750
Chewing gum (included with confectionery)				
Chicken, canned	Case	6,917	75,653	75,653
Chicory, roasted	Pound	336,692	28,280	28,280
Chocolate	"	10,220,059	2,313,723	2,313,723
Cider	.....	.....	.....	128,343
Cigarettes	M	3,613,194	36,281,937	36,281,937
Cigars	M	171,161	9,414,582	9,414,582
Clothing, rubber	.....	.....	.....	426,334
Cocoa	Pound	2,625,924	896,291	896,291
Cocoa butter	"	1,205,718	464,799	464,799
Cocoanut, prepared and desiccated	.....	2,884,196	481,324	481,324
Cocoanut parings and shells	.....	.....	.....	24,551
Coffee, roasted	Pound	16,421,307	6,874,167	6,874,167
Cones, ice cream	M	152,897	440,143	440,143
Confectionery, chocolate	Pound	61,176,370	18,256,457	18,256,457
Confectionery, sugar	"	44,872,153	9,742,125	9,742,125
Confectionery, n.s (including chewing gum)	"	11,354,883	5,196,445	5,196,445
Connections, rubber	.....	.....	.....	6,085
Coomings, malt	.....	.....	.....	6,326
Corn, cracked	Pound	47,388,216	1,010,899	1,010,899
Covers and vents, battery	.....	.....	.....	48,325
Cream	Pound	2,735	6,564	6,564
Cream of tartar, refined	"	565,496	154,625	154,625
D				
Dates, stuffed	.....	.....	.....	15,000
Diaphragms and rings, rubber	.....	.....	.....	8,676
Dipped goods, rubber	.....	.....	.....	136,569
Distillers' grains	.....	.....	.....	653,027
Dressing, salad	Gallon	30,698	100,969	100,969
Drug sundries	.....	.....	.....	596,538
E				
Egg substitute	Pound	181,386	136,468	136,468
Erasers	.....	.....	.....	39,697
Extracts, flavouring and colours	.....	.....	.....	657,566
F				
Feed, chopped	.....	.....	.....	33,345,468
Fillings, pie and cake	Pound	47,470	16,184	16,184
Flour, barley	"	1,344,800	33,372	33,372
Flour, buckwheat	"	3,305,884	134,427	134,427
Flour, corn	"	2,331,738	60,728	60,728
Flour, graham and whole wheat	.....	.....	.....	44,797
Flour, pea	Pound	6,000	900	900
Flour, prepared and self-raising	.....	.....	.....	322,937
Flour, wheat, fall or winter	Barrel	2,207,734	14,105,178	14,105,178
Flour, wheat, spring	"	16,019,345	107,407,265	107,407,265
Flour, wheat, blended	.....	560,253	3,598,410	3,598,410
Flour and meal, rye	Pound	1,863,103	55,969	55,969
Flour, low grade or feed	Ton	28,291	1,283,858	1,283,858

Table 35.—Alphabetical List of Products Manufactured by the Industries Classified under the Vegetable Products Group, 1927—Continued

——	Unit of measure	Quantity	Value of quantity	Total value
F				
Foods, infant's and dietetic	.....	.....	.....	167,543
Foods and remedies—stock and poultry	.....	.....	.....	2,114,063
Footwear, rubber boots, knee and hip	Pair	1,365,891	3,873,355	3,873,355
Footwear, rubber—lumbermen's boots	"	1,792,046	4,229,231	4,229,231
Footwear, rubber—overshoes, all kinds	"	8,261,168	11,168,448	11,168,448
Footwear, rubber—tennis	"	8,375,787	8,357,578	8,357,578
Fruits, canned	.....	.....	.....	2,256,201
Apples	Case	108,080	285,463	.....
Cherries	"	39,361	190,517	.....
Peaches	"	77,671	315,495	.....
Pears	"	145,193	476,764	.....
Plums	"	42,274	107,663	.....
Raspberries	"	56,347	294,603	.....
Strawberries	"	50,138	269,687	.....
All other	"	78,258	316,009	.....
Fruits preserved or crushed	.....	.....	.....	415,972
Fruits, glacés	Pound	878,134	272,177	272,177
Fruit butter	"	310,410	32,258	32,258
Fruit juices and extracts	Gallon	531,622	505,058	505,058
Fruit peel, candied	Pound	1,263,877	246,070	246,070
Fruit pulp	"	171,400	10,284	10,284
G				
Gaskets	.....	.....	.....	5,739
Glucose	Pound	40,621,391	1,420,458	1,420,458
Gluten	"	36,680,568	627,700	627,700
Grain offal	Ton	70,309	1,462,170	1,462,170
Grape juice	Gallon	69,964	121,034	121,034
Grits, buckwheat	Pound	200,000	13,500	13,500
H				
Heel cushions and liners	.....	.....	.....	2,573
Heels, rubber and composition	Pair	18,521,110	1,497,428	1,497,428
Hockey pucks	.....	.....	.....	4,645
Horse radish	Pound	108,950	25,116	25,116
Hose, rubber	"	4,214,920	1,801,616	1,801,616
I				
Ice	.....	.....	.....	4,677
Ice cream	Gallon	2,162,815	3,203,108	3,203,108
Icings and icing paste	Pound	236,085	23,970	23,970
Insulators, rubber	.....	.....	.....	25,092
J				
Jams	Pound	40,540,137	4,978,615	4,978,615
Jams, jellies and marmalades	"	2,237,342	281,185	281,185
Jars, battery	.....	.....	.....	202,037
L				
Leather goods, all kinds	.....	.....	.....	10,000
M				
Macaroni	Pound	322,698	57,972	57,972
Macaroni, vermicelli, spaghetti, etc	"	19,104,677	1,489,918	1,489,918
Macaroni, canned	Case	72,227	224,708	224,708
Malt	Bushel	3,677,113	3,800,107	3,800,107
Malt extract	Pound	7,533,088	629,356	636,944
Malt, prepared and malt flour	"	1,152,508	119,084	119,084
Malt sprouts	Ton	850	17,701	17,701
Maple butter	Pound	34,250	8,208	8,208
Marmalades	"	6,439,546	739,136	739,136
Mats and matting, rubber	"	2,042,685	374,219	374,219
Meal, alfalfa	.....	.....	.....	6,125
Meal, corn	Pound	50,825,812	1,438,817	1,438,817
Meal, flax	"	24,800	1,300	1,300
Meal, oil cake	Ton	35,349	1,567,321	1,567,321
Meal, pea	Pound	230,000	5,800	5,800
Meal, rice	Ton	2,332	66,989	66,989
Meats, jellied	.....	.....	.....	2,190
Milk	Pound	52,320	25,920	25,920
Mince meat	"	2,106,152	222,864	222,864
Molasses	"	42,768,494	283,004	325,941
Mustard, dry	"	265,944	67,245	67,245
Mustard, prepared	Gallon	287,594	283,882	283,882
O				
Oatmeal	Pound	9,968,490	349,302	349,302
Oats, rolled	"	110,754,330	5,591,765	5,591,765
Oil, corn, crude	"	3,310,042	277,545	277,545
Oil, corn, refined	"	1,843,068	281,805	281,805
Oil, fusel	Proof Gallon	5,516	5,516	5,516
Oils, hydrogenated	Gallon	98,882	88,994	88,994
Oil, linseed, raw	Imp. Gallon	3,112,520	2,535,805	2,535,805
Oil, linseed, boiled	"	1,062,985	868,224	868,224
Oil, olive	Gallon	5,459	56,595	56,595
Oil, special, refined	"	592,955	520,301	520,301
Oil cake	Ton	5,988	258,669	258,669
Oils, stearine	Pound	2,694,344	276,877	276,877
Olives	Gallon	210,226	575,941	575,941

Table 35.—Alphabetical List of Products Manufactured by the Industries Classified under the Vegetable Products Group, 1927—Continued

—	Unit of Measure	Quantity	Value of Quantity	Total value
P				
Packing, asbestos	pound	71,151	22,678	22,678
Packing, rubber, sheet	"	322,162	87,753	87,753
Packing, rubber, other than sheet	"	11,495	4,481	4,481
Pads, horseshoe	.....	.....	.....	29,222
Pants, baby, rubber	.....	.....	.....	32,112
Paste, flour	pound	1,066,040	19,864	19,864
Patches, rubber	.....	.....	.....	42,875
Peanut butter	pound	3,333,873	592,292	592,292
Peanuts, roasted and salted	"	3,440,663	810,292	810,292
Peas, split	"	1,544,000	57,530	57,530
Pickles, all kinds	gallon	1,272,745	1,927,172	1,927,172
Pies, cake and pastry	.....	.....	.....	12,267,431
Plumbers' supplies, rubber	.....	.....	.....	5,600
Popcorn	pound	1,009,996	251,736	251,736
Potash and mother liquor	.....	.....	.....	23,264
Powder, baking	pound	2,900,012	486,523	486,523
Powders, custard	"	52,567	9,862	9,862
Powders, ice cream	"	7,239	1,741	1,741
Powders, jelly	"	1,992,000	412,375	412,375
Powders, pudding	"	180,324	36,732	36,732
Powders, prepared, all kinds	.....	.....	.....	32,966
Puddings	.....	.....	.....	64,186
Pulp, fruit and vegetable	"	171,400	10,284	94,176
Pyridine	gallon	10,559	10,459	10,459
R				
Repair gums and fabrics	pound	1,712,870	841,990	841,990
Rice, cleaned, etc	ton	16,863	1,919,094	1,919,094
Rings, rubber (fruit jar)	pound	415,040	124,903	124,903
Roll cavering, wringer	"	18,391	6,689	6,689
Roll covering, other	"	260,048	220,882	220,882
Rubber, hard	.....	.....	.....	257,800
Rubber, cushion	.....	.....	.....	3,359
Rubber, proofing	.....	.....	.....	26,777
Rubber, reclaimed	.....	.....	.....	380,997
Rubber, specialties	.....	.....	.....	31,855
Rubber moulded goods	pound	825,443	403,041	403,041
Rubber stocks, uncured	.....	.....	.....	38,268
S				
Sauces, catsup and relishes	gallon	1,524,696	2,504,130	2,504,130
Sauerkraut	pound	2,846,119	107,758	107,758
Screenings, from malt mills	bushel	177,747	72,186	72,186
Seats, chair	.....	.....	.....	11,323
Sheeting, rubber	yard	188,728	94,830	103,040
Shields, dress	gross	1,701	68,040	68,040
Shortening and lard compound	pound	20,442,647	2,479,767	2,479,767
Shorts or middlings (flour mills)	ton	395,754	11,915,284	11,915,284
Soleing, rubber	.....	.....	.....	15,514
Soleing, rubber and composition	pair	2,185,615	704,177	704,177
Soup, canned	case	304,509	1,014,086	1,014,086
Spices, mixed, whole or ground	pound	4,018,894	1,412,654	1,412,654
Starch, corn, edible	"	17,802,434	919,333	919,333
Starch, corn, laundry	"	9,014,869	461,174	461,174
Starch, potato	"	419,587	20,570	20,570
Straps, deckle	.....	.....	.....	5,401
Sugar butter	pound	650,411	70,521	70,521
Sugar, granulated	"	872,053,919	53,808,350	53,808,350
Sugar, grape	"	4,831,359	154,784	154,784
Sugar, invert	.....	.....	.....	15,691
Sugar, maple	pound	4,667,457	830,018	830,018
Sugar, soft	"	107,079,213	5,910,074	5,910,074
Suspenders, supporters, etc	dozen	6,558	12,596	12,596
Swatters	.....	.....	.....	3,268
Syrups	pound	5,867,721	219,142	872,103
Syrups and fruit juices	.....	.....	.....	6,050
Syrup, corn	pound	17,233,966	761,047	761,047
Syrup, maple	"	2,073,628	391,358	391,358
T				
Tape, friction and splicing compound	pound	637,630	219,685	219,685
Tea, blended	"	24,641,914	14,123,783	14,123,783
Tiling and flooring, rubber	"	584,068	170,862	170,862
Tires, bicycle	number	160,705	175,572	175,572
Tires, carriage	pound	375,205	147,936	147,936
Tires, motor cycle	number	37,658	261,491	261,491
Tires and tubes, balloon—casings	"	1,966,031	19,136,283	19,136,283
Tires and tubes, balloon—inner tubes	"	1,876,994	3,647,373	3,647,373
Tires and tubes, pneumatic—casings	"	1,893,284	21,571,466	21,571,466
Tires and tubes, pneumatic—inner tubes	"	2,398,759	4,655,571	4,655,571
Tires, solid	"	21,471	859,552	859,552
Tires, solid, all other	pound	57,113	16,135	16,135
Tire kits	.....	.....	.....	93,970

Table 35.—Alphabetical List of Products Manufactured by the Industries Classified under the Vegetable Products Group, 1927—Concluded

—	Unit of measure	Quantity	Value of Quantity	Total value
T				
Tobacco, chewing, cut and twist	pound	376,608	416,314	416,314
Tobacco, chewing, plug	"	5,318,255	4,713,576	4,713,576
Tobacco smoking, cut and twist	"	12,476,711	14,522,758	14,522,758
Tobacco, smoking, leaf	"	4,891,496	1,703,633	1,703,633
Tobacco, smoking, plug	"	2,836,181	2,940,378	2,940,378
Tobacco, snuff	"	887,220	1,112,134	1,112,134
Tobacco, stems and cuttings	.....	.....	.....	18,116
Tubes, bicycle	number	150,149	84,408	84,408
Tubes, motor cycle	"	20,164	31,155	31,155
Tubing, rubber	.....	.....	.....	104,093
V				
Valves, gaskets and washers	.....	.....	.....	36,370
Vegetables, canned	.....	.....	.....	11,694,404
Beans, baked	cases	1,071,421	3,193,151	.....
Beans, green or wax	"	131,205	387,897	.....
Corn	"	593,353	1,477,444	.....
Peas	"	984,079	2,460,859	.....
Tomatoes	"	1,562,682	3,789,909	.....
All other	"	134,830	385,144	.....
Vinegar	gallon	4,416,122	1,429,782	1,429,782
W				
Wafers, ice cream	pound	22,170	11,085	11,085
Waters, aerated	.....	.....	.....	612,591
Water, distilled	.....	.....	.....	17,086
Webbing, elastic and non-elastic	.....	.....	.....	326,054
Whiskies and other potable spirits	proof gallon	9,025,180	23,963,227	23,963,227
Wines	gallon	2,736,398	2,411,143	2,411,143
Y				
Yeast and yeast food	pound	8,241,750	1,058,245	1,058,245
All other products, not specified	.....	.....	.....	2,368,792
Total	.....	.....	.....	712,700,080

NOTE.—The above list includes only the products of the industries included in the vegetable products group. In some cases, therefore, the amount shown is not the total production, since some of the products listed are also produced in industries grouped under other classifications.

PART II

CHAPTER II

FLOUR AND CEREALS

THE MILLING INDUSTRY

The flour milling industry in Canada had its humble beginnings in the domestic system of manufacture when every farmer ground his own grain for the use of his family. With the rise of the factory system of production, however, the farmer began to grind his grain at the village mill and from these small beginnings arose the large and important industry that we know to-day, supplying not only the needs of Canada, but exporting annually about 10,000,000 barrels of flour to all parts of the world.

The development of this industry is a good example of the transformation made in every branch of industry by the industrial revolution which began in Canada about the time of Confederation. Although the number of establishments decreased from 2,407 in 1881 to 1,315 in 1927 and the number of employees remained practically the same, yet the value of production increased more than fourfold. This result was attained through the ever increasing use of machinery, as the increase in invested capital from $13,857,923 to $62,062,013 shows. Owing to the change in the general level of prices since 1881, absolute changes in capital or volume of production cannot be ascertained, yet the following facts give a good indication of the development and the degree of mass production which exists in this industry to-day. In 1927, twenty of the largest establishments had a capital of $40,561,970; this was almost three times the capital of all the mills operating in 1881. And thirty-one of the largest mills had a total gross production valued at $137,314,762—more than three times the production of the entire country in 1881.

HISTORICAL SURVEY[1]

The French Regime.—Flour milling in Canada dates back to the very earliest days. The first permanent Canadian settlement was made by the French at Port Royal (now Annapolis, N.S.) in 1605. In this year and at this spot was grown the first wheat ever raised in America; and here in the same year was erected the first water wheel to turn a millstone for the grinding of wheat on the North American Continent.[2]

Other mills were constructed, with the growth of settlement in New France. Under the system of seigneurial tenure, the seigneur was given the right to build a mill within his domain to which his dependents were obliged to bring their grain to be made into flour. For the use of the mill the seigneur was entitled to a toll of one-fourteenth. If such a mill were not built by the seigneur the inhabitants had the right of providing one for themselves, in which case they were released for all time from the "banality" or obligation to the seigneur. This system has been regarded as a burden on the early agriculturists. As a matter of fact, however, the toll retained was so small that in many cases it did not pay the wages of the miller, much less allow a profit for the seigneur, though the authorities continued to insist that seigneurs should build and operate mills. It was not until after the British Conquest that the more rapid settlement of the country turned the flour mill banality into a source of advantage to the seigneur. Early census figures give the number of mills in New France during the French period as follows:—

1665	9
1685	41
1695	39
1721	90
1734	118

[1] From the Flour and Grist Milling Industry in Canada 1921, issued by the Dominion Bureau of Statistics.

[2] It was found impossible to induce the Indians to grind the wheat in the hand mills then in use. For three centuries there has been a mill on this site.

Upper Canada.—The coming of the United Empire Loyalists and the colonization of Upper Canada naturally led to the erection of mills for the grinding of the grain produced in the new settlements. One of the earliest mills was built at Niagara Falls in 1786.[1] An Order-in-Council was passed by the Imperial Government about this time to encourage the building of mills in the sections populated by the Loyalists. On application, the privilege of erecting mills on government water power sites was to be granted to responsible parties, together with certain other rights for a specified time, after which the mill and water-power were to revert to the government. This was found an unsatisfactory arrangement, as the mills were frequently lost to the millers just as they were becoming profitable, and a revision of the conditions became necessary in order to put the industry on a satisfactory footing.

Early Export Trade.—The Napoleonic wars in Europe caused a rapid increase in the prices of cereals, and an export business in wheat and flour from Canada grew up. The amounts exported during the period 1793-1808 were as follows[2]:—

Year	Wheat	Flour
	bush.	bbl.
1793	487,000	11,000
1794	415,000	14,000
1795	395,000	18,000
1796	3,000	4,000
1797	32,000	14,000
1798	92,000	10,000
1799	129,000	15,000
1800	217,000	20,000
1801	473,000	38,000
1802	1,010,000	28,000
1803	361,000	16,000
1804	202,000	14,000
1805	22,000	19,000
1806	97,000	11,000
1807	232,000	20,000
1808	187,000	42,000

Some Early Prices.—A view of prices current for wheat and flour at Quebec during the closing years of the Napoleonic wars and after—a revolutionary epoch for prices in general—is afforded by the subjoined table. The close of the war brought a sharp decline of prices in 1816, which was followed by a post-war boom period during the years 1817 and 1818, after which there was a gradual recession.

Year	Month	Wheat per bushel	Flour per barrel
1805	May	9/6	Superfine 60/-
			Fine 55/-
			Common 45/-
1808	January	5/6	Superfine 35/-
	February	5/6	Superfine 33/-
			Fine 32/6
			Common 25/-
	March	7/6	Superfine 35-37/6
	April	7/6	Superfine 37/6-40/-
	May	7/9	Superfine 42/6
	June	8/-	Superfine 45/-
	July	8/-	Superfine 55/-
	August	7/9	Superfine 55/-60/-
	September	7/9	Superfine 55/-
1809		6/-	Superfine 50/-
1810	June	8/6	Superfine 55/-
1811	September	None for sale	$10½ to $12.
	October	"	"
1812	June	9/6 to 10/-	Superfine $11½
			Fine $10½
			Common $ 9½
1813		12/6 to 13/4	Superfine none
			Fine $18
			Common $13 to $15
1821	August	4/3 to 4/6 per minot[3]	Superfine (kiln dried) 21/6 to 22/6
			Fine 19/- to 20/6
			Middlings 18/- to 19/-
1831	Average	5/4 = $1.29	1st quality 13/- per 100 lbs. = $3.16

[1]Another early mill was established in Napanee about 1786.
[2]See Canadian Archives, Series Q.
[3]1 minot = 1·0735 bushels.

The Industry in 1830-40.—The industry had now become firmly established. During the years 1831-2 census figures showed 393 mills operating in Lower Canada and 319 in Upper Canada. Imports of wheat and flour into Great Britain from British North America during the period 1831-1840 were shown in British records as below. The blanks during the years 1836-7-8 were probably due in part to disturbed political conditions in Canada, and in part to the system of "restrictive averages" in Britain—an endeavour to stabilize the price of bread by increasing the duty on cereals when prices fell and decreasing it when prices rose.

Year	Wheat	Flour[1]
	bush.	cwt.
1831	1,528,000	96,000
1832	720,000	49,000
1833	632,000	74,000
1834	360,000	40,000
1835	112,000	10,000
1836	.....	18,000
1837	.....	10,000
1838	.....	40,000
1839	216	27,000
1840	64,000	479,000

[1] Br. Blue Book, Vol. 39, p. 328.

The Crisis of the Forties and Later.—In 1843, to stem the strong agitation which had arisen in Great Britain for the repeal of the Corn Laws, a special preference was established whereby Canadian wheat and flour were admitted to British markets at the nominal rate of 1s. per quarter (480 pounds). The result was an immediate stimulus to the Canadian milling industry, which began to draw not only upon grain grown in Canada but also upon imports of grain from the United States. Owing to the opposition of the farmers of Upper Canada, a duty was charged on United States grain so that it did not enjoy the full preference. Whilst the preference did not affect Canadian agriculture as much as had been expected, the milling and carrying trades, with Montreal as their centre, were greatly benefited.

The concession of 1843 had not been recognized by Canadian millers merely as a step towards the total abolition of the Corn Laws and the establishment of free trade in Great Britain. Heavy investments were made in milling-establishments of a permanent nature, and the St. Lawrence canals were completed in order further to divert this profitable trade into Canadian channel The repeal of the Corn Laws in 1846 and the final loss of the preference in British markets came accordingly as a severe blow to the Canadian milling and grain trade. With the British preference gone, it seemed advisable to Canadian milling and transportation interests to link up with the main trade movement of the continent and to endeavour to make the St. Lawrence the joint exit for all North American grain. Thus the milling situation became one of the main economic factors underlying the annexation movement of 1848. Canadian farmers on the other hand benefited by the abolition of the Corn Laws and the free admission of most of their produce to British markets. The annexation movement declined with the revival of Canadian trade which began in 1849, and which was in turn the result of three causes, the beginning of railway building on an extensive scale in Canada, the Reciprocity Treaty of 1854, and the Crimean War which brought high prices for Canadian farm products.

It is of interest to note that, as the heavy advances made during the 'forties for expansion in the milling industry were a leading factor in the failure of the two principal early banks of Canada West, namely, the Bank of Upper Canada and the Commercial Bank of Canada (the Bank of Montreal and the Merchants Bank of Canada being also considerably embarrassed), so the recovery and growth of the milling industry in the 'sixties led at once to the extension of banking facilities for which the disappearance of the principal banks of the Western section had opened the door, leading Canadian millers being prominent in the organization of the new financial enterprises which were set on foot during this period. The present Canadian Bank of Commerce, the Bank of Toronto, the Imperial Bank of Canada, and the Dominion Bank owe their inception, at least in part, to this reaction.

The Modern Phase—Disappearance of the Small Mill.—The next important factor which influenced the milling industry was the introduction in Canada of the gradual reduction process (Hungarian process) or roller milling. Up to this time small and large mills had been on an equal footing in so far as the process of manufacture was concerned. Large scale production

in milling in Canada began with competition between the two processes, stone and rolls. Many of the small mills were unable to compete with the larger mills in the production of flour and either disappeared or were transformed into chopping mills, the more complete transformation of the wheat into flour by the new process, and the consequent reduction of the amount of offal feed for live stock further stimulating the growth of chopping mills. The increase in the latter obscured to some extent the loss of the small flour mills.

Another factor tending to the disappearance of the small flour mill was the reduction in water power in the settled districts. Rain and snowfall had not changed, but the cutting of the forests and resultant loss of shade caused more rapid evaporation in summer and the more rapid melting of the winter snowfall with flood conditions in the spring. Many streams were dried up in the summer instead of having a constant flow of water throughout the year and providing the small mills with the power they required at a low cost.

By the 'eighties the roller process had secured a virtual monopoly of the flour milling industry in Canada. The farmers lost the market for their wheat at the local mill, where previously the grain had been bought and milled to be shipped away as flour. Elevators sprang up at railway points and the grain was sold and shipped as grain to be ground at the large milling centres. This was coincident with a steady decline in the price secured by the farmers for their wheat and the older sections of Canada became more and more devoted to mixed farming. The live stock, dairying and fruit industries expanded as a result of this development.

The opening of the west provided the vast supply of wheat needed by the new milling industry. With the extension of transportation facilities more and more new land became available for agriculture. The high quality of Canadian wheat became recognized throughout the world, and Canada's huge export trade in wheat and its products developed. With the increase in the available supply of wheat and the extension of the markets, the milling industry has grown apace so that to-day it has attained a capacity far beyond the needs of domestic markets. A large quantity of wheat is ground each year in Canadian mills for shipment overseas in the manufactured form of flour rather than as a raw material.

Exports of Wheat Flour.—The growth in the export flour trade of Canada is shown in the following table:—

Quantity of Wheat Flour Exported from Canada to Various Countries in Barrels for the Fiscal Years 1871, 1881, 1891, 1901, and 1911

County of Destination	1871	1881	1891	1901	1911
Australasia	.....	.....	.....	47,484	2,225
Bermuda	.....	.....	.....	.....	19,228
British Africa	.....	.....	.....	500	189,098
British Guiana	.....	.....	.....	2,030	50,724
British West Indies	1,009	79	399	33,722	365,474
Great Britain	185,438	376,008	181,543	770,714	1,884,655
Hong Kong	.....	.....	.....	.....	14,951
Malta	.....	.....	.....	.....	2,621
Newfoundland	.....	57,806	99,438	234,259	248,054
Other British	94,949	.....	.....	.....	713
Total British Empire	281,396	433,893	281,380	1,088,709	2,777,743
Belgium	.....	.....	1,520	.....	72
China	.....	.....	.....	1,530	1,697
Cuba	.....	.....	.....	41	4,420
Denmark	.....	.....	.....	168	67,559
Dutch Guiana	.....	.....	.....	.....	220
Dutch West Indies	.....	.....	.....	.....	10
Egypt	.....	.....	.....	.....	275
France	.....	.....	.....	1,676	5,183
Germany	.....	.....	.....	315	13,133
Japan	.....	.....	1	3,035	3,595
Netherlands	.....	.....	.....	1,728	24,223
Norway	.....	.....	.....	.....	75,529
Russia	.....	.....	.....	.....	10,334
St. Pierre and Miquelon	3,060	905	1,393	1,065	5,639
Spain	.....	.....	.....	.....	285
Sweden	.....	.....	.....	.....	530
Turkey	.....	.....	.....	.....	420
United States	21,382	4,758	12,439	14,682	25,967
Other Foreign	501	172	51	5,751	32,212
Total Foreign	24,943	5,835	15,404	29,991	271,303
Grand Total	**306,339**	**439,728**	**296,784**	**1,118,700**	**3,049,046**

Value in Dollars of Wheat Flour Exported from Canada to Various Countries for the Fiscal Years 1871, 1881, 1891, 1901, 1911

Country of Destination	1871	1881	1891	1901	1911
Australasia	.....	.....	.....	209,947	11,184
Bermuda	.....	.....	.....	.....	93,887
British Africa	.....	.....	.....	2,000	994,242
British Guiana	.....	.....	.....	6,151	222,106
British West Indies	6,711	467	1,618	115,356	1,678,086
Great Britain	1,006,374	1,848,259	851,912	2,702,132	8,189,837
Hong Kong	.....	.....	.....	.....	52,025
Malta	.....	.....	.....	.....	12,567
Newfoundland	.....	294,755	468,409	885,846	1,364,642
Other British	466,070	.....	.....	.....	3,169
Total British Empire	1,479,155	2,143,481	1,321,939	3,921,432	12,621,745
Belgium	.....	.....	4,200	.....	350
China	.....	.....	.....	5,509	6,153
Cuba	.....	.....	.....	178	19,834
Denmark	.....	.....	.....	550	299,731
Dutch Guiana	.....	.....	.....	.....	1,003
Dutch West Indies	.....	.....	.....	.....	45
Egypt	.....	.....	.....	.....	1,465
France	.....	.....	.....	4,985	21,168
Germany	.....	.....	.....	1,425	59,884
Japan	.....	.....	.....	8,410	13,521
Netherlands	.....	.....	.....	5,850	109,341
Norway	.....	.....	.....	.....	339,579
Russia	.....	.....	.....	.....	47,594
St. Pierre and Miquelon	16,612	4,980	6,905	3,478	29,717
Spain	.....	.....	.....	.....	1,290
Sweden	.....	.....	.....	.....	2,290
Turkey	.....	.....	.....	.....	1,960
United States	110,423	23,671	55,249	43,579	114,669
Other foreign	3,659	976	285	19,830	163,451
Total Foreign	130,694	29,627	66,639	93,794	1,233,045
Grand Total	**1,609,849**	**2,173,108**	**1,388,578**	**4,015,226**	**13,854,790**

The growth of the milling industry in Canada from Confederation to 1911 is shown in table 36 which follows:—

Table 36.—Flour and Grist Mills: Principal Statistics, 1871-1911

Year	Number of establishments	Capital	Employees	Salaries and wages	Raw materials used	Value of products
		$	No.	$	$	$
1871[1]						
Nova Scotia	301	342,064	416	62,687	839,269	1,073,054
New Brunswick	233	328,258	311	55,967	866,668	1,049,355
Quebec	810	3,461,723	1,506	280,266	8,152,797	9,897,714
Ontario	951	5,797,853	2,759	833,959	22,615,814	27,115,796
Canada	**2,295**	**9,929,898**	**4,992**	**1,232,879**	**32,474,548**	**39,135,919**
1881						
Prince Edward Island	99	211,496	176	29,147	283,675	358,409
Nova Scotia	263	422,298	498	78,013	924,341	1,200,762
New Brunswick	166	285,670	296	44,240	560,814	742,046
Quebec	790	3,697,060	1,791	509,799	7,309,208	8,861,752
Ontario	1,034	8,922,249	3,565	1,215,411	25,075,047	29,859,118
Manitoba	19	158,800	86	38,420	391,000	509,200
British Columbia	30	129,650	47	24,710	111,300	178,695
The Territories	6	30,700	13	7,850	22,029	62,390
Canada	**2,407**	**13,857,923**	**6,472**	**1,947,590**	**34,677,414**	**41,772,372**
1891						
Prince Edward Island	112	236,032	162	53,429	411,615	567,293
Nova Scotia	209	409,834	301	74,182	684,619	955,442
New Brunswick	188	375,840	289	83,738	912,003	1,173,715
Quebec	871	6,052,134	1,628	545,133	6,857,992	8,697,483
Ontario	1,078	13,813,176	3,453	1,349,291	29,657,851	36,558,320
Manitoba	50	1,593,265	346	193,103	2,836,095	3,668,813
British Columbia	24	345,245	78	45,265	341,590	449,085
The Territories	18	213,515	60	22,790	238,672	353,135
Canada	**2,550**	**23,039,041**	**6,317**	**2,366,931**	**41,940,437**	**52,423,286**
1901[2]						
Prince Edward Island	2	23,100	16	3,240	15,750	21,200
Nova Scotia	10	131,675	90	32,410	338,897	442,081
New Brunswick	19	195,840	155	41,357	357,287	483,441
Quebec	35	2,268,459	467	222,738	2,691,086	3,195,911
Ontario	275	8,937,285	2,815	1,267,266	17,504,002	21,025,481
Manitoba	37	2,294,817	510	293,057	4,683,124	5,626,351
British Columbia	5	299,260	57	41,904	271,035	349,428
The Territories	17	536,122	141	84,019	489,525	691,980
Canada	**400**	**14,686,558**	**4,251**	**1,985,991**	**26,350,706**	**31,835,873**
1911						
Prince Edward Island	53	203,605	103	35,995	323,045	472,650
Nova Scotia	35	277,150	123	38,789	573,897	817,375
New Brunswick	73	402,718	190	71,436	905,805	1,323,667
Quebec	318	6,083,493	1,162	577,705	8,775,243	11,095,311
Ontario	574	22,918,407	4,133	2,163,990	34,371,464	52,721,625
Manitoba	36	8,979,829	625	494,689	9,092,259	11,660,015
Saskatchewan	21	1,174,000	161	109,869	1,037,716	1,459,478
Alberta	25	2,617,487	249	223,362	1,829,995	2,525,698
British Columbia	6	249,000	45	40,440	318,096	419,007
Canada	**1,141**	**42,905,689**	**6,791**	**3,756,275**	**57,227,520**	**82,494,826**

[1] Not including Prince Edward Island with 145 mills.
[2] Includes mills employing five hands and over only.

Table 37.—"Flour" and "Feed and Grist Mills": Principal Statistics, 1917-27

Year	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages			
	No.	$	No.	No.	$	No.	No.	$	$	$	$
1917											
Canada	1,098	72,573,982	...	...	...	6,914[1]		6,292,797[2]	183,586,936	224,191,735	40,604,799
Prince Edward Island	25	120,206	...	...	...	32		18,495	510,054	592,263	82,209
Nova Scotia	32	337,839	...	...	...	63		48,003	445,866	590,022	144,156
New Brunswick	45	405,030	...	...	...	94		67,213	1,084,262	1,497,558	413,296
Quebec	290	9,587,027	...	...	...	1,237		1,085,090	31,488,107	37,899,887	6,411,780
Ontario	526	39,622,857	...	...	...	3,366		3,006,498	97,375,526	119,453,870	22,078,344
Manitoba	47	7,206,613	...	...	...	706		675,935	23,840,558	28,761,331	4,920,773
Saskatchewan	66	5,435,124	...	...	...	652		619,017	11,483,995	12,950,577	1,466,582
Alberta	61	7,877,422	...	...	...	578		582,069	15,836,621	20,486,122	4,649,501
British Columbia	6	1,981,864	...	...	...	186		190,507	1,521,947	1,960,105	438,158
1918											
Canada	1,188	78,303,022	...	...	...	7,407[1]		7,,555,476[2]	218,646,546	262,537,122	43,890,576
Prince Edward Island	27	147,713	...	...	...	34		21,112	376,750	464,927	88,177
Nova Scotia	37	376,637	...	...	...	68		51,564	601,391	838,812	237,421
New Brunswick	52	491,314	...	...	...	118		83,809	1,328,153	1,737,900	409,747
Quebec	287	9,390,867	...	...	...	1,019		1,063,005	35,019,034	42,518,530	7,499,496
Ontario	624	48,332,915	...	...	...	4,082		4,087,364	119,598,888	142,977,616	23,378,728
Manitoba	46	6,141,553	...	...	...	725		762,050	26,713,977	31,855,937	5,141,960
Saskatchewan	57	6,901,200	...	...	...	665		707,044	15,182,802	17,782,830	2,600,028
Alberta	53	5,310,883	...	...	...	585		663,149	18,795,504	23,078,613	4,283,109
British Columbia	5	1,209,940	...	...	...	111		116,378	1,030,047	1,281,957	251,910
1919											
Canada	1,255	76,411,423	...	...	...	7,401[1]		8,083,270[2]	229,835,706	262,786,759	32,951,053
Prince Edward Island	21	103,630	...	...	...	26		16,313	365,495	468,284	102,789
Nova Scotia	38	356,358	...	...	...	62		45,693	713,755	885,012	171,257
New Brunswick	42	466,157	...	...	...	87		68,913	1,401,722	1,674,956	273,234
Quebec	428	12,617,753	...	...	...	1,209		1,241,412	37,180,948	42,071,066	4,890,118
Ontario	588	39,726,415	...	...	...	3,986		4,328,729	130,724,527	150,061,254	19,336,727
Manitoba	38	8,711,329	...	...	...	728		817,126	23,934,172	26,764,437	2,830,265
Saskatchewan	47	4,888,051	...	...	...	671		760,471	15,318,858	17,673,125	2,354,267
Alberta	49	8,401,666	...	...	...	571		723,920	18,534,986	21,297,786	2,762,800
British Columbia	4	1,140,064	...	...	...	61		80,693	1,661,243	1,890,839	229,596
1920											
Canada—	1,332	68,838,927	...	...	...	7,086[1]		8,571,504[2]	205,746,546	239,255,461	33,508,915
Prince Edward Island	24	184,294	...	...	...	29		15,571	442,898	577,043	134,145
Nova Scotia	32	247,751	...	...	...	44		37,846	555,307	692,898	137,591
New Brunswick	50	517,515	...	...	...	83		79,636	1,361,559	1,674,091	312,532
Quebec	457	12,416,837	...	...	...	1,075		1,315,360	29,114,147	34,090,774	4,976,627
Ontario	617	35,083,283	...	...	...	3,817		4,453,498	115,911,508	135,055,61[illegible]	19,144,108
Manitoba	44	7,252,366	...	...	...	724		903,793	23,834,742	27,235,314	3,400,572
Saskatchewan	45	4,304,904	...	...	...	620		807,800	14,962,761	17,053,491	2,090,730
Alberta	58	6,826,608	...	...	...	553		763,197	17,862,802	20,863,880	3,001,078
British Columbia	5	2,005,369	...	...	...	141		194,803	1,700,822	2,012,354	311,532

Table 37.—"Flour" and "Feed and Grist Mills": Principal Statistics, 1917-27—Concluded

Year	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages			
	No.	$	No.	No.	$	No.	No.	$	$	$	$
1921											
Canada	1,257	61,827,312	.....	.....	.....	7,004[1]		8,311,184[2]	164,582,636	194,772,849	30,190,213
Prince Edward Island	26	136,540	.....	.....	.....	26		11,802	205,121	257,744	52,623
Nova Scotia	29	313,896	.....	.....	.....	40		34,936	352,825	447,116	94,291
New Brunswick	41	267,834	.....	.....	.....	53		34,174	558,943	703,321	144,378
Quebec	372	11,003,553	.....	.....	.....	1,085		1,149,094	32,028,136	36,328,786	4,300,650
Ontario	640	33,561,141	.....	.....	.....	3,713		4,218,622	86,278,181	103,779,768	17,501,587
Manitoba	34	6,423,151	.....	.....	.....	689		985,313	18,361,574	20,886,018	2,524,444
Saskatchewan	51	3,694,550	.....	.....	.....	671		912,485	13,005,779	15,532,306	2,526,527
Alberta	57	5,000,823	.....	.....	.....	580		778,217	12,540,362	15,093,412	2,553,050
British Columbia	7	1,425,824	.....	.....	.....	147		186,541	1,251,715	1,744,378	492,663
1922											
Canada	1,364	68,453,886	.....	.....	.....	6,757[1]		7,490,369[2]	136,687,078	166,881,455	30,194,377
Prince Edward Island	28	192,228	.....	.....	.....	31		17,888	278,935	361,739	82,804
Nova Scotia	30	296,906	.....	.....	.....	46		34,994	383,007	524,755	141,748
New Brunswick	44	310,112	.....	.....	.....	74		53,859	826,898	1,021,727	194,829
Quebec	449	14,300,475	.....	.....	.....	1,228		1,124,289	24,401,706	29,286,355	4,884,649
Ontario	660	34,236,778	.....	.....	.....	3,248		3,549,111	76,180,668	92,841,756	16,661,088
Manitoba	39	7,241,415	.....	.....	.....	663		812,929	13,879,206	16,038,146	2,159,240
Saskatchewan	54	3,805,734	.....	.....	.....	645		858,983	9,637,787	12,358,720	2,720,933
Alberta	53	6,590,267	.....	.....	.....	660		828,216	9,826,930	12,677,672	2,850,742
British Columbia	7	1,479,971	.....	.....	.....	162		210,100	1,271,941	1,770,285	498,344
1923											
Canada	1,387	60,556,587	1,036	250	2,321,738	5,402	98	5,128,690	128,473,059	154,895,991	26,422,932
Prince Edward Island	25	119,812	.....	1	300	20	.....	10,047	186,988	240,262	53,274
Nova Scotia	30	237,757	6	.....	9,634	32	.....	21,375	299,695	379,158	79,463
New Brunswick	46	314,917	8	2	13,282	58	.....	42,455	951,393	1,165,644	214,25
Quebec	436	12,181,927	140	26	456,022	1,158	2	713,405	22,238,863	25,196,087	2,957,224
Ontario	679	30,869,868	374	125	788,375	2,798	67	2,902,506	73,079,793	89,281,524	16,201,731
Manitoba	37	6,627,291	140	27	294,791	509	11	519,180	13,655,348	15,908,515	2,253,167
Saskatchewan	66	3,359,256	202	29	391,573	322	14	367,206	7,177,829	9,151,507	1,973,678
Alberta	61	5,439,523	129	25	282,734	429	2	469,686	9,979,193	12,355,353	2,376,160
British Columbia	7	1,406,236	37	15	85,027	76	2	82,830	903,957	1,217,941	313,984
1924											
Canada	1,309	64,356,541	984	232	2,265,218	5,256	137	5,543,721	150,056,430	180,807,549	30,751,119
Prince Edward Island	22	112,135	.....	1	300	21	.....	10,087	190,482	228,076	37,594
Nova Scotia	26	250,750	3	3	6,660	29	.....	20,606	295,455	353,263	57,808
New Brunswick	39	310,837	5	5	11,883	58	.....	39,515	891,033	1,042,071	151,038
Quebec	395	12,277,858	133	24	426,676	869	2	785,090	22,931,481	26,757,298	3,825,817
Ontario	655	32,359,902	328	113	771,285	2,904	110	3,073,743	88,735,361	106,141,210	17,405,849
Manitoba	34	6,381,419	107	19	238,674	498	8	609,157	15,158,115	18,986,684	3,828,569
Saskatchewan	66	4,088,056	212	25	415,494	353	14	430,694	9,406,305	11,853,000	2,446,695
Alberta	67	7,198,060	135	29	295,177	464	1	507,084	11,534,962	14,310,194	2,775,232
British Columbia	5	1,377,524	61	13	99,069	60	2	67,745	913,236	1,135,753	222,517

1925											
Canada	1,310	60,104,258	953	211	2,163,551	4,881	121	5,026,471	163,164,668	187,944,731	24,780,063
Prince Edward Island	24	111,792	.....	1	400	26	.....	13,862	225,734	277,206	51,472
Nova Scotia	28	354,806	6	.....	7,862	33	2	26,635	431,002	490,033	59,031
New Brunswick	35	309,847	5	4	11,067	55	.....	39,323	826,609	932,859	106,250
Quebec	392	11,260,728	132	21	422,402	840	2	749,221	28,300,232	32,250,490	3,950,258
Ontario	664	29,012,816	304	106	700,276	2,651	93	2,782,801	90,811,425	104,522,309	13,710,884
Manitoba	36	6,530,119	112	16	227,407	460	9	502,930	17,368,935	19,450,481	2,081,546
Saskatchewan	61	4,210,715	204	22	422,385	332	11	378,837	10,586,543	12,468,343	1,881,800
Alberta	65	6,929,787	129	27	294,912	428	2	469,796	13,460,069	16,213,735	2,753,666
British Columbia	5	1,383,648	61	14	76,840	56	2	63,066	1,154,119	1,339,275	185,156
1926											
Canada	1,291	58,335,813	955	193	2,177,790	5,065	135	5,044,674	163,905,450	189,580,741	25,675,291
Prince Edward Island	17	71,438	.....	1	290	20	.....	10,391	156,085	190,581	34,496
Nova Scotia	23	351,557	3	.....	5,031	36	1	25,540	488,578	576,983	88,405
New Brunswick	37	286,282	3	3	7,706	67	.....	44,802	1,230,459	1,370,299	139,840
Quebec	371	10,992,050	146	22	455,463	897	2	688,161	24,835,206	28,513,371	3,678,165
Ontario	676	29,008,355	288	95	694,510	2,692	105	2,778,365	92,865,617	105,437,330	12,571,713
Manitoba	36	6,159,778	111	11	212,283	448	10	471,493	16,166,439	19,319,203	3,152,764
Saskatchewan	63	4,402,031	200	21	404,529	344	15	410,818	11,777,415	14,518,952	2,741,537
Alberta	64	5,898,632	121	25	282,461	483	.....	539,453	15,181,038	18,097,886	2,916,848
British Columbia	4	1,165,690	83	15	115,517	78	2	75,651	1,204,613	1,556,136	351,523
1927											
Canada	1,315	62,062,013	904	221	2,152,877	5,124	135	5,219,793	163,712,597	191,741,470	28,028,873
Prince Edward Island	15	72,700	.....	1	316	16	.....	7,470	174,812	215,342	40,530
Nova Scotia	22	407,772	4	.....	7,423	35	1	23,266	512,485	622,657	110,172
New Brunswick	33	297,176	2	3	6,296	60	.....	45,303	1,510,825	1,679,490	168,665
Quebec	370	9,992,556	142	23	458,767	874	2	689,214	23,357,675	26,588,146	3,230,471
Ontario	701	29,929,851	296	106	727,628	2,748	101	2,859,274	92,846,762	107,646,593	14,799,831
Manitoba	38	6,461,905	110	11	214,099	433	12	517,451	14,447,958	17,577,133	3,129,175
Saskatchewan	66	5,074,421	191	25	372,995	361	16	434,016	13,685,616	16,746,267	3,060,651
Alberta	65	8,366,728	147	37	319,668	524	2	573,217	15,810,292	19,040,218	3,229,926
British Columbia	5	1,458,904	12	15	45,685	73	1	70,582	1,366,172	1,625,624	259,452

[1]Includes male and female salaried employees and wage-earners. [2]Includes salaries.

Review of Milling Industry Since 1917.—From a study of tables 36 and 37, in which are shown the principal statistics of flour and feed mills from 1871 to 1911 and 1917 to 1927 respectively, the following significant facts emerge. Since 1917 the number of establishments has increased from 1,098 to 1,315 with a decrease in the amount of capital employed from $72,573,-982 to $62,062,013. The number of employees also dropped from 6,914 to 6,384 but the amount paid out in salaries and wages rose from $6,292,797 to $7,372,670.

Production and the value added by manufacture declined from $224,191,735 and $40,604,799 respectively to $191,741,470 and $28,028,873. The centre of this industry is still preponderantly in Ontario and Quebec, although the Prairie Provinces are assuming increasing importance.

In 1927 there were 1,315 establishments engaged in the milling industry, of which 701 were located in Ontario, 370 in Quebec, 169 in the Prairie Provinces, 70 in the Maritime Provinces and 5 in British Columbia. Of the capital employed, amounting to $62,062,013, 48 p.c. was used by Ontario establishments, 16 p.c. by Quebec and the remainder was distributed among the other provinces. Not only did the amount of capital decline, but the average per establishment and per employee also decreased considerably, having dropped from $66,097 and $10,497 to $47,196 and $9,721 respectively.

Of the employees, numbering 6,384 in 1927, 1,125 were salaried employees, who were paid $2,152,877 or an average of $1,914, and 5,259 were wage-earners, who received $5,219,793, or an average of $993—a little over half the amount paid to salaried employees. Owing to the heavy work, few females can be employed, so that out of 5,259 wage-earners only 135 or 2·6 p.c. were females. In the case of salaried employees the percentage of females was higher, viz., 19·6 p.c.

The impetus given to the milling industry during the years of the war is strikingly illustrated by the figures for value of production. During the last year of the war production amounted to $262,537,122, with a similar amount for 1919. Unlike the other industries which reported a maximum production in 1920, the milling industry showed a drop of $23,531,298 in that year, due in large measure to the lessened demand of Europe for foreign milled products. During 1921, the year of the business depression, production dropped still lower; this tendency continuing for 1922 and 1923. The reduced production for the last two years, however, was due to the decline in the selling price of flour, which dropped from a maximum in 1920 of $11.66 per barrel to $6.23 in 1922 and $5.37 in 1923. The physical volume of production in 1924 was the highest recorded, but owing to the lower prices prevailing, this is not shown by the figures for gross value of products. Since 1917 the value of production decreased by $32,450,265, although the volume was greater, the number of barrels of flour produced increasing from 17,687,338 in 1917 to 18,787,312 in 1927. It is interesting to note that while the average value of production per employee dropped from $32,427 to $30,035 and the value added by manufacture per employee from $5,873 to $4,390, the average amount paid to wage-earners rose from $799 to $993.

Some interesting facts of the development of the milling industry since 1881 are shown in Table 38, which gives comparative statistics of capital, production, salaries and wages, etc., per establishment and per employee.

Table 38.—Summary Statistics of the Milling Industry

—	1881	1911	1917	1920	1921	1926	1927
Number of establishments..No.	2,407	1,141	1,098	1,332	1,257	1,291	1,315
Capital..... $	23,039,041	42,905,689	72,573,982	68,838,927	61,827,312	58,335,813	62,062,013
Average capital per establishment..... $	9,572	37,604	66,097	251,681	49,186	45,187	47,196
Average capital per employee..... $	3,647	6,318	10,497	9,715	8,827	9,190	9,721
Total number of employees. No.	6,317	6,791	6,914	7,086	7,004	6,348	6,384
Average number of employees per establishment..No.	2·6	5·9	6·3	5·3	5·6	4·9	4·9
Total salaries and wages.... $	2,366,931	3,756,275	6,292,797	8,571,504	8,311,184	7,222,464	7,372,670
Average per employee.... $	375	553	910	12,100	1,187	1,138	1,155
Gross value of products..... $	52,423,286	82,494,826	224,191,725	239,255,461	194,772,849	189,580,741	191,741,470
Average per establishment $	21,780	72,300	204,182	179,621	154,951	146,848	145,811
Average per employee..... $	8,299	12,148	32,427	33,764	27,809	29,865	30,035
Value added by manufacture $	10,482,849	25,267,306	40,604,799	33,508,915	30,190,213	25,675,291	28,028,873
Average per establishment $	4,355	22,145	36,981	25,232	24,018	19,888	21,314
Average per employee..... $	1,660	3,721	5,873	4,729	4,314	4,045	4,390
Power employed.....h.p.	.....	.....	87,036	116,224	102,072	113,766	117,405
Average per establishment "	.....	.....	79·1	87·3	81·2	88·1	89·3
Average per employee.... "	.....	.....	12·6	16·4	14·6	17·9	18·4

Capital Invested.—The amount of capital invested in the milling industry is shown by classes and provinces in Table 39 for the years 1921 to 1927. The amount of fixed capital invested in flour mills declined from $36,988,250 in 1921 to $33,300,414 in 1927. Working capital, which includes cash, trading and operating accounts, materials on hand, etc., rose from $22,246,597 to $23,066,285; or a net decrease of $2,868,148 in the total capital. Feed and grist mills, on the other hand, showed an increase of $3,102,849 in the total capital.

Table 39.—Capital Invested in the Milling Industry, by Items, 1921 to 1927

Provinces and year	Flour Mills				Total capital in Feed mills	Grand total capital all classes of mills
	Land, buildings, machinery and tools	Materials on hand, stocks in process, etc.	Cash, trading and operating accounts, etc	Total capital in Flour mills		
	$	$	$	$	$	$
1921	36,988,250	11,148,085	11,098,512	59,234,847	2,592,465	61,827,312
1922	36,887,704	13,408,835	15,631,982	65,928,521	2,525,365	68,453,886
1923	34,758,383	11,238,662	10,429,162	56,426,207	4,130,380	60,556,587
1924	33,999,792	16,718,163	8,791,916	59,509,871	4,846,670	64,356,541
1925	31,584,693	13,923,990	9,502,373	55,011,056	5,093,202	60,104,258
1926						
Prince Edward Island	63,500	1,178	760	65,438	6,000	71,438
Nova Scotia	97,127	21,099	20,261	138,487	213,070	351,557
New Brunswick	92,141	3,300	500	95,941	190,341	286,282
Quebec	5,463,901	1,178,010	2,843,368	9,485,279	1,506,771	10,992,050
Ontario	17,275,630	6,132,326	2,664,207	26,072,163	2,936,192	29,008,355
Manitoba	3,692,530	1,288,301	1,142,050	6,122,881	36,897	6,159,778
Saskatchewan	1,451,259	1,853,673	1,055,213	4,360,145	41,886	4,402,031
Alberta	3,294,013	1,744,322	636,996	5,765,331	223,301	5,898,632
British Columbia	582,221	249,432	334,037	1,165,690	.....	1,165,690
Canada	**32,012,322**	**12,471,641**	**8,697,392**	**53,181,355**	**5,154,458**	**58,335,813**
1927						
Prince Edward Island	68,500	800	200	69,500	3,200	72,700
Nova Scotia	70,152	600	500	71,252	336,520	407,772
New Brunswick	86,842	3,316	500	90,658	206,518	297,176
Quebec	5,056,557	1,089,167	2,196,651	8,342,375	1,650,181	9,992,556
Ontario	17,397,259	6,548,989	2,784,044	26,730,292	3,199,559	29,929,851
Manitoba	3,690,604	1,313,270	1,422,117	6,425,991	35,914	6,461,905
Saskatchewan	1,650,091	1,976,808	1,414,271	5,041,170	33,251	5,074,421
Alberta	4,646,891	2,453,157	1,036,509	8,136,557	230,171	8,366,728
British Columbia	633,518	400,812	424,574	1,458,904	.....	1,458,904
Canada	**33,300,414**	**13,786,919**	**9,279,366**	**56,366,699**	**5,695,314**	**62,062,013**

Materials Used.—The quantity and cost value of the grains milled during 1927 is shown by provinces in table 40 for flour mills and in Table 41 for feed and grist mills. Of the grains used by the flour mills, wheat takes first place with $119,441,749 or 83·4 p.c. of the total, while of the $143,255,728 spent for raw materials and containers, Ontario, which is the real centre of the industry, spent $77,198,836 or 54 p.c. and Quebec $21,170,376 or 14·8 p.c.

The raw materials and containers used by the feed and grist mills amounted to $20,456,869, of which $15,049,309 was for mixed grains and $2,279,647 for oats. Practically the whole of this industry is in Ontario and Quebec, the two provinces having utilized about 87 p.c. of the materials used.

The average price per bushel of each kind of grain delivered at the mill is shown in Table 42 for the years 1921 to 1927.

Table 40.—Materials Used in Flour Mills, by Provinces, 1927

Materials	Canada		P. E. Island		Nova Scotia		New Brunswick		Quebec	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$		$
Wheat.....Bush.	86,807,691	119,441,749	52,031	73,937	13,325	21,200	40,854	64,705	12,766,447	19,175,591
Oats..... "	9,888,649	6,475,661	12,755	7,440	10,334	6,250	31,024	17,752	679,210	360,408
Barley..... "	655,243	485,298	300	230	1,700	1,370	1,200	960	141,366	122,280
Rye..... "	72,500	68,512	.....	.....	.....	.....	.....	.....	8,147	10,085
Corn..... "	1,347,363	1,309,085	.....	.....	31,602	31,602	.....	.....	249,224	252,457
Buckwheat..... "	178,250	151,410	350	355	5,628	5,430	63,067	49,677	70,110	63,846
Peas..... "	6,602	8,150	.....	.....	.....	.....	.....	.....	1,340	2,620
Mixed grain for chopping..... "	10,838,762	6,692,119	136,553	81,437	50,132	34,925	1,350	1,030	485,113	340,765
Other grains..... "	98,020	93,270	.....	.....	.....	.....	.....	.....	12,438	7,608
Cost of containers purchased.....	.....	8,273,597	.....	.....	.....	.....	.....	150	.....	745,412
Cost of materials used in making containers.....	.....	256,877	.....	.....	.....	.....	.....	.....	.....	89,304
Total.....	.....	**143,255,728**	.....	**163,399**	.....	**100,777**	.....	**134,274**	.....	**21,170,376**

Materials	Ontario		Manitoba		Saskatchewan		Alberta		Brit. Columbia	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$		$
Wheat.....Bush.	45,168,366	62,654,907	8,837,628	12,225,797	8,458,932	10,595,534	10,907,366	13,742,479	562,742	887,590
Oats..... "	4,181,848	3,053,229	1,463,266	806,471	2,490,043	1,625,508	743,440	414,310	277,729	184,293
Barley..... "	200,243	152,225	126,983	82,642	104,691	71,213	65,991	42,310	12,769	12,068
Rye..... "	54,143	49,898	8,597	7,219	1,301	1,061	312	249	.....	.....
Corn..... "	864,399	795,747	16,895	15,245	.....	.....	13,639	15,166	171,604	198,868
Buckwheat.... "	38,704	30,989	1,021	1,113	.....	.....	.....	.....	.....	.....
Peas..... "	5,262	5,530	.....	.....	.....	.....	.....	.....	.....	.....
Mixed grains for chopping. "	9,545,016	5,892,691	300,757	168,653	84,531	48,134	230,310	121,484	5,000	3,000
Other grains. "	42,964	73,227	42,100	11,788	200	86	318	561	.....	.....
Cost of containers purchased.....	.....	4,441,240	.....	918,798	.....	1,054,236	.....	1,033,417	.....	80,344
Cost of materials used in making containers.....	.....	49,153	.....	.....	.....	79,250	.....	39,170	.....	.....
Total.....	.....	**77,198,836**	.....	**14,237,726**	.....	**13,475,022**	.....	**15,409,146**	.....	**1,366,172**

Table 41.—Materials Used in Feed and Grist Mills, by Provinces, 1927

Materials	Canada		P. E. Island		Nova Scotia		New Brunswick		Quebec	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$		$
Wheat... .....bush.	79,805	91,065	.....	.....	.....	.....	189	302	11,961	13,711
Oats..... "	4,175,830	2,279,647	.....	.....	30,938	20,638	393,222	291,911	1,170,792	624,640
Barley..... "	889,757	648 956	.....	.....	1,400	980	477	417	181,791	154,581
Rye..... "	32,968	30 981	.....	.....	30	30	.....	.....	1,745	2,182
Corn..... "	1,760,415	1,899,017	.....	.....	343,619	358,912	838,435	982,595	315,156	305 958
Buckwheat..... "	230 961	200,841	.....	.....	45	40	64,178	51,514	127,199	117,700
Peas..... "	45,570	66,352	.....	.....	.....	.....	.....	.....	2,380	3 460
Mixed grain..... "	24,226,863	15,049,309	18,897	11,413	30,820	22,883	16,334	12,026	1,315,718	927,933
Other grains..... "	184,078	91,829	.....	.....	.....	.....	.....	.....	28,110	16,994
Cost of containers..	.....	98 872	.....	.....	.....	8,225	.....	37,786	.....	20,140
Total.....	.....	**20,456,869**	.....	**11,413**	.....	**411,708**	.....	**1,376,551**	.....	**2,187,299**

Materials	Ontario		Manitoba		Saskatchewan		Alberta	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$
Wheat.....bush.	33,300	39,665	13,293	20,408	1,750	1 387	19,312	15,592
Oats..... "	2,083,504	1,117,846	96,000	50,880	125,602	62,164	275,772	111,568
Barley..... "	571,216	419,012	16,000	10,000	37,144	22,106	81,729	41,860
Rye..... "	28,968	26,235	1,590	2,080	.....	.....	635	454
Corn..... "	239,322	229,284	20,000	18,000	.....	.....	3,883	4,268
Buckwheat..... "	39,539	31,587	.....	.....	.....	.....	.....	.....
Peas..... "	43,190	62,892	.....	.....	.....	.....	.....	.....
Mixed grain..... "	22,007,499	13,623,602	160,020	99,288	235,378	124,922	442,197	227,242
Other grains..... "	155,308	73,255	660	1 580	.....	.....	.....	.....
Cost of containers, etc.....	.....	24,548	.....	7,996	.....	15	.....	162
Total.....	.....	**15,647,926**	.....	**210,232**	.....	**210,594**	.....	**401,146**

Table 42.—Average Price per Bushel of Grains Milled, as Delivered at Mill, 1921-27

—	1921	1922	1923	1924	1925	1926	1927
	$	$	$	$	$	$	$
Wheat	1 84	1 26	1 10	1 17	1 56	1 43	1 38
Oats	0 56	0 50	0 48	0 45	54	0 47	0 65
Barley	0 87	0 63	0 61	0 68	0 76	0 68	0 74
Rye	1 30	0 83	0 71	0 91	0 92	0 91	0 94
Corn	0 89	0 83	0 97	0 98	1 11	0 94	0 97
Buckwheat	0 97	0 82	0 74	0 84	0 95	0 85	0 85
Peas	1 98	1 84	1 39	1 79	1 56	1 60	1 24
Mixed grains	0 68	0 61	0 54	0 60	0 59	0 60	0 62

Table 43.—Quantity and Value of Principal Mill Products in Canada, 1917-1927

Products	Unit	Quantity	Selling value at mill	Average value
			$	$ cts.
1917				
Wheatflour, all grades	Barrels	17,687,338	170,381,834	9 63
Oatmeal and rolled oats	"	863,954	7,122,348	8 24
Bran, shorts and middlings	Tons	708,615	19,223,981	27 13
Feed, chopped	"	526,581	21,305,812	40 50
1918				
Wheatflour, all grades	Barrels	17,880,912	189,096,238	10 58
Oatmeal and rolled oats	"	1,348,730	12,657,667	9 38
Bran, shorts and middlings	Tons	714,357	24,146,089	33 82
Feed, chopped	"	571,726	28,976 338	50 75
1919				
Wheatflour, all grades	Barrels	17,842,833	185,982,307	10 42
Oatmeal and rolled oats	"	861,923	8,899,924	10 32
Bran, shorts and middlings	Tons	585,896	23,971,404	40 97
Feed, chopped	"	663,438	38,460,495	58 00
1920				
Wheatflour, all grades	Barrels	13,127,320	153,117,662	11 66
Oatmeal and rolled oats	"	678,327	7,754,869	11 43
Bran, shorts and middlings	Tons	550,190	26,577,214	48 87
Feed, chopped	"	681,310	39,381,047	57 83
1921				
Wheatflour, all grades	Barrels	15,321,759	136,257,285	8 89
Oatmeal and rolled oats	"	815,740	6,327,214	7 75
Bran, shorts and middlings	Tons	617,097	16,897,957	27 39
Feed, chopped	"	706,309	28,079 796	39 77
1922				
Wheatflour, all grades	Barrels	18,098,212	112,749,505	6 23
Oatmeal and rolled oats	"	803,333	5,577,473	6 94
Bran, shorts and middlings	Tons	652,708	14,351,839	21 99
Feed, chopped	"	703,499	26,694,424	37 92
1923				
Wheatflour, all grades	Barrels	19,075,814	102,571,212	5 37
Oatmeal and rolled oats	"	658,273	4,444,936	6 75
Bran, shorts and middlings	Tons	640,317	14,775,544	23 08
Feed, chopped	"	780,664	26,602,025	34 08
1924				
Wheatflour, all grades	Barrels	21,076,733	121,786,505	5 78
Oatmeal and rolled oats	"	1,077,811	6,875,091	6 38
Bran, shorts and middlings	Tons	728,841	18,060,813	24 78
Feed, chopped	"	763,910	27,552,914	36 07
1925				
Wheatflour, all grades	Barrels	17,769,071	131,857,785	7 42
Oatmeal and rolled oats	"	734,266	5,574,200	7 59
Bran, shorts and middlings	Tons	626,289	16,518,717	26 22
Feed, chopped	"	792,512	27,854,365	35 15
1926				
Wheatflour, all grades	Barrels	19,056,162	131,187,907	6 89
Oatmeal and rolled oats	"	884,375	6,251,572	7 07
Bran, shorts and middlings	Tons	651,428	16,930,909	25 99
Feed, chopped	"	843,148	29,027,954	34 43
1927				
Wheatflour, all grades	Barrels	18,787,312	125,110,853	6 66
Oatmeal and rolled oats	"	699,495	5,941,067	8 49
Bran, shorts and middlings	Tons	681,439	19,400,565	28 47
Feed, chopped	"	924,225	33,345,468	36 08

Table 44.—Production of "Flour," and "Feed and Grist Mills," by Classes, 1926 and 1927

Products	Unit	1926			1927		
		Quantity	Selling value	Average selling price	Quantity	Selling value	Average selling price
1926			$	$ cts.		$	$ cts.
Chopped grain feed	ton	843,148	29,027,954	34·43	924,225	33,345,468	36·08
Wheat flour—							
Fall or winter	bbls.	1,291,753	8,598,172	6·66	2,207,734	14,105,178	6·39
Spring	"	17,624,357	121,625,661	6·90	16,019,325	107,407,265	6·70
Blended	"	140,002	964,074	6·88	560,253	3,598,410	6·42
Low grade or feed	ton	24,859	1,065,513	42·86	28,291	1,283,858	45·38
Shorts and middlings	"	371,999	10,185,325	27·38	395,757	11,915,284	30·11
Bran	"	279,429	6,745,584	24·14	285,682	7,485,281	26·20
Oatmeal	bbl. 196 lbs.	126,132	616,823	4·89	50,860	349,302	6·87
Rolled oats	bbl. 180 lbs.	758,243	5,634,759	7·43	648,635	5,591,765	8·62
Barley, pot and pearl	lb.	4,261,061	137,777	0·032	4,268,528	145,654	0·034
Barley, flour and meal	"	694,800	14,097	0·020	1,344,800	33,372	0·025
Rye flour and meal	"	2,009,230	55,806	0·027	1,863,103	55,969	0·030
Corn flour	"	1,104,136	32,654	0·029	2,331,738	60,728	0·026
Corn meal	"	40,560,079	965,983	0·024	56,825,812	1,438,817	0·025
Corn, cracked	"	49,059,976	973,083	0·019	47,388,216	1,010,899	0·021
Buckwheat flour	"	3,300,801	134,480	0·041	3,305,884	134,427	0·041
Pea meal	"	233,400	5,098	0·022	230,000	5,800	0·025
Peas, split	"	1,789,800	75,338	0·042	1,544,000	57,530	0·037
Offal, not specified	ton	75,341	1,166,022	15·48	69,606	1,453,440	20·88
All other products, including cereals			1,556,548			2,263,023	
Total Value of Products			**189,580,741**			**191,741,470**	

Production.—In table 43 are given the principal items of mill production, showing the quantity, selling value and average value at the mill or point of production for the years 1917 to 1927. During this period the average price of wheat flour and oatmeal products was highest in 1920 and lowest in 1923. Bran, shorts and middlings were highest in 1920 and lowest in 1922, while chopped feed was highest in 1919 and lowest in 1923.

Production of flour and feed mills by classes and quantities and average selling price are given in table 44 and by provinces and classes in tables 45 and 46. Wheat flour is the most important product, with a production in 1927 of $125,110,853 out of a total of $191,741,470. Wheat flour is also produced in every province, Ontario contributing 50·6 p.c. of the total, Quebec 15 p.c., and the Prairie Provinces and British Columbia practically the whole of the balance. Almost all of the cereal products are manufactured in Ontario, while the Prairie Provinces produce more than 50 p.c. of the rolled oats.

Table 45.—Production of Flour Mills, by Provinces and Classes of Products, 1927

Products	Canada	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
	$	$	$	$	$	$	$	$	$	$
Chopped grain feed	11,543,990	102,570	48,241	23,078	1,176,795	8,716,012	424,095	255,056	412,423	385,720
Wheat flour—										
Fall or winter	14,105,178	12,000	480	.....	54,566	13,472,393	35,950	6,800	522,989	.....
Spring	107,407,265	70,758	14,380	61,519	18,675,554	48,548,054	14,199,937	12,102,285	12,809,090	925,688
Blended	3,598,410	.....	7,200	6,576	38,442	1,339,939	.....	16,354	2,188,619	1,280
Low grade or feed	1,283,858	150	.....	.....	537,402	594,298	3,005	7,884	116,266	24,853
Shorts and middlings	11,915,284	6,675	1,593	6,986	2,103,798	6,635,549	893,86	1,046,720	1,148,314	71,783
Bran	7,485,281	8,444	2,030	5,946	1,276,425	3,917,691	692,713	610,814	893,356	77,862
Oatmeal	255,089	895	202	.....	.....	.....	84,345	99,391	42,972	27,284
Rolled oats	5,504,156	.....	.....	.....	.....	2,457,052	853,397	1,865,682	259,425	68,600
Barley—										
Pot and pearl	92,278	.....	.....	.....	9,040	34,234	13,100	33,365	2,473	.....
Flour and meal	21,257	.....	.....	.....	21,257	.....	.....	.....	.....	.....
Rye, flour and meal	55,960	.....	.....	.....	.....	48,113	7,073	504	270	.....
Corn—										
Flour	60,728	.....	.....	.....	21,846	38,882	.....	.....	.....	.....
Meal	439,041	.....	26,303	.....	74,549	337,060	1,129	.....	.....	.....
Cracked	200,260	.....	14,342	.....	34,947	150,971	.....	.....	.....	.....
Buckwheat flour	74,914	210	5,624	49,680	7,574	11,826	.....	.....	.....	.....
Peas—										
Meal	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Split	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Offal not otherwise specified	1,369,943	300	1,298	13,955	16,475	755,097	113,092	394,222	69,313	6,191
All other cereal products	1,395,615	.....	.....	.....	.....	1,268,889	.....	53,068	49,440	24,218
All other products	788,818	.....	.....	.....	.....	748,065	888	1,400	26,320	12,145
Total	**167,597,325**	**202,002**	**121,693**	**167,740**	**24,048,670**	**89,674,125**	**17,322,656**	**16,493,545**	**18,541,270**	**1,625,624**

Table 46.—Production of Feed and Grist Mills by Classes and Provinces, 1927

Products	Chopped grain feed		Other products		Total	
	Quantity	Value	Quantity	Value	Quantity	Value
	ton	$	ton	$	ton	$
CANADA	606,058	21,801,478	48,249	2,342,667	654,307	24,144,145
Prince Edward Island	379	13,340	.....	.....	379	13,340
Nova Scotia	1,201	55,994	9,610	444,970	10,811	500,964
New Brunswick	7,030	331,933	24,803	1,179,817	31,833	1,511,750
Quebec	60,615	2,293,328	5,748	246,148	66,363	2,539,476
Ontario	506,966	18,149,736	8,059	422,732	515,025	18,572,468
Manitoba	5,822	205,477	29	49,000	5,851	254,477
Saskatchewan	7,854	252,722	.....	.....	7,854	252,722
Alberta	16,191	498,948	.....	.....	16,191	498,948
British Columbia	.....	.....	.....	.....	.....	.....

Wholesale Prices of Flour and Milled Products

STANDARD OATMEAL

Price per 98 lb. sack at Toronto. Monthly quotations from Canadian Grocer and other sources

Averages		Averages	
	$		$
1917	4·987	1923	3·958
1918	6·354	1924	4·133
1919	5·192	1925	4·987
1920	5·968	1926	4·343
1921	4·568	1927	4·371
1922	4·060		

ROLLED OATS

Price per 90 pound sack at Toronto—Monthly quotations from manufacturers

Averages		Averages	
	$		$
1917	4·302	1923	3·275
1918	5·444	1924	3·354
1919	4·842	1925	3·750
1920	5·484	1926	3·396
1921	3·355	1927	3·750
1922	3·230		

FLOUR, FIRST PATENT

Price per 2-98's jute, car lots, delivered Montreal rate points. Monthly average quotations from The Globe, Toronto

Averages		Averages	
	$		$
1917	11·480	1923	6·867
1918	11·660[1]	1924	7·400
1919	11·420[1]	1925	9·424
1920	13·837[1]	1926	8·821
1921	19·781	1927	8·254
1922	7·650		

FLOUR, SECOND PATENT

Price per 2-98's, jute, car lots delivered Montreal rate points. Monthly average quotations from The Globe, Toronto

Averages		Averages	
	$		$
1917	10·980	1923	6·367
1918	11·160[1]	1924	6·900
1919	10·920[1]	1925	8·924
1920	13·357[1]	1926	8·321
1921	9·218	1927	7·736
1922	7·150		

[1]1918, 1919 and Jan. to Aug. 1920, Government Standard converted to Second Patent.

SHORTS, ONTARIO

Price per ton f.o.b. Toronto. Monthly average quotations from The Globe

Averages	$	Averages	$
1917	41·542	1923	29·230
1918	40·590	1924	30·280
1919	47·021	1925	31·421
1920	54·157	1926	31·700
1921	30·834	1927	34·530
1922	27·540		

MALT

Price per bushel of 36 pounds at Toronto—Monthly quotations from the Canada Malting Company

Averages	$	Averages	$
1917	1·614	1923	1·046
1918	1·908	1924	1·214
1919	1·689	1925	1·263
1920	1·955	1926	1·090
1921	1·236	1927	1·228
1922	1·100		

Equipment and Capacity of Milling Industry.—The equipment installed in the milling industry in 1926 and 1927, together with its capacity per 24 hours, is shown in Table 47. In 1927, the mills had a capacity of 121,748 bbls. per 24 hours, an increase of 3,432 bbls. from that of the preceding year and a decrease of 19,540 bbls. from that of 1919, when the value of production reached its maximum of $262,786,759. Since 1919 the capacity has been steadily decreasing, although the number of barrels produced every year since 1922 exceeded that of 1919. The gradual elimination of the smaller class of custom mills accounts for the decrease in the equipment and the daily capacity. Over 85 p.c. of the total capacity, approximately 121,750 barrels per day, is represented by the larger merchant mills.

Table 47.—Equipment and Capacity of Flour Mills, 1926 and 1927

Provinces	1927				1926			
	Mills	Rolls	Stones	Capacity per 24 hours	Mills	Rolls	Stones	Capacity per 24 hours
	No.	No.	No.	Bbls.	No.	No.	No.	Bbls.
CANADA	431	5,177	319	121,748	442	5,087	330	118,316
Prince Edward Island	12	56	16	473	13	50	20	454
Nova Scotia	13	30	24	345	14	37	22	485
New Brunswick	11	85	3	666	13	90	3	717
Quebec	91	791	196	21,180	92	788	204	21,155
Ontario	188	2,458	52	61,599	199	2,538	57	62,139
Manitoba	30	582	5	12,415	29	568	7	12,270
Saskatchewan	45	509	16	10,946	43	448	10	8,834
Alberta	36	617	2	13,170	35	534	2	11,609
British Columbia	5	49	5	954	4	34	5	653

Employment and Hours of Work.—The number of wage-earners employed each month during 1926 and 1927 is shown in Table 48, for both flour and feed mills. Flour mills reported an average monthly employment in 1927 of 4,055, a slight decrease over that of 1926, when the average was 4,066, and feed mills 1,204, an increase of 70 over the preceding year. Employment in this industry is comparatively steady, the variation from the maximum being only about 17 p.c. The maximum employment occurs in the fall of the year and the minimum during June, July and August.

The number of hours worked per day in 1926 and 1927 is given by provinces in Table 49. In the flour milling industry 65·4 p.c. of the wage-earners worked 10 hours or more per day in 1926, compared with 61·9 p.c. in 1927. In Quebec 94·2 p.c. of the wage-earners worked 10 hours or more per day in 1927, compared with 78·1 p.c. in Ontario and 8·1 p.c. in Manitoba. The working day in the Prairie Provinces is shorter than in either Ontario or Quebec, for, with the exception of Saskatchewan, the majority of wage-earners worked only 8 hours per day.

Table 50 gives by provinces the number of hours worked per day and per week in flour and feed mills in 1927. It should be noted that the statistics relating to hours of labour in columns 1, 2 and 3 are based on figures compiled for the month of highest employment, while those in columns 4 and 5 represent the total standard and average weekly hours of labour for the number of establishments reporting to the Bureau in 1927. On this account and because of the considerable number of smaller mills working 8 hours per day or less, the relation between daily and weekly hours is to some extent impaired. The average daily hours of labour in flour mills in the Dominion was 9·36 and in feed mills 9·28, and the standard weekly hours were 55·05 in flour mills and 50·37 hours in feed mills.

It is rather difficult to make comparisons of the number of hours worked and wages paid in view of the fact that since 1921, flour and feed mills are shown separately, and figures for the number of wage-earners employed by the feed mills and the amount of wages paid are not available for some years subsequent to that. However, in view of the lesser importance of feed mills, the figures given in table 51 show fairly accurately the changes after 1917. The number of hours worked per day and per week show little change; the only important fluctuations took place in the number of days that establishments operated on full time and in the nominal and real wages paid. Nominal wages in all mills, amounting to $799 in 1917, rose to $1,097 in the flour milling industry in 1927; but, owing to an increase of 16 p.c. in the cost of living, the increase in real wages is reduced by $151, or to $946 in 1917 dollars.

Table 48.—Number of Wage-earners Employed, by Months, 1926 and 1927

—	Flour Mills						Feed and Grist Mills					
	1926			1927			1926			1927		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
January	3,858	127	3,985	3,898	144	4,042	1,034	2	1,036	1,045	1	1,046
February	3,825	126	3,951	3,863	131	3,994	1,022	2	1,024	1,036	1	1,037
March	3,807	123	3,930	3,789	129	3,918	1,022	2	1,024	1,045	1	1,046
April	3,678	123	3,801	3,708	128	3,836	992	2	994	1,013	.....	1,013
May	3,605	98	3,703	3,711	119	3,830	956	1	957	987	.....	987
June	3,782	102	3,884	3,657	120	3,777	926	1	927	956	.....	956
July	3,660	123	3,783	3,602	118	3,720	944	2	946	974	.....	974
August	3,631	142	3,773	3,620	129	3,749	966	2	968	1,011	.....	1,011
September	3,898	156	4,054	3,900	152	4,052	1,048	1	1,049	1,077	.....	1,077
October	4,175	158	4,333	4,135	140	4,275	1,108	2	1,110	1,175	.....	1,175
November	4,261	157	4,418	4,271	152	4,423	1,118	2	1,120	1,197	.....	1,197
December	4,212	151	4,363	4,191	149	4,340	1,117	2	1,119	1,161	.....	1,161
Average monthly employment	**3,933**	**133**	**4,066**	**3,921**	**134**	**4,055**	**1,132**	**2**	**1,134**	**1,203**	**1**	**1,204**

Table 49.—Flour Mills: Hours Worked by Wage-earners in Month of Highest Employment, 1926 and 1927

—		Number of wage-earners working per day				Percentage of wage-earners working per day			
		8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
Canada	1926	1,200	416	2,547	516	25·7	8·9	54·4	11·0
	1927	1,401	375	2,516	370	30·1	8·0	54·0	7·9
Prince Edward Island	1926	9	2	6	.....	52·9	11·8	35·3	.....
	1927	8	.....	6	.....	57·1	.....	42·9	.....
Nova Scotia	1926	15	4	6	.....	60·0	16·0	24·0	.....
	1927	11	.....	3	.....	78·6	.....	21·4	.....
New Brunswick	1926	7	1	13	.....	33·3	4·8	61·9	.....
	1927	2	2	12	.....	12·5	12·5	75·0	.....
Quebec	1926	53	6	589	101	7·1	0·8	78·6	13·5
	1927	33	4	485	115	5·2	0·6	76·1	18·1
Ontario	1926	304	202	1,547	338	12·7	8·5	64·7	14·1
	1927	350	172	1,668	197	14·7	7·2	69·9	8·2
Manitoba	1926	322	60	90	15	66·1	12·3	18·5	3·1
	1927	373	56	36	2	79·9	12·0	7·7	0·4
Saskatchewan	1926	73	18	247	45	19·1	4·7	64·5	11·7
	1927	107	23	243	47	25·5	5·5	57·8	11·2
Alberta	1926	348	107	48	17	66·9	20·6	9·2	3·3
	1927	449	98	62	9	72·6	15·9	10·0	1·5
British Columbia	1926	69	16	1	.....	80·2	18·6	1·2	.....
	1927	68	20	1	.....	76·4	22·5	1·1	.....

Table 49a.—Feed and Grist Mills: Hours Worked by Wage-earners in Month of Highest Employment, 1926 and 1927

—		Number of wage-earners working per day				Percentage of wage-earners working per day			
		8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
Canada	1926	342	153	705	15	28·2	12·6	58·0	1·2
	1927	382	174	732	10	29·4	13·4	56·4	0·8
Quebec	1926	111	8	185	5	35·9	2·6	59·9	1·6
	1927	87	46	193	2	26·5	14·0	58·9	0·6
Ontario	1926	172	105	473	10	22·6	13·8	62·3	1·3
	1927	244	95	467	8	30·0	11·7	57·3	1·0
All other provinces	1926	59	40	47	.....	40·4	27·4	32·2	.....
	1927	51	33	72	.....	32·7	21·2	46·1	.....

Table 50.—Hours of Labour, per Day and per Week, 1927

(1) IN FLOUR MILLS

Provinces	Total hours worked per day and number of wage earners in month of highest employment			Standard working hours per week	
	Total hours	Total wage-earners	Average hours per day per wage-earner	Total hours	Average per mill
Canada	**43,628**	**4,662**	**9·36**	**23,725**	**55·05**
Prince Edward Island	124	14	8·86	540	45·00
Nova Scotia	118	14	8·43	428	32·92
New Brunswick	154	16	9·62	600	54·54
Quebec	6,358	637	9·98	5,224	57·40
Ontario	23,096	2,387	9·68	10,813	54·85
Manitoba	3,809	467	8·29	1,474	49·13
Saskatchewan	3,986	420	9·49	2,519	55·98
Alberta	5,189	618	8·40	1,915	53·19
British Columbia	734	89	8·25	212	42·40

(2) IN FEED MILLS

Canada	**12,047**	**1,298**	**9·28**	**44,528**	**50·37**
Prince Edward Island	26	3	8·67	75	25·00
Nova Scotia	242	26	9·31	407	45·22
New Brunswick	490	52	9·42	902	40·50
Quebec	3,061	328	9·33	14,682	52·62
Ontario	7,561	814	9·29	25,933	50·55
Manitoba	163	18	9·06	380	47·50
Saskatchewan	193	22	8·77	825	39·29
Alberta	311	35	8·89	1,324	45·65
British Columbia	.....	.....	.....	.....	.....

Table 51 —"Flour" and "Feed and Grist Mills": Hours of Labour and Wages Paid, 1917-27

—	Average number of hours worked		Average number of days that establishments operated on full time	Wages paid		
	Per day	Per week		Nominal wages	Cost of Living Index 1917=100	Real wages
				$		$
Flour and Feed and Grist Mills—						
1917	9·6	56·3	237	799	100·0	799
1918	9·3	55·8	198	896	113·7	788
1919	9·6	57·2	188	947	125·2	756
1920	9·4	56·2	176	1,055	145·0	728
Flour Mills—						
1921	9·5	56·6	225	1,085	127·5	851
1922	9·7	57·7	219	1,086	116·8	930
1923	9·7	57·9	193	1,001	116·8	857
1924	9·7	56·0	214	1,121	114·5	979
1925	9·5	56·6	216	1,098	116·0	947
1926	9·5	55·9	221	1,068	116·8	914
1927	9·4	55·1	224	1,097	116·0	946

Fuel Consumption and Power Installation.—The fuel consumed by the milling industry from 1917 to 1927 is shown by classes and quantities in Table 52. It is interesting to note that the cost of electric power increased from $605,811 in 1917 to $957,482 in 1927, while the amount spent for fuel dropped from $687,508 to $597,542. The power installation, shown in Table 53, also illustrates the increasing use of electricity for motive power, the amount installed having increased from 87,036 H.P. in 1917 to 117,405 H.P. in 1927.

Table 52.—Fuel Consumption in the Milling Industry, 1917-27

Year	Bituminous coal		Anthracite coal		Lignite coal		Coke		Gasoline	
	Tons	Value	Tons	Value	Tons	Value	Tons	Value	Gallons	Value
		$		$		$		$		$
Flour and Feed Mills—										
1917	97,728	508,449	3,696	23,083	.....	.....	50	405	58,654	22,714
1918	92,105	562,050	6,191	34,404	12,789	62,253	153	1,552	50,478	18,104
1919	83,159	509,853	1,255	11,164	16,194	74,129	137	1,027	36,753	13,753
1920	47,786	360,546	1,713	20,052	39,027	171,246	26	316	65,177	27,744
Flour Mills—										
1921	35,413	261,550	3,286	42,662	31,006	158,027	1,418	7,851	18,927	7,678
1922	41,555	289,766	864	10,298	38,236	181,127	82	1,133	29,465	10,261
1923	41,591	297,456	632	8,793	40,196	155,564	17	219	26,915	8,457
1924	43,559	244,065	558	8,302	44,925	180,207	39	524	42,518	11,789
1925	45,255	243,812	688	7,689	39,748	146,187	30	398	39,996	11,076
1926	45,521	246,061	931	8,198	43,537	150,427	311	2,153	41,524	12,073
1927	61,228	331,084	812	6,852	16,839	77,134	97	866	16,392	4,786
Feed Mills—										
1921	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1922	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1923	1,291	10,413	206	3,120	1	5	76	921	52,691	16,323
1924	4,119	23,375	369	4,497	67	534	56	676	61,502	18,234
1925	3,362	22,084	345	3,694	85	416	6	83	64,763	18,294
1926	2,413	14,629	424	4,246	211	627	15	177	66,133	19,052
1927	2,085	13,224	248	2,445	204	710	20	248	67,100	17,142

Year	Oil		Wood		Gas, artificial and natural		Other fuel	Total	Cost of electricity
	Gallons	Value	Cords	Value	M cu. ft.	Value	Value	Value	
		$		$		$	$	$	$
Flour and Feed Mills—									
1917	79,846	18,202	23,270	71,825	.....	32,254	10,656	687,588	605,811
1918	134,292	30,429	20,202	74,821	321,778	42,901	2,478	828,992	774,013
1919	96,697	20,125	11,138	51,559	350,386	71,452	334	753,396	876,115
1920	9,412	1,147	10,268	45,560	18,984	7,537	34,186	608,340	804,312
Flour Mills—									
1921	88,885	18,903	8,432	35,626	9,350	8,864	13,208	554,369	784,563
1922	28,000	4,441	12,599	51,698	334,958	22,282	41,012	612,018	.....
1923	79,210	16,660	11,067	39,343	402,342	66,361	11,844	604,697	703,250
1924	103,203	18,340	11,237	40,411	394,353	23,166	10,591	537,395	803,491
1925	97,257	19,028	11,455	42,584	331,142	21,266	12,359	504,399	794,312
1926	117,045	21,488	12,730	47,084	351,932	14,190	16,804	518,478	797,045
1927	115,310	18,943	8,328	32,326	360,172	16,920	22,343	511,254	809,624
Feed Mills—									
1921	.....	.....	.....	.....	.....	.....	.....	70,530	53,367
1922	.....	.....	.....	.....	.....	.....	.....	75,691	59,654
1923	95,450	18,515	5,121	20,798	13,008	4,955	951	76,001	83,771
1924	101,498	15,517	4,714	18,747	10,919	5,268	1,049	87,897	115,723
1925	148,578	24,473	3,972	15,285	11,507	6,603	391	91,323	120,683
1926	170,824	28,242	3,633	13,844	11,952	6,863	1,557	89,237	131,021
1927	223,932	32,346	3,008	11,423	14,491	8,420	330	86,288	147,858

Table 53.—Power Installed in the Milling Industry, 1917-27

Year	Steam Engines and Turbines		Oil, Gas and Gasoline Engines		Hydraulic Turbines or Water Wheels		Electric Motors Operated by Purchased Power	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
Flour and Feed and Grist Mills—								
1917	464	24,436	337	5,461	745	29,230	575	27,909
1918	240	20,345	248	6,992	954	38,749	818	42,273
1919	213	17,943	208	6,353	1,072	43,522	1,110	48,435
1920	227	17,871	232	6,614	1,144	44,467	1,013	47,421
Flour Mills—								
1921	121	12,824	74	2,322	533	31,403	672	33,209
1922	131	14,083	78	2,762	325	25,105	731	35,770
1923	144	14,344	80	2,697	472	23,859	1,212	49,472
1924	120	13,697	83	2,888	372	20,530	1,049	47,446
1925	115	13,069	79	2,103	372	20,918	1,032	46,374
1926	113	12,728	79	2,207	357	20,098	1,056	46,901
1927	109	11,989	80	2,360	344	19,795	1,147	49,804
Feed and Grist Mills—								
1921	.....	3,260	.....	3,597	.....	12,635	.....	2,822
1922	.....	5,363	.....	4,849	.....	19,132	.....	3,920
1923	103	4,182	208	4,468	511	15,926	181	4,543
1924	116	4,751	196	4,253	521	16,477	219	5,578
1925	95	3,712	227	5,404	499	15,878	270	6,639
1926	90	3,477	212	5,528	510	16,201	277	6,626
1927	80	3,310	233	6,287	512	16,521	316	7,339

Year	Total Power Used for Manufacturing		Electric Motors Operated by Owned Power		Total Electric Motors		Boilers Installed	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
Flour and Feed and Grist Mills—								
1917	2,121	87,036	219	6,141	794	34,050	.....	* .....
1918	2,260	108,359	95	3,616	913	45,889	207	16,965
1919	2,603	116,253	.....	.....	1,110	48,435	274	21,279
1920	2,612	116,224	124	3,621	1,137	51,042	231	17,828
Flour Mills—								
1921	1,400	79,758	340	16,604	1,012	49,813	159	15,450
1922	1,265	77,720	371	17,595	1,102	53,365	109	12,361
1923	1,908	90,372	36	1,252	1,248	50,724	127	12,348
1924	1,624	84,561	66	2,649	1,115	50,095	125	13,481
1925	1,598	82,464	69	2,654	1,101	49,028	112	11,989
1926	1,605	81,934	66	2,680	1,122	49,581	117	14,439
1927	1,680	83,948	68	2,578	1,215	52,382	131	14,684
Feed and Grist Mills—								
1921	.....	22,314	.....	.....	.....	2,822	.....	.....
1922	.....	33,264	.....	.....	.....	3,920	.....	.....
1923	1,003	29,119	9	177	190	4,720	37	1,912
1924	1,052	31,059	.....	.....	219	5,578	37	2,199
1925	1,191	31,633	2	30	272	6,669	44	2,510
1926	1,089	31,832	3	37	280	6,663	29	1,613
1927	1,141	33,457	5	107	321	7,446	45	2,393

* Boilers included under steam Engines and Turbines.

Imports and Exports.—The imports and exports of milled products for the calendar years 1922 to 1927 are set forth in Table 54. The imports are small, the total in 1927 being only $1,235,222 while the largest items were wheat flour and cereal foods in packages coming mostly from the United States. The exports on the other hand, amounted to $67,290,214, made up of wheat flour $60,266,510, bran, shorts and middlings $2,616,934, oatmeal and rolled oats $1,490,670, cereal foods $2,061,824 and miscellaneous products $854,276. Of the wheat flour exported in 1927, $21,140,299 worth went to the United Kingdom, $6,709,379 to Germany and the balance to almost every part of the world. More than half of the flour produced in Canada is exported; in 1927 there was a production of 18,787,312 barrels, of which 9,262,936 were exported. The maximum production was attained in 1924, when 21,076,733 barrels were produced and 11,476,868 barrels exported. Since then both production and exports have somewhat declined.

Table 54.—Imports and Exports of Milled Products in the Calendar Years 1922-27

Article	Unit	1922		1923		1924		1925		1926		1927	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$		$		$		$
IMPORTS													
Wheat flour	Bbl.	49,591	321,408	81,534	442,662	78,761	486,178	51,697	450,161	53,841	436,162	64,337	504,730
Buckwheat flour	Cwt.	505	2,520	713	3,630	459	2,731	300	1,624	699	3,901	846	3,544
Cornmeal	Bbl.	33,197	117,688	36,731	167,870	40,954	218,438	39,331	216,707	41,476	180,974	41,475	203,027
Malt flour	Lb.	336,444	25,748	82,254	6,816	332,161	16,889	256,242	9,930	120,268	9,860	115,862	6,195
Rye flour	Bbl.	3,549	16,922	3,687	14,187	2,722	11,983	3,912	21,475	2,962	14,202	3,707	19,151
Oatmeal and rolled oats	Lb.	237,998	5,868	372,286	10,187	66,277	5,264	169,486	10,976	373,849	21,555	569,784	27,704
Barley, pot and pearl	Lb.	140,577	26,542	134,389	23,299	100,356	15,171	68,413	7,164	12,195	614	22,570	838
Peas, split	Lb.	23,389	1,475	26,933	2,697	31,754	1,527	102,365	4,049	74,501	4,030	203,821	9,400
Hominy, cracked, ground, etc.	.....	.....	6,355	.....	59,163	.....	148,961	.....	99,596	.....	72,704	.....	86,463
Rice and cassava flour, etc.	Lb.	171,159	14,046	261,225	28,057	277,568	21,288	163,002	13,453	135,195	12,133	117,538	10,502
Sago and tapioca flour	Lb.	2,155,428	68,823	1,218,083	47,031	990,219	39,863	1,697,951	64,051	740,789	29,215	2,454,902	85,436
Bran and mill feed	Cwt.	.....	77,956	.....	35,179	.....	13,961	3,410	6,655	5,615	9,180	15,017	25,553
Cereal foods in packages	Lb.	977,480	98,839	1,199,628	115,097	1,714,123	150,244	1,727,480	162,667	2,900,719	287,787	1,898,806	206,549
Cereal foods, n.o.p.	.....	.....	26,303	.....	28,348	.....	24,777	.....	46,322	.....	44,121	.....	44,566
Semolina	Bbl.	436	3,457	413	3,312	407	3,437	244	3,456	55	1,148	88	1,564
Total	.....	.....	**813,950**	.....	**987,535**	.....	**1,160,712**	.....	**1,118,286**	.....	**1,127,586**	.....	**1,235,222**
EXPORTS													
Wheat flour	Bbl.	9,484,725	56,277,992	11,198,635	62,462,853	11,476,868	64,295,566	10,318,840	74,319,169	10,456,916	71,993,608	9,262,936	60,266,510
Oatmeal and rolled oats	Cwt.	369,303	1,607,860	398,215	1,425,027	1,051,817	3,527,754	532,815	2,071,587	497,312	2,109,033	298,297	1,490,670
Bran, shorts and middlings	Cwt.	1,454,464	1,610,496	2,424,278	3,106,839	3,422,792	4,148,272	3,530,719	4,539,137	1,792,355	2,212,538	1,816,607	2,616,934
Malt	Bush.	137,984	198,468	156,037	184,703	224,524	285,913	97,177	146,213	138,527	189,750	135,005	178,457
Peas, split	Bush.	64,111	214,940	96,882	286,431	37,993	93,884	20,301	45,738	23,620	55,363	5,277	13,885
Screenings	Cwt.	1,405,374	252,080	1,925,800	553,709	2,514,152	786,218	1,922,365	818,790	1,871,960	663,611	1,483,222	575,623
Cornmeal	Bbl.	23,931	96,876	20,671	99,142	12,672	56,920	11,074	50,416	13,416	51,249	10,166	43,102
Rye flour	Bbl.	643	3,725	998	4,820	714	3,488	.....	.....	357	1,800	.....	.....
Rice, meal and flour	Lb.	323,000	7,690	1,007,420	16,340	1,909,494	31,353	1,020,038	19,563	920,517	18,997	162,035	6,127
All other meals	Bbl.	10,302	44,537	9,867	39,539	15,172	63,776	26,990	108,362	8,653	32,757	8,998	37,082
Cereal foods, prepared, all kinds	.....	.....	.....	.....	.....	.....	.....	.....	1,548,814	.....	1,939,078	.....	2,061,824
Total	.....	.....	**69,314,664**	.....	**68,179,433**	.....	**73,293,153**	.....	**83,667,789**	.....	**79,267,834**	.....	**67,290,214**

Consumption.—The quantities and values of the principal milled products available for consumption in the calendar year 1927, as well as the per capita quantities and values based on an estimated population of 9,519,000, are given in Table 55. Consumption of any commodity is usually computed by adding together production and imports and deducting therefrom the exports.

Table 55.—Consumption of Milled Products, 1927

Articles	Unit	Production		Imports		Exports	
		Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$
Wheat flour	Bbl.	18,787,312	125,110,853	64,337	504,730	9,262,936	60,266,510
Oatmeal and rolled oats	Lb.	126,722,820	5,941,067	569,784	27,704	29,829,700	1,490,670
Cornmeal	"	56,825,812	1,438,817	8,129,100	203,027	1,992,536	43,102
Rye flour	"	1,863,103	55,969	726,572	19,151	.....	.....
Buckwheat flour	"	3,305,884	134,427	84,600	3,544	.....	.....
Barley, pot and pearl	"	4,268,528	145,654	22,570	838	.....	.....

Articles	Unit	Available for consumption		Per capita consumption	
		Quantity	Value	Quantity	Value
			$		$
Wheat flour	Bbl.	9,588,713	65,349,073	1·00	6·87
Oatmeal and rolled oats	Lb.	97,462,904	4,478,101	10·24	0·47
Cornmeal	"	62,962,376	1,598,742	6·61	0·168
Rye flour	"	2,589,675	75,120	0·272	0·008
Buckwheat flour	"	3,390,484	137,971	0·356	0·014
Barley, pot and pearl	"	4,291,098	146,492	0·451	0·015

RICE MILLING INDUSTRY

The principal statistics of the rice milling industry from 1917 to 1927 are shown in table 56, from which may be noted the following significant facts. The number of establishments decreased from 7 to 6, with a corresponding decrease in capital from $2,031,565 to $1,402,285. The decrease in the amount of capital invested, however, is due to the reduction in the amount of raw materials and finished products on hand, as well as to a decrease in the amount of cash and bills receivable, the fixed capital having increased from $518,374 in 1917 to $594,933 in 1927. Cost of materials used declined from $2,529,954 to $1,588,168 and gross value of products from $3,329,825 to $1,994,-813. In connection with the decline in production, it is interesting to note that the export of rice and rice meal and flour dropped considerably after 1920, declining from a maximum of $712,626 in 1919 to $7,948 in 1922 and $21,184 in 1927. The amount paid out in salaries and wages and the number of persons employed also decreased after 1917, while the average salary rose from $2,036 to $2,767 and the average wage from $760 to $1,029.

This industry is confined to British Columbia and Quebec; the former with 4 establishments in 1927 contributed 50·5 p.c. of the total production, although employing but 39·2 p.c. of the capital and 46·2 p.c. of the employees.

The cost of fuel and electricity, the power employed and the export of rice and rice meal and flour processed in Canada are given in tables 57 and 58.

Table 56.—Rice Mills: Principal Statistics, 1917-27

Year	Number of establishment	Capital	Employees on Salaries			Employees on Wages			Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages			
		$			$			$	$	$	$
1917	7	2,031,565	32	2	69,231	80	3	63,057	2,529,954	3,329,825	799,871
1918	5	3,027,967	19	1	40,117	67	.....	65,247	3,236,090	3,687,855	451,765
1919	7	1,317,771	20	1	44,003	57	.....	54,849	4,011,027	4,603,812	592,785
1920	7	1,750,185	13	1	46,329	84	.....	102,264	4,646,259	5,161,455	515,196
1921	6	1,049,418	13	.....	51,900	34	.....	33,738	964,100	1,245,765	281,665
1922	7	1,177,521	24	3	75,068	45	.....	41,240	1,287,754	1,530,086	242,332
1923	7	1,258,173	18	1	56,224	47	.....	43,873	1,539,664	1,788,181	248,517
1924	6	1,299,835	13	2	52,852	41	.....	44,598	1,357,027	1,605,288	248,261
1925	4	1,109,148	20	4	63,355	40	.....	41,153	1,470,906	1,725,554	254,648
1926	5	1,502,809	21	4	68,690	49	.....	51,936	1,540,118	1,751,812	211,695
1927	6	1,402,285	24	3	74,721	51	.....	52,477	1,588,168	1,994,813	406,644

Table 57.—Rice Mills: Power Installation and Cost of Fuel and Electricity, 1917-27

—	Cost of fuel	Cost of electricity	Power installation
	$	$	h.p.
1917	1,010	15,224	781
1918	600	11,021	596
1919	500	8,933	577
1920	750	18,030	665
1921	.....	7,805	590
1922	36	*	645
1923	50	7,215	547
1924	48	7,301	447
1925	400	4,446	460
1926	460	7,602	570
1927	572	7,755	58

*Not reported in 1922.

Table 58.—Exports of Rice and Rice Meal and Flour Products in Canada during the Fiscal Years ended March 31, 1918-1928

Fiscal year	Rice	Rice meal and flour	Total
	$	$	$
1917-18	320,623	109,401	430,024
1918-19	87,800	86,538	174,338
1919-20	668,077	44,549	712,626
1920-21	223,732	84,298	308,030
1921-22	6,761	22,606	29,367
1922-23	258	7,690	7,948
1923-24	56,803	16,340	73,143
1924-25	65,506	31,450	96,956
1925-26	33,679	19,831	53,510
1926-27	45,012	19,114	64,126
1927-28	15,360	5,824	21,184

MALT AND MALT MILLS

The mills producing malt and malt products enjoyed a period of prosperity and development during the years 1917-27. Although the number of mills increased from 4 to 8 in 1920, when the value of production was at its maximum, and then dropped again to 5 in 1923, yet the amount of capital invested rose from $542,718 in 1917 to $5,437,053 in 1927. Wages and salaries paid and the number of persons employed increased from $98,358 and 87 respectively to $316,174 and 177, while the output rose from $1,483,584 to $4,787,879 in the same period.

This industry is confined to four provinces, with Manitoba having the greatest production, followed in order by Quebec, Alberta and Ontario. A maximum production of $5,457,166 was attained in 1920, but dropped almost 50 p.c. in 1921. This drop, however, was not serious, since it was due to the decline in the price of malt, for the volume of malt produced in 1921 was only 17 p.c. lower than that of the previous year. The greatest physical volume of production was in 1927; this is, however, concealed by the lower prices prevailing.

The size of establishment increased considerably; the average capital per establishment rose from $135,640 in 1917 to $1,087,411 in 1927, while the number of persons employed increased from 22 to 35 per establishment and the value of production from $370,896 to $957,578 per establishment.

The number of salaried employees increased from 26 to 53, while the number of wage-earners increased from 61 to 124. Average salaries paid rose from $1,501 in 1917 to $2,257 in 1927, while wages increased from $1,005 to $1,585. The wages paid in malt mills are the highest in any industry of the whole vegetable products group. This is due in part to the absence of female wage-earners and the steadier employment afforded, as table 61 shows. Also the net output per employee in this industry was $7,939 in 1927, as compared with $3,619 for all industries producing vegetable products.

The principal statistics, the cost of fuel and electricity and the power installation, and the hours of work and salaries and wages paid are set forth below in tables 59 to 61.

Table 59.—Malt and Malt Mills: Principal Ststistics, 1917-27

Year	Number of establishments	Capital	Employees on Salaries			Employees on Wages			Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages			
		$			$			$	$	$	$
1917	4	542,718	23	3	37,042	61	.....	61,316	1,055,622	1,483,584	427,962
1918	6	516,056	23	2	38,730	106	1	119,574	2,220,619	3,147,229	1,926,610
1919	7	935,489	31	4	51,914	123	.....	139,077	2,374,951	3,460,759	1,085,808
1920	8	2,444,209	36	5	86,665	137	1	194,093	4,338,453	5,457,166	1,118,713
1921	7	2,246,223	19	5	57,947	153	4	248,945	2,019,577	2,793,417	773,840
1922	6	2,183,282	32	11	125,954	129	2	243,798	1,372,301	2,416,686	1,044,385
1923	5	2,473,818	32	10	133,083	141	1	231,051	1,501,187	2,500,966	1,095,779
1924	5	3,553,042	22	3	59,886	108	1	185,664	2,047,500	4,308,631	2,261,131
1925	5	3,580,979	25	6	67,840	141	.....	235,101	2,503,525	4,015,634	1,512,109
1926	5	3,470,215	28	6	75,778	141	.....	207,337	2,105,700	3,943,101	1,837,401
1927	5	5,437,053	49	4	119,630	124	.....	196,544	3,382,740	4,787,879	1,405,139

Table 60.—Malt and Malt Mills: Cost of Fuel and Electricity and Power Installation, 1917-27

Year	Cost of fuel	Cost of electricity	Power installation
	$	$	h.p.
1917	25,442	3,080	870
1918	78,792	9,255	1,460
1919	106,854	12,170	1,535
1920	186,527	15,241	684
1921	129,518	13,877	393
1922	113,805	*	124
1923	116,152	5,029	149
1924	145,117	811	236
1925	134,646	22,075	2,299
1926	66,966	20,870	2,472
1927	141,166	9,187	2,655

*Not given in 1922.

Table 61.—Malt and Malt Mills—Hours of Work and Wages and Salaries Paid, 1917-27

Year	Average number of hours worked		Average number of days on full time operation	Average salary	Average wage
	Per day	Per week			
				$	$
1917	9·7	63·5	249	1,501	1,005
1918	9·8	62·2	263	1,550	1,118
1919	8·6	49·6	222	1,483	1,131
1920	8·4	46·7	249	2,114	1,406
1921	9·4	51·6	238	2,414	1,586
1922	9·7	58·0	254	2,920	1,861
1923	9·2	55·2	302	3,169	1,627
1924	8·8	53·2	263	2,395	1,703
1925	8·0	50·4	304	2,190	1,667
1926	9·5	55·2	278	2,229	1,470
1927	9·3	54·4	303	2,257	1,585

CHAPTER III

MISCELLANEOUS GRAIN FOODS AND CONFECTIONERY

BREAD AND OTHER BAKERY PRODUCTS

The baking industry in the last quarter of a century has experienced remarkable expansion and has rapidly evolved from the domestic to the factory system of production. Early in the century much of the bread and bakery products were baked at home and only a small proportion by the small neighbourhood bakery. To-day, as a result of the increase in the urban population, most of the bread and a large quantity of pastry are produced in large modern factories, requiring heavy investments for equipment and employing a large number of people. This heavy capital expenditure necessarily brought the corporation into the field as a leading factor in the industry.

The centre of the industry is in the two most populous provinces of Ontario and Quebec; these two provinces employed in 1927, 78 p.c. of the capital, 77 p.c. of the employees and produced 76 p.c. of the output of the whole industry. On comparing the production in each province with the population, it is found that the two do not correspond, as might be expected from the fact that bread and other bakery products are usually consumed within a very short distance of the point of production. This seeming discrepancy is due to the greater production of bread at home in rural districts, with the result that a much smaller proportion of the production of such districts is reported to the Census of Industry. Ontario and Quebec with a large urban population, naturally produce more of their bread in factories, so that their reported production is proportionately larger than that of either the Maritime or Prairie Provinces, as the following table, based on the 1926 production figures and an estimated population of 9,389,693 people, shows.

Province	Percentage Population	Percentage Production
Prince Edward Island	0·9	0·2
Nova Scotia	5·8	2·3
New Brunswick	4·3	1·9
Quebec	27·3	27·9
Ontario	33·5	47·9
Manitoba	6·8	5·0
Saskatchewan	8·7	3·0
Alberta	6·5	4·5
British Columbia and Yukon	6·2	7·3
Total	**100·0**	**100·0**

In 1927 there were 2,443 establishments in Canada whose chief products were bread and other bakery products, such as buns, pies, cakes and puddings. These establishments had a capital investment of $40,559,259, a gross value of production of $68,726,262 and gave employment to 14,414 persons, the highest number employed by any industry of the whole vegetable products group. The importance of this industry in the vegetable products group is indicated by Table 5, which shows that it was first in employment afforded, third in the value added by manufacture, second in the gross value of products and sixth in the amount of capital invested.

Previous to 1919, statistics for "Bread and Other Bakery Products" and "Biscuits, Confectionery and Chewing Gum" were combined so that it is impossible to give figures for each industry separately for 1917 and 1918. Statistics for the combined industries for 1917 and 1918 and for the Bread and Bakery Products Industry 1919-27 are given in table 62. Since 1919 the number of establishments increased from 1,690 to 2,443, while the capital employed rose from $22,558,093 to $40,559,259, an increase of 80 p.c. and the number of persons employed increased by 49 p.c. from 9,705 to 14,414. The value of production increased steadily, but not to so great an extent as either capital or the number of persons employed, having only increased by some 31 p.c. from $52,318,484 to $68,726,262. The figures for gross value of production do not, however, disclose the whole of the increase, in view of the drop in the price of bread and other bakery products. The price of bread, which forms about 80 p.c. of the production of this industry, dropped from 7·6c. in 1919 to 6·9c. in 1927, while the number of pounds of bread produced increased from 556,057,387 to 780,940,855 lbs., an increase of 40 p.c. (Table 65). This industry suffered very little from the depression of 1921. Although the gross value of products dropped $10,432,716, the physical volume of production and the number of persons employed however, dropped only slightly. The reduced value of products was due to the sharp drop in the price of flour, with the consequent reduction in the price of bread from an average of 8·3c. per pound in 1920 to 6·8c. in 1921.

Table 62.—Principal Statistics of Bread and Other Bakery Products and Biscuit, Confectionery and Chewing Gum Industries, 1917-18 and Bread and Other Bakery Products Industry, 1919-27

	Number of Est.	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	wer instal-lation	Cost of materials used	Gross value of products	Value Added by manu-facture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1917													
Canada	2,032	38,411,760	1,510	676	2,270,746	10,433	6,095	11,122,172	1,140,614	19,276	45,149,662	79,417,427	34,267,765
Prince Edward Island	3	8,100	.....	.....	.....	5	2	3,348	650	4	20,265	28,457	8,192
Nova Scotia	48	2,042,355	62	49	109,310	607	752	571,410	63,574	1,087	2,419,247	4,303,602	1,884,355
New Brunswick	30	1,391,143	60	30	106,854	275	419	276,690	38,631	448	1,698,304	2,553,662	855,358
Quebec	608	8,893,642	390	112	503,010	3,071	875	2,360,786	312,154	1,539	11,896,178	20,021,287	8,125,109
Ontario	888	20,198,857	647	375	1,084,494	4,828	3,190	6,169,889	544,372	14,805	22,162,763	40,361,289	18,198,526
Manitoba	93	2,128,750	143	28	182,486	499	346	543,099	62,206	367	2,531,865	4,432,151	1,900,286
Saskatchewan	117	802,723	47	17	51,121	291	98	300,659	37,155	191	1,143,631	1,970,756	827,125
Alberta	100	956,751	60	27	93,997	298	143	315,515	31,738	153	1,180,795	2,075,007	894,212
British Columbia and Yukon	145	1,989,441	101	38	139,474	559	270	580,776	50,134	682	2,096,614	3,671,216	1,574,602
1918													
Canada	1,935	43,713,136	1,693	745	3,098,381	10,425	6,524	11,360,148	1,360,726	22,429	51,293,418	88,562,596	37,269,178
Prince Edward Island	3	10,175	.....	.....	.....	5	1	3,850	1,160	4	26,307	37,107	10,800
Nova Scotia	51	1,976,026	47	59	104,662	589	527	530,711	75,961	1,913	2,502,213	4,371,431	1,869,218
New Brunswick	27	1,781,508	65	36	145,377	314	469	303,326	55,141	947	1,944,134	3,280,912	1,336,778
Quebec	629	9,373,972	541	139	684,551	2,930	1,032	2,566,807	362,069	3,429	12,951,733	20,277,372	7,325,639
Ontario	831	24,386,628	712	405	1,648,729	5,083	3,667	6,095,749	662,697	13,364	26,398,015	47,697,701	21,299,686
Manitoba	87	2,311,032	73	29	143,473	570	333	702,244	79,675	901	2,820,358	4,820,400	2,000,042
Saskatchewan	83	608,223	31	13	40,355	196	73	216,827	29,467	226	678,681	1,205,893	527,212
Alberta	96	1,249,346	50	16	101,168	280	188	373,661	38,107	814	1,531,079	2,605,522	1,074,443
British Columbia and Yukon	128	2,016,226	174	48	230,068	458	234	566,973	56,449	831	2,440,898	4,266,258	1,825,360
Bread and Other Bakery Products													
1919													
Canada	1,690	22,558,093	890	354	1,462,233	7,230	1,231	8,170,995	986,682	7,118	33,682,533	52,318,484	18,635,951
Prince Edward Island	7	9,350	.....	.....	.....	13	2	10,520	2,061	10	68,768	100,146	31,378
Nova Scotia	43	687,803	15	23	38,865	206	76	227,894	33,114	170	997,759	1,550,995	553,236
New Brunswick	23	200,788	2	5	6,520	70	24	62,314	10,237	46	376,303	572,422	196,119
Quebec	562	7,216,134	413	86	512,947	2,150	203	2,113,991	316,582	1,296	9,944,854	15,391,223	5,446,369
Ontario	733	10,315,674	344	169	655,915	3,401	652	4,023,733	447,169	4,670	16,517,888	25,173,887	8,655,999
Manitoba	76	1,475,142	26	34	69,729	492	39	559,192	58,231	345	2,007,672	3,167,746	1,160,074
Saskatchewan	70	706,037	17	2	22,747	214	80	269,932	34,619	113	823,468	1,408,619	585,151
Alberta	71	856,068	34	16	65,723	239	80	333,302	37,711	144	1,044,581	1,851,634	807,053
British Columbia and Yukon	105	1,091,097	39	19	89,787	445	75	570,117	46,958	324	1,901,240	3,101,812	1,200,572
1920													
Canada	1,769	23,612,654	839	331	1,742,175	7,616	1,054	9,752,213	1,261,241	5,667	38,239,135	61,800,633	23,561,498
Prince Edward Island	6	7,000	.....	.....	.....	8	2	6,700	2,058	3	37,321	58,385	21,064
Nova Scotia	41	616,263	14	26	32,984	190	40	216,019	26,586	108	909,524	1,366,228	456,704
New Brunswick	29	219,966	3	1	9,126	110	36	106,100	16,471	80	556,798	840,235	283,437
Quebec	599	7,968,943	409	84	716,101	2,310	197	2,453,832	382,607	1,446	11,459,101	18,196,283	6,737,182
Ontario	737	10,056,473	295	162	704,943	3,504	532	4,761,128	598,947	3,032	18,624,873	28,900,821	10,275,948
Manitoba	67	1,557,438	26	19	65,017	511	54	728,976	78,099	287	1,541,728	3,972,503	2,430,775
Saskatchewan	86	941,751	25	13	51,825	249	32	318,660	46,248	202	1,212,957	1,945,272	732,315
Alberta	86	823,645	22	7	52,349	243	65	398,175	45,615	168	1,426,072	2,402,181	976,109
British Columbia and Yukon	118	1,421,175	45	19	109,830	491	96	762,623	64,630	341	2,470,761	4,118,725	1,647,964

1921													
Canada	1,658	23,551,215	933	328	1,798,705	7,475	962	9,483,319	1,176,138	5,696	29,202,936	51,367,917	22,164,981
Prince Edward Island	7	18,231	1	1	1,500	11	5	11,656	1,647	6	43,666	78,112	34,446
Nova Scotia	33	400,611	12	24	27,174	144	22	144,841	24,071	54	576,742	958,662	381,920
New Brunswick	35	259,083	15	4	24,861	110	34	123,558	19,339	118	466,237	801,331	335,094
Quebec	518	6,982,845	352	64	610,336	2,115	161	2,216,594	336,804	1,318	7,655,002	13,197,481	5,542,479
Ontario	729	10,990,134	301	195	698,277	3,601	531	4,842,784	552,246	3,192	14,438,088	24,989,549	10,551,461
Manitoba	70	1,465,192	111	22	204,308	456	62	666,126	78,231	340	1,910,742	3,723,376	1,812,634
Saskatchewan	73	837,163	31	1	43,707	236	25	237,115	37,820	114	750,772	1,380,475	629,703
Alberta	92	1,442,463	29	10	74,396	320	61	478,296	61,925	263	1,329,340	2,602,410	1,273,070
British Columbia and Yukon	101	1,155,493	81	7	114,146	482	61	762,349	64,055	291	2,032,347	3,636,521	1,604,174
1922													
Canada	1,865	25,551,612	1,254	299	2,119,976	7,917	985	9,740,643	1,290,984	6,291	24,708,136	47,845,811	23,137,675
Prince Edward Island	7	24,354	1	1	1,500	12	2	11,371	2,031	7	37,655	67,279	29,624
Nova Scotia	37	413,763	20	6	25,785	147	26	149,108	28,414	92	477,173	861,386	384,213
New Brunswick	42	394,200	14	5	27,231	129	41	155,029	25,502	112	464,747	875,286	410,539
Quebec	628	7,879,904	581	60	838,072	2,217	155	2,209,596	373,531	1,548	6,756,929	12,867,855	6,110,926
Ontario	762	11,730,129	331	162	735,035	3,887	560	4,943,072	614,873	3,649	12,154,434	23,018,254	10,863,820
Manitoba	73	1,442,541	123	28	208,486	455	40	786,061	72,780	250	1,454,353	3,091,869	1,637,516
Saskatchewan	79	1,091,767	74	6	71,856	218	26	285,191	47,380	133	723,725	1,517,151	793,426
Alberta	103	1,291,399	29	11	68,678	330	62	444,948	58,889	174	928,478	2,021,122	1,092,644
British Columbia and Yukon	134	1,283,555	81	20	143,333	522	73	756,267	67,584	277	1,710,642	3,525,609	1,814,967
1923													
Canada	1,980	28,231,856	1,079	320	2,282,922	8,493	1,014	9,966,086	1,370,441	6,555	24,287,282	48,859,478	24,572,196
Prince Edward Island	7	34,243	1	1	1,000	15	4	12,257	2,095	8	38,628	75,891	37,263
Nova Scotia	49	437,773	13	13	27,898	167	30	184,840	33,744	88	518,144	948,329	430,185
New Brunswick	49	436,306	11	6	29,938	149	47	186,690	27,754	101	558,804	1,053,934	495,130
Quebec	611	8,814,619	467	63	969,947	2,398	159	2,393,052	401,573	1,346	6,736,946	13,395,518	6,658,572
Ontario	831	13,321,736	364	175	805,416	4,304	551	5,275,174	671,813	3,795	12,181,143	24,100,179	11,919,036
Manitoba	102	1,461,891	107	25	196,057	467	42	593,365	82,570	359	1,224,915	2,797,479	1,572,564
Saskatchewan	103	1,107,222	24	13	56,242	274	32	323,365	46,134	121	768,083	1,612,791	844,708
Alberta	112	1,330,773	43	10	90,388	350	69	460,824	51,577	411	922,726	2,085,863	1,163,137
British Columbia and Yukon	116	1,287,293	49	14	106,036	369	80	536,509	53,181	326	1,337,893	2,789,494	1,451,601
1924													
Canada	2,073	32,261,401	775	235	1,549,527	9,602	1,305	11,948,564	1,337,596	8,636	28,112,082	54,403,078	26,290,996
Prince Edward Island	5	50,450	1	1	1,500	14	3	13,116	2,705	12	48,659	94,228	45,569
Nova Scotia	49	545,540	11	5	22,600	180	42	187,070	27,199	100	586,780	1,040,201	453,421
New Brunswick	46	536,403	13	7	31,417	152	36	179,648	27,024	89	560,784	1,017,576	456,792
Quebec	662	10,016,068	298	42	493,791	3,005	229	3,293,228	393,591	2,493	8,270,016	15,493,596	7,223,580
Ontario	848	14,931,187	225	110	534,176	4,617	712	6,080,964	637,790	4,229	13,461,883	25,999,114	12,537,231
Manitoba	96	1,659,418	105	33	191,439	450	45	559,326	77,257	568	1,270,079	2,698,390	1,428,311
Saskatchewan	101	1,260,899	18	4	44,536	289	40	351,944	42,300	224	861,214	1,700,536	839,322
Alberta	113	1,489,624	35	12	89,953	351	72	485,024	54,086	326	1,040,561	2,281,053	1,240,492
British Columbia and Yukon	153	1,771,812	69	21	140,115	544	126	798,244	75,644	595	2,012,106	4,078,384	2,066,278
1925													
Canada	2,176	33,810,501	550	232	1,240,358	10,285	1,371	12,645,043	1,404,933	9,418	31,795,203	60,392,439	28,597,236
Prince Edward Island	6	57,642	1	1	1,500	16	4	14,874	3,055	15	55,869	101,197	45,328
Nova Scotia	49	512,647	10	5	20,624	166	36	167,264	28,463	75	584,021	1,035,485	451,464
New Brunswick	45	510,667	16	6	37,884	145	38	175,285	21,578	131	615,018	1,080,526	465,508
Quebec	740	10,962,216	90	56	197,999	3,481	225	3,812,427	464,753	2,806	9,106,802	17,776,097	8,669,295
Ontario	877	15,459,466	205	101	499,535	4,794	786	6,220,679	637,470	4,757	15,488,996	28,552,332	13,063,336
Manitoba	94	1,812,054	110	28	190,379	475	47	588,977	72,708	567	1,599,873	3,303,467	1,703,594
Saskatchewan	96	1,210,027	12	4	52,827	286	43	369,494	43,448	237	862,885	1,785,181	922,296
Alberta	116	1,424,502	23	11	82,470	367	74	476,211	56,847	325	1,260,665	2,523,276	1,262,611
British Columbia and Yukon	153	1,861,280	573	20	157,140	555	118	819,832	76,611	505	2,221,074	4,234,878	2,013,804

Table 62.—Principal Statistics of Bread and Other Bakery Products and Biscuit, Confectionery and Chewing Gum Industries, 1917-18 and Bread and Other Bakery Products Industry, 1919-27—Concluded

	Number of Est.	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value Added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1926													
Canada	2,214	37,416,979	549	239	1,258,897	11,059	1,542	13,473,242	1,546,678	19,325	32,928,065	62,920,009	29,991,944
Prince Edward Island	6	59,133	1	1	1,500	18	4	14,400	3,113	16	67,062	120,149	53,087
Nova Scotia	61	631,859	11	11	24,242	234	46	232,709	40,131	163	791,551	1,475,993	684,442
New Brunswick	44	547,366	6	5	21,281	165	42	204,255	24,078	225	665,683	1,206,287	540,604
Quebec	764	11,647,553	82	38	181,874	3,668	253	3,984,045	523,324	3,132	9,356,208	17,567,988	8,211,780
Ontario	890	17,156,580	211	113	532,918	5,170	853	6,762,341	707,450	5,039	15,753,267	30,125,253	14,371,986
Manitoba	92	1,795,824	113	28	187,627	524	63	557,735	75,126	543	1,571,379	3,174,424	1,603,045
Saskatchewan	85	1,256,063	22	6	61,299	289	41	370,421	44,196	241	960,033	1,850,207	890,174
Alberta	110	1,551,171	27	16	76,557	380	79	431,856	50,898	457	1,333,173	2,816,547	1,483,374
British Columbia and Yukon	162	2,771,430	76	21	171,599	611	161	915,480	78,362	509	2,429,709	4,583,161	2,153,452
1927													
Canada	2,443	40,559,259	598	248	1,342,088	11,786	1,782	14,726,059	1,518,293	11,353	35,779,690	68,726,262	32,946,572
Prince Edward Island	6	60,935	1	1	1,500	20	3	16,929	2,835	14	71,784	135,222	63,438
Nova Scotia	56	369,848	7	9	19,836	213	47	223,855	28,645	152	702,393	1,330,217	627,824
New Brunswick	56	545,499	20	4	34,423	167	61	202,861	27,575	151	742,500	1,318,620	576,120
Quebec	838	12,498,864	90	42	207,842	3,847	279	4,290,949	508,843	3,198	10,171,046	19,310,546	9,139,500
Ontario	947	19,056,396	224	113	539,070	5,536	1,009	7,423,169	707,242	5,874	16,880,622	32,745,604	15,864,982
Manitoba	120	1,943,325	133	32	225,428	555	79	655,965	72,003	584	1,953,961	3,809,554	1,855,593
Saskatchewan	101	1,276,471	21	4	58,362	332	50	410,752	45,839	204	1,035,212	2,052,142	1,016,930
Alberta	120	1,830,844	30	12	94,375	407	86	502,218	47,806	485	1,540,726	3,181,721	1,640,995
British Columbia and Yukon	199	2,977,077	72	31	161,252	709	168	999,361	77,505	691	2,681,446	4,842,636	2,161,190

Some interesting facts of the growth of the Bread and Other Bakery Products Industry are shown in table 63, which shows in summary form the increase per employee and per establishment of the more important factors of production.

Table 63.—Summary Statistics of Bread and Other Bakery Products Industry

—		1919	1920	1921	1926	1927
Number of establishments	No.	1,690	1,769	1,658	2,214	2,443
Capital	$	22,558,093	23,612,654	23,551,215	37,416,970	40,559,259
Average capital per establishment	$	13,348	13,348	14,205	16,900	16,603
Average capital per employee	$	2,324	2,400	2,428	2,795	2,814
Total number of employees	No.	9,705	9,840	9,698	13,389	14,414
Total salaries and wages	$	9,633,228	11,494,388	11,282,024	14,732,139	16,068,147
Average per employee	$	993	1,168	1,163	1,100	1,115
Total salaries	$	1,462,233	1,742,175	1,798,705	1,258,897	1,342,088
Average per salaried employee	$	1,175	1,489	1,427	1,598	1,586
Total wages	$	8,170,995	9,752,213	9,483,319	13,473,242	14,726,059
Average per wage-earner	$	966	1,125	1,124	1,069	1,085
Gross value of product	$	52,318,484	61,800,633	51,367,917	62,920,009	68,720,262
Average per establishment	$	30,984	34,935	30,980	28,419	28,132
Average per employee	$	5,391	6,281	5,297	4,699	4,768
Value added by manufacture	$	18,635,961	23,561,498	22,164,981	29,991,944	32,946,572
Average per establishment	$	11,027	13,319	13,369	13,546	13,486
Average per employee	$	1,920	2,394	2,389	2,240	2,286
Power employed	h.p.	7,118	5,667	5,696	10,325	11,353
Average per establishment	h.p.	4·2	3·2	3·4	4·7	4·6
Average per wage-earner	h.p.	0·8	0·7	0·7	0·8	0·8

Capital Invested.—Capital invested in the bread and other bakery products industry is shown in table 64 by classes for the years 1919-27. Fixed capital, comprising land, buildings, fixtures, machinery and tools, totalled $32,509,770 in 1927 as against $29,928,435 in 1926, an increase of 8·6 p.c., while working capital, made up of materials, supplies and stocks on hand, together with cash, trading and operating accounts, etc., totalled $8,049,489 in 1927 as against $7,488,544 the previous year, an increase of 7·5 p.c. In the nine-year period, fixed capital increased 108 p.c. and working capital 16 p.c., the fixed and working capital in 1919 amounting to $15,639,277 and $6,918,816 respectively.

Apportioned by provinces, Ontario leads with 47·0 p.c. of the total capital invested, Quebec second with 30·8 p.c. and the other provinces follow in the order named; British Columbia 7·3 p.c., Manitoba 4·8 p.c., Alberta 4·5 p.c., Saskatchewan 3·2 p.c., and the Maritime Provinces 2·4 p.c.

Table 64.—Capital Invested in the Bread and Other Bakery Products Industry by Items, 1919-27

Provinces	Fixed Capital	Working Capital		Total capital
	Land, buildings, fixtures, machinery, and tools	Materials, supplies, and stocks on hand	Cash, trading and operating accounts, etc.	
	$	$	$	$
1919	15,639,277	3,760,860	3,157,956	22,558,093
1920	17,060,255	3,289,605	3,262,794	23,612,654
1921	18,377,517	2,203,187	2,970,511	23,551,215
1922	20,334,240	2,157,019	3,060,353	25,551,612
1923	22,766,244	2,211,735	3,253,877	28,231,856
1924	25,197,739	3,243,019	3,820,643	32,261,401
1925	26,800,082	2,950,734	4,059,685	33,810,501
1926	29,928,435	3,231,950	4,256,594	37,416,979
1927	.....	.....	.....	.....
Canada	32,509,770	3,505,958	4,543,531	40,559,259
Prince Edward Island	42,907	12,234	5,794	60,935
Nova Scotia	262,839	48,512	58,497	369,848
New Brunswick	363,699	73,211	108,589	545,499
Quebec	9,991,919	1,112,889	1,394,056	12,498,864
Ontario	15,888,219	1,505,201	1,662,976	19,056,396
Manitoba	1,479,236	147,243	316,816	1,943,325
Saskatchewan	936,471	127,390	212,610	1,276,471
Alberta	1,384,459	166,416	279,969	1,830,844
British Columbia and Yukon	2,160,021	312,862	504,194	2,977,077

Production.—The production of the bread and other bakery products industry is given in tables 65, 66 and 67. These statistics include only those of the establishments manufacturing bread, pastry, etc., as their principal product. The statistics relating to specific products are therefore not to be regarded as comprehensive, since products like bread, buns, pies, cakes and

puddings are also found as secondary products of other industries, such as biscuits, confectionery and chewing gum. This is evident from table 66, which gives the production of both the bread and biscuit and confectionery industries. For example, the total production of bread and other bakery products amounted to $69,261,009 in 1927, while the production of the bread and other bakery products industry is shown as $68,726,262. The production of biscuits, confectionery and chewing gum is therefore correspondingly overstated. This difference, however, is so slight that it does not materially affect the value of production figures of these two industries.

Table 65.—Quantity and Value of Principal Products of the Bread and Other Bakery Products Industry, 1919-27

Product	Quantity	Selling value at the factory	Average price per pound
1919	lb.	$	cents
Bread	556,057,387	42,327,535	7·6
Buns	.....	1,317,559	
Pies, cakes, etc	.....	6,020,108	
Puddings	.....	37,700	
1920			
Bread	621,611,862	51,564,995	8·3
Buns	.....	1,530,195	
Pies, cakes, etc	.....	7,028,511	
Puddings	.....	14,410	
1921			
Bread	613,629,022	42,223,595	6·8
Buns	.....	1,452,413	
Pies, cakes, etc	.....	6,459,038	
Puddings	.....	10,245	
1922			
Bread	658,428,893	38,782,746	5·9
Buns	.....	1,564,742	
Pies, cakes, etc	.....	6,546,758	
Puddings	.....	36,536	
1923			
Bread	664,076,921	38,879,579	5·9
Buns	.....	1,830,027	
Pies, cakes, etc	.....	6,633,323	
Puddings	.....	70,288	
1924			
Bread	708,430,407	43,445,304	6·1
Buns	.....	1,715,143	
Pies, cakes, etc	.....	7,220,667	
Puddings	.....	16,922	
1925			
Bread	754,618,565	48,956,017	6·5
Buns	.....	1,815,633	
Pies, cakes, etc	.....	7,576,643	
Puddings	.....	133,246	
1926			
Bread	819,205,502	50,438,458	6·2
Buns	.....	2,521,934	
Pies, cakes, etc	.....	8,894,184	
Puddings	.....	110,827	
1927			
Bread	780,940,855	54,043,072	6·9
Buns	.....	2,465,990	
Pies, cakes, etc	.....	11,440,431	
Puddings	.....	32,984	

Table 66.—Production of the Bread, Biscuit and Confectionery Industries, 1927

Items	Made in Bakeries		Made in biscuit and confectionery establishments		Total Production	
	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$
Bread ... lb.	780,940,855	54,043,072	4,822,489	343,233	785,763,344	54,386,305
Buns	.....	2,465,990	.....	99,449	.....	2,565,439
Pies, cakes, etc	.....	11,440,431	.....	804,648	.....	12,245,079
Puddings	.....	32,984	.....	31,202	.....	64,186
Biscuits, plain, etc ... ton	340	127,256	50,473	16,338,476	50,813	16,465,732
Confectionery, all kinds ... lb.	615,752	143,598	105,432,771	27,854,984	106,048,523	27,998,582
Ice cream ... gal.	68,502	108,640	2,094,313	3,094,468	2,162,815	3,203,108
All other products	.....	364,291	.....	4,562,428	.....	4,926,719
Total value	.....	**68,726,262**	.....	**53,128,888**	.....	**121,855,150**

Table 67.—Production of Bread and Other Bakery Products by Provinces, 1927

—	Canada		Prince Edward Island		Nova Scotia		New Brunswick		Quebec	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$		$
Bread ..... lb.	780,940,855	54,043,072	1,597,264	112,543	15,715,612	1,061,323	14,569,850	1,041,996	218,400,823	16,113,016
Buns	.....	2,465,990	.....	13,990	.....	22,979	.....	77,373	.....	562,868
Pies, cakes, etc...	.....	11,440,431	.....	8,469	.....	240,293	.....	188,472	.....	2,471,804
Puddings	.....	32,984	.....	20	.....	12	.....	75	.....	912
Biscuits, plain, etc ..... ton	340	127,256	.....	.....	.....	.....	.....	.....	238	107,424
Chocolate confectionery.. lb.	155,901	55,044	.....	.....	.....	.....	.....	.....	18,737	9,830
Sugar confectionery. lb.	459,851	88,554	.....	.....	500	150	.....	.....	35,882	12,683
Ice cream... gal.	68,502	108,640	.....	.....	675	1,810	.....	.....	14,063	25,370
All other products	.....	364,291	.....	200	.....	3,650	.....	10,704	.....	6,639
Total value	.....	**68,726,262**	.....	**135,222**	.....	**1,330,217**	.....	**1,318,620**	.....	**19,310,546**

—	Ontario		Manitoba		Saskatchewan		Alberta		British Columbia	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$		$
Bread..... lb.	364,064,575	24,578,897	52,320,443	3,287,625	24,066,627	1,670,528	38,636,591	2,664,303	51,569,067	3,512,841
Buns.....	.....	1,284,137	.....	114,180	.....	99,168	.....	118,065	.....	173,230
Pies, cakes, etc..	.....	6,382,755	.....	395,718	.....	267,169	.....	387,031	.....	1,098,720
Puddings.....	.....	18,718	.....	1,128	.....	1,430	.....	2,396	.....	8,293
Biscuits, plain, etc.....ton	102	19,832	.....	.....	.....	.....	.....	.....	.....	.....
Chocolate confectionery lb.	113,795	36,497	3,920	1,552	10,350	3,485	1,038	441	8,061	3,239
Sugar confectionery.... lb.	406,855	69,989	4,797	1,330	1,700	500	5,006	1,581	5,111	2,321
Ice cream... gal.	43,012	63,413	3,584	4,336	3,210	7,040	2,768	4,281	1,190	2,390
All other products.....	.....	291,366	.....	3,685	.....	2,822	.....	3,623	.....	41,602
Total value	.....	**32,745,604**	.....	**3,809,554**	.....	**2,052,142**	.....	**3,181,721**	.....	**4,842,636**

PER CAPITA CONSUMPTION OF "BAKERS' BREAD" AND WEIGHT OF A LOAF OF BREAD

The per capita consumption of "bakers' bread" on an estimated population of 9,519,000 in 1927 was 82·5 pounds as compared with 83·4 pounds in 1926. A table showing the per capita consumption of biscuits, confectionery and ice cream is given in the report on that industry.

The weight of a loaf of bread throughout the Dominion is not standardized but is regulated by municipal by-laws in the various provinces, except in Ontario where under R.S.O. ch. 224 the standard weight of the loaf is fixed at 24 and 48 ounces, except that in the "small bread" the limit is fixed at 12 ounces. According to information collected by the Bureau of Statistics the average weight of a loaf in the provinces may be stated as follows:—

Prince Edward Island, Nova Scotia and New Brunswick at 1½ pounds or 24 oz., Quebec, in certain municipalities at 1½ pounds or 24 ounces, while in the remaining parts of the province it is variously stated at 4, 5 and 6 pounds. Ontario at 24 and 48 ounces except in the case of "small bread." Manitoba generally at 16 and 20 ounces except in outlying portions of the province where it is stated at 3 pounds.

Saskatchewan, Alberta and British Columbia report 16, 18 and 20 ounces as the average weight of the loaf which is regulated by municipal by-laws.

WHOLESALE PRICES OF BAKERY PRODUCTS

Bread, Plain White

Price per pound at Toronto—Monthly quotations from Canada Bread Co., Ltd.

Averages		Averages	
1917	$0·0606	1922	$0·0522
1918	0·0670	1923	0·0533
1919	0·0660	1924	0·0565
1920	0·0771	1925	0·0666
1921	0·0638	1926	0·0666
		1927	0·0716

Bread, Plain White

Price per pound at Winnipeg—Monthly quotations from Canada Bread Co., Ltd.

Averages		Averages	
1917	$0·0533	1922	$0·0516
1918	0·0600	1923	0·0500
1919	0·0650	1924	0·0541
1920	0·0746	1925	0·0675
1921	0·0625	1926	0·0600
		1927	0·0600

Bread, Plain White

Price per pound at Vancouver—Monthly quotations from bakers.

Averages		Averages	
1917	$0·0745	1922	$0·0599
1918	0·0899	1923	0·0533
1919	0·0710	1924	0·0577
1920	0·0840	1925	0·0677
1921	0·0680	1926	0·0666
		1927	0·0686

Biscuits, Soda

Price per pound—Monthly quotations from Christie, Brown & Co., Ltd., Toronto.

Averages		Averages	
1917	$0·1175	1922	$0·1100
1918	0·1420	1923	0·1100
1919	0·1580	1924	0·1333
1920	0·1673	1925	0·1383
1921	0·1500	1926	0·1425
		1927	0·1275

Materials Used.—The quantity and cost value of all materials used in the bread and other bakery products industry in 1927 are given in table 68 for the Dominion. The single item of flour constituted 66·9 per cent of the total cost of all materials used and yeast, sugar, shortening and eggs, each with a cost exceeding a million dollars, were next in order. Containers of all kinds and labels cost $604,822 or ·9 per cent of the selling value of the products of the entire industry.

Table 68.—Materials Used by Quantity and Cost Value, 1927

Classes of materials	Unit of measure	Quantity	Cost value
			$
Flour	Barrel	3,263,182	23,923,254
Hops	Pound	44,154	6,705
Malt	"	3,726,253	427,033
Yeast	"	6,783,564	1,738,492
Salt	Barrel	39,010	133,812
Sugar	Pound	21,535,015	1,466,803
Butter	"	1,066,126	387,523
Cooking oils	"	555,674	77,718
Lard	"	3,961,618	581,387
Shortening	"	10,972,931	1,546,066
Cream	Gallon	98,428	202,346
Milk, fresh and skim	"	420,997	128,454
" condensed	Pound	4,936,613	334,926
" dried or powdered	"	1,562,565	199,203
Eggs	Dozen	3,682,769	1,253,493
Fruits	Pound	5,581,335	780,216
Nuts	"	320,856	125,267
Glucose	"	241,381	12,626
Chocolate	"	170,149	39,212
Cocoanut	"	395,685	66,635
Syrups	Gallon	55,239	29,409
Extracts, essences, etc. (value only)	.....	.....	62,486
All other materials (value only)	.....	.....	1,651,802
Boxes, cases, tins, labels, etc. (value only)	.....	.....	604,822
Total cost of Materials	.....	.....	**35,779,690**

Employment Statistics.—The employment statistics of the bread and other bakery products industry are shown in the following tables:—

Table 62—Sex and Provincial Distribution of Salaried employees and Wage-Earners, 1919-26.

Table 69—Employment of Wage-Earners by Months and Sex, 1925-26.

Table 70—Hours Worked by Wage-Earners in Month of Highest Employment 1925-26.

The number of salaried employees decreased from 1,244 in 1919 to 846 in 1927; the biggest drop of 367 employees being reported by Quebec, while the number of wage-earners rose from 8,461 to 13,568 during the same period. The average salary of $1,175 in 1919 rose to $1,586 in 1927 while wages increased from $966 to $1,085. Although salaries rose much higher than wages, it is not to be inferred that wage-earners as a class are now not as well off as salaried employees. On the contrary, the average wage of $1,085 compares quite favourably with that paid in other industries of the vegetable products group, while in spite of the increase, the average salary is still lower than that of the vegetable products group as a whole, which was about $1,950 in 1927.

Employment in this industry is steady throughout the year, there being no seasonal fluctuation. The variation from the maximum was only 3 p.c. in 1925 and 5 p.c. in 1926 and 1927. The average number of persons employed in 1927 was 13,568 of whom 1,782 or 13·1 p.c. were female while the average in 1926 was 12,601 of whom 1,542 or 12·2 p.c. were female.

From a study of table 70 which gives the number of hours worked by wage-earners in the month of highest employment, it is seen that the eight-hour day is prevalent in British Columbia and Alberta and the nine-hour day in Saskatchewan, Manitoba, Ontario and New Brunswick. For the Dominion as a whole 42·7 p.c. of the wage-earners in 1927 worked nine hours per day, 33·3 p.c. 8 hours or less and 24 p.c. 10 hours or over. The number of hours worked per day in the Dominion decreased slightly from that of the previous year.

Table 69 —Bread and Other Bakery Products Industry: Employment of Wage-earners by month, 1926 and 1927

—	1926			1927		
	Male	Female	Total	Male	Female	Total
January	10,579	1,438	12,017	11,275	1,674	12,949
February	10,582	1,436	12,018	11,313	1,678	12,991
March	10,650	1,445	12,095	11,408	1,690	13,098
April	10,731	1,452	12,183	11,513	1,698	13,211
May	10,880	1,500	12,380	11,588	1,727	13,315
June	11,017	1,513	12,530	11,734	1,759	13,493
July	11,094	1,533	12,627	11,816	1,785	13,601
August	11,099	1,541	12,640	11,857	1,799	13,656
September	11,119	1,552	12,671	11,799	1,787	13,586
October	11,118	1,534	12,652	11,733	1,764	13,497
November	11,114	1,534	12,648	11,708	1,751	13,459
December	11,125	1,536	12,661	11,602	1,766	13,368
Average monthly employment	**11,059**	**1,542**	**12,601**	**11,786**	**1,782**	**13,568**

Table 70.—Bread and Other Bakery Products Industry: Hours Worked by Wage-Earners in Month of Highest Employment, 1926 and 1927

—		Number of Wage-Earners Working per Day				Percentage of Wage-Earners Working per Day			
		8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
Canada	1926	2,765	7,866	2,281	209	21·1	59·9	17·4	1·6
	1927	4,735	6·055	3,072	339	33·3	42·7	21·6	2·4
Prince Edward Island	1926	15	.....	8	.....	65·2	.....	34·8	.....
	1927	6	7	11	.....	25·0	29·2	45·8	.....
Nova Scotia	1926	119	55	82	26	42·2	19·5	29·1	9·2
	1927	114	70	75	4	43·4	26·6	28·5	1·5
New Brunswick	1926	40	149	25	3	18·4	68·7	11·5	1·4
	1927	57	131	50	5	23·5	53·9	20·6	2·0
Quebec	1926	505	2,528	943	76	12·4	62·4	23·3	1·9
	1927	1,058	1,357	1,732	173	24·5	31·4	40·1	4·0
Ontario	1926	1,068	4,070	1,095	79	16·9	64·5	17·3	1·3
	1927	2,231	3,466	1,018	126	32·6	50·7	14·9	1·8
Manitoba	1926	77	497	30	17	12·4	80·0	4·8	2·8
	1927	195	413	59	19	28·4	60·2	8·6	2·8
Saskatchewan	1926	71	207	57	4	20·9	61·1	16·8	1·2
	1927	81	226	77	8	20·7	57·7	19·6	2·0
Alberta	1926	265	189	9	4	56·8	40·5	1·9	0·8
	1927	314	167	32	4	60·7	32·3	6·2	0·8
British Columbia	1926	605	171	32	.....	74·9	21·1	4·0	.....
	1927	679	218	18	.....	74·2	23·8	2·0	.....

Working Time and Wages.—In table 71 is given the average number of hours worked by wage-earners per day and per week; the average number of days that establishments operated on full time during each year; and the nominal and real wages paid in the bread and other bakery products industry from 1919 to 1927. As the figures indicate, employment in this industry is quite steady, very little change taking place in either the number of hours worked per day or week, or the number of days that establishments operated on full time. From the nature of the industry, severe unemployment or business depression is improbable, since production must of necessity continue at all times, unlike other industries which experience periods of over-production with resulting unemployment, when no market can be found for their surplus products. A change took place, however, in the wages paid. For the Dominion as a whole, nominal wages rose from $966 in 1919 to $1,085 in 1927, an increase of 12·3 p.c. Increases took place in all the provinces with the exception of Manitoba where nominal wages dropped from $1,053 to $1,035. The figures given for money wages, however, do not disclose the full extent of the increase. In

view of the drop in the cost of living from 125·2 p.c. to 116·0 p.c., real wages therefore rose from $771 to $935, an increase of 21·3 p.c. during the period under review.

In 1927, the highest wages were paid in British Columbia with an average of $1,139, followed by Ontario with $1,134, Quebec $1,040, Manitoba $1,035, and Nova Scotia $861.

Table 71.—Bread and Other Bakery Products Industry: Hours of Labour and Wages Paid, 1919-27

—	Average number of hours worked		Average number of days establishments on full time operation	Wages paid		
	Per day	Per week		Nominal wages	Cost of living index 1917=100	Real wages
				$		$
1919						
Canada	8·9	53·7	291	966	125·2	771
Nova Scotia	8·8	52·8	295	808	125·2	645
Quebec	9·2	55·2	294	898	125·2	717
Ontario	8·8	53·5	289	993	125·2	793
Manitoba	8·9	53·4	291	1,053	125·2	841
British Columbia	8·5	50·9	292	1,097	125·2	876
1920						
Canada	8·9	53·7	288	1,125	145·0	776
Nova Scotia	8·9	53·5	293	939	145·0	648
Quebec	9·2	55·4	293	979	145·0	675
Ontario	8·8	53·0	287	1,180	145·0	814
Manitoba	9·1	53·3	283	1,290	145·0	890
British Columbia	8·6	51·7	287	1,299	145·0	896
1921						
Canada	8·9	53·7	290	1,124	127·5	882
Nova Scotia	8·8	53·0	294	873	127·5	685
Quebec	9·7	58·1	295	974	127·5	764
Ontario	8·7	53·0	287	1,172	127·5	919
Manitoba	8·7	51·4	287	1,286	127·5	1,009
British Columbia	8·2	48·3	294	1,404	127·5	1,101
1922						
Canada	8·8	52·9	291	1,094	116·8	937
Nova Scotia	8·0	52·4	291	862	116·8	738
Quebec	9·0	54·2	296	932	116·8	798
Ontario	8·8	52·6	290	1,111	116·8	951
Manitoba	8·7	52·1	293	1,588	116·8	1,360
British Columbia	8·6	51·1	287	1,273	116·8	1,090
1923						
Canada	8·6	51·2	295	1,048	116·8	897
Nova Scotia	8·9	53·2	284	938	116·8	803
Quebec	9·7	58·0	302	936	116·8	801
Ontario	8·8	52·9	291	1,086	116·8	930
Manitoba	7·7	52·1	287	1,166	116·8	998
British Columbia	8·6	51·1	292	1,195	116·8	1,023
1924						
Canada	8·9	53·8	302	1,095	114·5	956
Nova Scotia	8·7	55·1	304	843	114·5	736
Quebec	9·1	55·8	306	1,018	114·5	889
Ontario	9·0	53·6	301	1,141	114·5	996
Manitoba	8·8	50·9	297	1,130	114·5	987
British Columbia	8·3	49·5	301	1,191	114·5	1,040
1925						
Canada	9·0	53·3	300	1,085	116·0	935
Nova Scotia	8·7	52·9	306	828	116·0	714
Quebec	9·2	54·9	305	1,029	116·0	887
Ontario	8·9	53·0	297	1,115	116·0	961
Manitoba	8·8	52·8	305	1,128	116·0	972
British Columbia	8·3	50·5	299	1,218	116·0	1,050
1926						
Canada	9·0	53·9	297	1,069	116·8	915
Nova Scotia	9·0	53·5	283	831	116·8	711
Quebec	9·1	54·2	298	1,016	116·8	870
Ontario	9·0	53·9	296	1,123	116·8	961
Manitoba	9·0	53·9	296	950	116·8	813
British Columbia	8·3	50·7	296	1,186	116·8	1,015
1927						
Canada	8·9	56·9	296	1,085	116·0	935
Nova Scotia	8·9	53·4	296	861	116·0	742
Quebec	9·2	55·6	299	1,040	116·0	897
Ontario	8·9	61·2	294	1,134	116·0	978
Manitoba	8·8	52·4	292	1,035	116·0	892
British Columbia	8·3	50·2	299	1,139	116·0	982

Fuel Consumption and Power Installation.—The fuel consumed and the power installed in the bread and other bakery products industry from 1919 to 1927 are set forth in tables 72 and 73. Of the fuel used in 1927, amounting to $1,518,293, $430,433 was for wood, $338,300 for coke, $285,983 for gas and the remainder for coal, gasoline, oil, etc. With the exception of 1921 and 1924 the amount spent for fuel increased each year so that an expenditure of $986,682 in 1919 amounted to $1,546,678 in 1926, with a slight drop to $1,518,293 in 1927, an increase of 53·9 per cent, while the cost of electricity rose from $108,357 to $294,598, an increase of 171·9 p.c. The increase in the power installed for manufacturing purposes from 7,118 h.p. in 1919 to 11,353 h.p. in 1927 is further evidence of the increasing use of electricity for motive power.

Table 72.—Fuel Consumption of the Bread and Other Bakery Products Industry, 1919-27

Year	Bituminous Coal		Anthracite coal		Lignite Coal		Coke		Gasoline	
	Tons	Value	Tons	Value	Tons	Value	Tons	Value	Gallons	Value
		$		$		$		$		$
1919	12,702	122,420	25,187	251,824	2,109	18,744	19,006	184,501	75,751	30,389
1920	15,315	187,437	22,202	340,495	2,305	24,428	18,224	230,554	107,752	49,189
1921	12,263	145,656	20,486	327,235	3,943	42,468	22,299	255,635	104,638	40,405
1922	14,339	149,007	18,206	294,204	5,024	44,366	26,305	322,160	91,923	35,508
1923	15,887	156,109	15,524	247,627	2,869	28,725	30,682	391,584	109,444	38,869
1924	15,516	147,267	14,587	221,888	1,720	15,372	30,086	339,931	110,327	33,715
1925	17,864	152,890	13,718	199,764	2,233	18,273	29,639	331,706	144,308	49,962
1926	18,017	172,058	13,515	192,530	1,361	11,360	30,510	351,160	166,670	52,331
1927	18,669	173,569	12,239	166,936	2,490	26,383	30,215	338,300	74,687	31,140

Year	Oil		Wood		Gas, Artificial, and Natural		Other fuel	Total value	Cost of electricity
	Gallons	Value	Cords	Value	M. cu. ft.	Value	value		
		$		$		$	$	$	$
1919	102,485	8,726	50,657	302,693	111,639	58,267	9,118	986,682	108,357
1920	116,422	9,515	56,258	353,457	105,715	62,103	4,063	1,261,241	104,928
1921	2,069	311	50,361	291,070	96,017	67,341	6,017	1,176,138	146,480
1922	660	136	60,354	345,433	120,168	86,602	13,568	1,220,984	.....
1923	91,572	10,299	65,242	354,668	196,704	134,498	8,062	1,370,441	147,630
1924	300,871	26,744	69,381	366,576	270,046	176,820	9,283	1,337,596	276,610
1925	399,121	33,501	71,629	379,805	376,519	231,411	7,621	1,404,933	276,476
1926	2,753,583	81,086	77,804	389,922	370,005	291,721	4,510	1,546,678	254,147
1927	625,175	63,090	83,375	430,433	406,935	285,983	2,459	1,518,293	294,598

Table 73.—Power Installed in the Bread and Other Bakery Products Industry, 1919-27

Year	Steam engines and turbines		Oil, gas and gasoline engines		Hydraulic turbines or water wheels		Electric motors operated by purchased power	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
1919	11	117	236	984	22	115	812	5,902
1920	11	160	290	1,063	37	182	912	4,262
1921	10	133	232	843	2	6	990	4,714
1922	13	163	333	1,209	14	52	1,309	4,867
1923	13	183	317	1,203	.....	.....	1,253	5,169
1924	23	258	333	1,248	29	86	1,476	7,044
1925	10	183	367	1,358	15	101	1,783	7,776
1926	13	233	405	1,482	.....	.....	2,057	8,610
1927	16	223	426	1,471	.....	.....	2,361	9,659

—	Total power used for manufacturing		Electric motors operated by power generated by establishments		Total electric motors		Boilers installed	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
1919	1,081	7,118	.....	.....	812	5,902	19	479
1920	1,250	5,667	.....	.....	912	4,262	44	1,460
1921	1,234	5,696	.....	.....	990	4,714	.....	.....
1922	1,671	6,291	318	1,187	1,627	6,052	36	982
1923	1,583	6,555	346	1,557	1,599	6,726	42	1,472
1924	1,861	8,636	57	200	1,533	7,244	63	1,489
1925	2,175	9,418	49	149	1,832	7,925	98	2,414
1926	2,475	10,325	11	24	2,068	8,634	85	2,203
1927	2,803	11,353	.....	.....	2,361	9,659	115	3,023

Imports and Exports.—The imports of manufactured commodities in the baking industry are not of sufficient importance to have a separate import classification, but are included in imports under the item "flavoring powders, custard powders, jelly powders, sweetened breads, pies, cakes and puddings." One item only is shown separately, that of Passover Bread which in the calendar year 1927 was valued at $125,669, all of which came from the United States.

Exports similarly are combined in the export classification under the head of "biscuits and bread" so that it is not possible to give separate information regarding the export of either commodity. Import and export statistics for the "bread" and "biscuit and confectionery" industries will be found under the "Biscuits, Confectionery and Chewing Gum Industry" which follows.

THE BISCUIT, CONFECTIONERY AND CHEWING GUM INDUSTRY*

The biscuit, confectionery and chewing gum industry is closely allied with that of bread and other bakery products with which it was combined for statistical purposes until 1919. Unlike the bread industry, its products need not necessarily be made fresh daily with the result that its market is greatly increased, so much so that the products of this industry find their way to all parts of the world (Table 87). The importance of this industry in the vegetable products group may be seen on referring to table 5, which shows that it is second in the employment afforded, fifth in the value added by manufacture, fifth in the amount of capital invested and sixth in the gross value of products.

This industry did not experience as great a development during the nine years under review, as some of the other industries of the vegetable products group. Although the amount of capital invested increased from $32,800,944 in 1919 to $46,448,311 in 1927, production decreased from $55,926,685 to $53,128,888, employment dropped from 12,744 to 12,486 and the number of establishments engaged in the industry declined from 330 to 294. The maximum production was attained in 1920 when goods to the value of $57,721,763 were produced. The following two years saw a diminution in production each year and for the last five years the gross value of products fluctuated between 48 and 53 million dollars annually. The depression of 1921 affected this industry to a somewhat greater extent than that of bread and other bakery products. The number of establishments decreased from 404 in 1920 to 376 in 1921, the number of persons employed dropped considerably from 13,023 to 11,490 and production decreased by $8,559,343, due chiefly to the drop in the price of raw materials used. It is interesting to note that in 1921, although there were 1,533 less persons employed, the value added by manufacturing processes was a little higher than the previous year. This was undoubtedly due in part to the lag between the drop in the price of raw materials and that of manufactured products.

In 1927 there were 294 establishments engaged in the manufacture of biscuits, confectionery, chewing gum and kindred products; they had a capital investment of $46,448,311; gave employment to 12,486 persons and paid out $11,399,594 in salaries and wages. They also produced goods that had a selling value of $53,128,888 and spent $25,149,428 for raw materials, leaving the value added by manufacture at $27,979,460. Of the 294 establishments, 144 were located in Ontario, 49 in Quebec, 37 in the Prairie Provinces, 40 in British Columbia and 24 in the Maritimes. At the present time, the centre of the industry is in Ontario, which employs 56 p.c. of the capital, 50 p.c. of the employees and manufactures 56 p.c. of the products of the whole industry. Quebec, is, however, assuming increasing importance. In 1919, it employed only 17 p.c. of the persons engaged in the industry and produced 14 p.c. of the products, while in 1927, with the same number of establishments, it employed 27 p.c. of the employees and produced 22 p.c. of the value of production.

The principal statistics of this industry by provinces are given in table 74 for the years 1919 to 1927.

Summary statistics of the biscuit, confectionery and chewing gum industry are given in table 75 which shows the change that took place in the value of production, capitalization, power installation, employment and the remuneration of the persons engaged in the industry during the nine years under review.

*Prior to 1927, only firms producing biscuits, confectionery and chewing gum as their principal products were included under this classification. Firms producing cocoa and chocolate as their principal products and confectionery as a subsidiary product were treated as a separate industry under the heading of "Cocoa and Chocolate." Commencing with 1928, it is the intention of the Bureau to include the "Cocoa and Chocolate Industry" with that of "Biscuits, Confectionery and Chewing Gum."

Table 74.—Principal Statistics of the Biscuit, Confectionery and Chewing Gum Industry, 1919-27

Year	Number of establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1919													
Canada	330	32,800,944	1,149	424	2,486,040	4,417	6,754	7,040,283	549,643	13,145	30,112,915	55,926,685	25,813,770
Prince Edward Island and Nova Scotia	12	1,840,899	45	27	113,766	302	685	573,663	11	2,130	1,994,168	4,247,277	2,253,109
New Brunswick	6	1,755,053	68	34	135,541	225	470	407,576	31,922	770	2,006,961	3,258,964	1,252,003
Quebec	49	4,084,949	237	26	418,533	851	1,050	1,015,029	102,030	947	5,150,963	7,975,283	2,824,320
Ontario	174	22,204,456	656	304	1,487,711	2,588	3,757	4,153,797	282,569	8,140	17,220,404	33,879,159	16,658,755
Manitoba	15	937,481	43	7	100,696	172	373	355,359	24,862	274	1,509,803	2,436,197	926,394
Saskatchewan	11	192,278	11	2	19,836	30	29	48,284	4,958	41	193,456	328,655	135,199
Alberta	26	623,667	27	8	64,295	88	157	194,766	10,582	230	830,885	1,626,351	795,466
British Columbia	37	1,162,161	62	16	125,662	161	233	291,809	24,509	613	1,206,275	2,174,799	968,524
1920													
Canada	40	435,100,618	1,345	441	2,998,209	4,574	6,663	7,909,914	756,192	.....	32,646,709	57,721,763	25,075,054
Prince Edward Island and Nova Scotia	12	1,961,893	55	24	119,676	449	595	737,937	94,090	.....	2,580,725	4,718,630	2,137,905
New Brunswick	9	1,991,236	67	39	183,668	242	493	389,881	42,525	.....	2,054,260	3,618,648	1,564,388
Quebec	47	4,711,617	249	43	488,146	798	1,090	1,108,849	127,545	.....	5,591,662	8,845,595	3,253,933
Ontario	229	23,136,859	822	305	1,863,070	2,616	3,731	4,677,152	411,885	.....	18,358,937	33,505,754	15,146,817
Manitoba	17	988,258	43	3	83,450	149	310	368,150	26,115	.....	1,529,910	2,386,770	856,860
Saskatchewan	13	182,955	7	4	24,659	42	44	51,025	6,579	.....	240,458	389,862	149,404
Alberta	28	777,923	30	6	69,290	87	172	221,223	12,225	.....	944,436	1,655,362	710,926
British Columbia	49	1,349,877	72	17	166,250	191	228	355,697	35,228	.....	1,346,321	2,601,142	1,254,821
1921													
Canada	376	33,152,701	1,359	427	3,001,254	4,214	5,460	7,081,328	700,556	14,521	23,724,027	49,171,420	25,447,393
Prince Edward Island	4	27,592	2	1	2,600	4	1	2,481	868	21	20,060	31,140	11,080
Nova Scotia	9	1,725,513	46	20	120,343	438	604	706,364	86,508	2,133	1,447,460	3,577,463	2,130,003
New Brunswick	10	1,829,965	71	22	188,653	214	355	374,548	45,994	838	1,338,852	2,828,506	1,489,654
Quebec	38	6,008,233	316	50	578,239	946	1,247	1,248,209	170,077	2,172	4,838,710	9,268,470	4,429,760
Ontario	211	20,433,886	749	314	1,741,632	2,180	2,607	3,816,582	333,543	8,308	13,042,024	27,710,219	14,668,195
Manitoba	24	1,013,184	73	2	143,336	175	297	400,458	23,687	386	1,383,447	2,474,338	1,090,891
Saskatchewan	8	40,622	1	.....	3,000	16	1	22,185	2,254	9	36,298	79,316	43,018
Alberta	26	796,473	32	6	80,546	78	144	172,491	11,036	151	697,348	1,356,012	658,664
British Columbia	46	1,277,233	69	12	142,905	193	204	338,010	26,589	503	919,828	1,845,956	926,128
1922													
Canada	372	35,788,835	1,532	502	3,443,580	4,412	5,823	7,262,529	663,763	11,799	20,742,382	44,749,262	24,006,880
Prince Edward Island	4	30,556	2	1	3,100	5	.....	3,034	822	21	13,821	26,445	12,624
Nova Scotia	13	1,912,667	87	43	114,204	414	546	658,485	64,810	1,179	1,186,933	3,125,693	1,938,760
New Brunswick	11	1,647,825	70	21	181,403	214	350	342,587	33,547	732	1,324,783	2,358,234	1,033,451
Quebec	48	7,527,043	410	53	760,935	1,070	1,398	1,381,428	166,076	2,364	5,146,465	9,621,957	4,475,492
Ontario	203	22,047,183	837	343	2,053,518	2,309	3,024	4,130,367	347,260	6,856	10,796,872	25,166,300	14,369,428
Manitoba	23	1,038,310	46	27	165,818	164	247	317,328	17,804	317	1,068,741	1,987,544	918,803
Saskatchewan	10	61,059	1	1	3,936	19	5	20,094	2,026	6	32,213	68,538	36,325
Alberta	20	702,004	32	8	63,680	81	104	185,670	10,810	154	494,156	1,066,969	572,813
British Columbia	40	822,188	47	5	96,991	136	149	223,536	20,608	170	678,398	1,327,582	649,184

1923													
Canada	361	36,827,117	1,592	496	3,742,906	4,658	5,978	7,382,255	688,774	19,171	23,959,877	48,394,175	24,434,298
Prince Edward Island	3	29,695	2	.....	2,600	4	.....	2,440	756	21	14,559	27,093	12,534
Nova Scotia	12	1,861,241	41	16	98,370	385	587	602,057	57,770	1,208	1,352,826	3,148,763	1,795,937
New Brunswick	11	2,019,197	69	36	176,361	220	362	367,596	36,474	894	1,574,380	2,709,186	1,134,806
Quebec	45	7,521,468	438	55	793,623	1,171	1,443	1,451,683	168,299	5,879	6,017,381	10,938,768	4,921,387
Ontario	190	22,217,908	864	352	2,264,380	2,411	3,057	4,117,977	365,406	10,578	12,230,163	26,274,737	14,044,574
Manitoba	21	1,144,493	83	26	207,301	176	232	340,675	26,261	345	1,290,349	2,292,994	1,002,645
Saskatchewan	10	67,769	1	.....	2,400	16	6	18,849	1,640	21	41,062	75,724	34,662
Alberta	18	666,661	22	4	54,615	83	86	152,130	11,666	159	458,885	1,001,276	542,391
British Columbia	51	1,298,685	72	7	143,256	192	205	328,848	26,502	66	980,272	1,925,634	945,362
1924													
Canada	321	38,557,117	1,356	496	3,286,807	4,355	5,679	7,027,773	599,058	17,754	23,383,625	45,123,629	21,740,004
Prince Edward Island	3	13,600	.....	.....	.....	4	1	4,238	202	8	20,855	28,193	7,338
Nova Scotia	11	1,935,245	25	41	106,091	435	615	646,361	49,937	1,411	1,694,418	3,159,883	1,465,465
New Brunswick	12	2,043,149	63	22	166,847	218	365	370,072	40,169	916	1,403,368	2,562,383	1,159,015
Quebec	42	8,102,957	310	49	519,968	1,102	1,348	1,378,431	149,438	2,702	5,350,876	9,657,295	4,306,419
Ontario	171	23,059,279	799	354	2,156,857	2,177	2,864	3,870,155	296,265	11,248	12,556,004	24,785,238	12,229,234
Manitoba	20	1,171,859	60	9	140,574	166	241	328,200	24,0[illegible]2	578	1,009,099	2,125,035	1,115,936
Saskatchewan	7	78,638	1	1	3,400	14	5	14,993	1,486	22	24,010	56,893	32,883
Alberta	15	636,678	27	6	56,419	65	78	126,773	8,969	160	466,708	1,022,891	556,183
British Columbia	40	1,515,712	71	14	136,651	174	162	288,550	28,570	709	858,287	1,725,818	867,531
1925													
Canada	320	40,770,096	1,471	502	3,461,480	4,385	5,600	7,051,290	577,256	17,438	23,227,967	46,745,355	23,517,388
Prince Edward Island and Nova Scotia	14	3,634,745	41	50	123,303	490	576	636,135	46,949	2,269	1,529,937	3,246,004	1,716,067
New Brunswick	11	2,020,451	70	38	187,365	217	368	348,571	32,981	1,011	1,403,439	2,560,171	1,156,732
Quebec	46	8,078,459	377	51	713,953	1,103	1,380	1,460,153	147,370	2,480	5,164,207	9,197,134	4,032,927
Ontario	169	23,688,367	816	333	2,091,388	2,149	2,769	3,807,638	284,270	10,336	12,597,770	26,383,977	13,786,207
Manitoba	19	1,130,864	59	10	132,688	177	237	339,348	28,130	232	1,056,263	2,301,894	1,245,631
Saskatchewan	5	84,040	2	.....	3,800	12	4	13,380	1,229	19	32,779	54,248	21,469
Alberta	13	605,008	21	3	50,124	57	77	120,638	8,066	161	463,995	1,067,752	603,757
British Columbia	43	1,528,162	85	17	158,859	180	189	325,427	28,261	930	979,577	1,934,175	954,598
1926													
Canada	315	42,422,378	1,383	452	3,466,128	4,473	5,668	7,289,422	560,364	16,050	23,644,255	49,178,836	25,534,581
Prince Edward Island and Nova Scotia	16	3,576,935	116	52	265,525	495	605	725,154	40,724	2,269	1,666,143	3,119,758	1,453,615
New Brunswick	11	2,271,931	257	24	156,620	224	364	352,908	34,854	988	1,474,529	2,474,799	1,000,270
Quebec	48	8,823,632	362	59	775,155	1,227	1,457	1,655,133	154,789	3,085	5,794,842	10,660,803	4,865,961
Ontario	161	24,645,729	642	272	1,877,349	2,057	2,763	3,744,878	276,049	8,839	12,071,190	27,298,584	15,227,394
Manitoba	18	1,286,668	90	20	165,979	197	224	340,480	22,523	252	1,147,643	2,377,661	1,230,018
Saskatchewan	6	79,422	2	.....	3,800	9	1	10,330	1,189	18	17,666	40,005	22,339
Alberta	12	612,232	34	4	70,826	79	78	103,910	7,230	163	483,564	1,023,194	539,630
British Columbia	43	1,125,829	80	21	150,874	194	176	356,629	23,006	436	988,678	2,184,032	1,195,354
1927													
Canada	294	46,448,311	1,559	564	3,901,618	4,433	5,930	7,497,976	557,305	18,654	25,149,428	53,128,888	27,979,460
Prince Edward Island	3	6,394	.....	.....	.....	2	2	2,170	210	5	4,593	8,914	4,321
Nova Scotia	13	4,194,394	107	57	341,653	391	533	595,4[illegible]	38,236	2,580	1,652,898	3,295,299	1,642,401
New Brunswick	8	2,269,655	63	39	178,172	226	344	346,042	34,394	972	1,302,769	2,531,796	1,229,027
Quebec	49	9,697,473	471	95	890,818	1,200	1,553	1,661,924	146,974	4,864	6,057,127	11,759,189	5,702,062
Ontario	144	26,358,812	784	337	2,181,130	2,121	2,984	4,062,377	281,652	8,956	13,154,970	29,645,999	16,491,029
Manitoba	19	1,741,397	23	10	59,519	203	216	340,113	20,544	489	1,299,017	2,402,521	1,103,504
Saskatchewan	5	75,633	2	.....	4,000	9	1	9,826	1,117	16	19,912	37,188	17,276
Alberta	13	968,851	33	7	64,428	103	110	136,658	9,252	297	465,443	1,100,686	635,243
British Columbia	40	1,135,702	78	19	181,898	179	207	343,436	24,926	475	1,192,699	2,347,296	1,154,597

Table 75.—Summary Statistics of the Biscuit, Confectionery and Chewing Gum Industry, 1919-1927

—		1919	1920	1921	1925	1926	1927
Number of establishments	No	330	404	376	320	315	294
Capital	$	32,800,944	35,100,618	33,152,701	40 770,096	42,422,378	46,448 311
Average per establishment	$	99,397	86,882	88,172	127,407	134,674	157,987
Average per employee	$	2,574	2,694	2,885	3,427	3,542	3,720
Total number of employees	No.	12,744	13,023	11 490	11,958	11,976	12,486
Total salaries and wages	$	9,526 323	10,908,123	10 082,582	10,512 770	10,755,550	11,399 594
Average per employee	$	748	838	877	879	898	913
Total salaries	$	2,486,040	2 998,209	3,001,254	3,461,480	3,466,128	3,901,618
Average per salaried employee	$	1,580	1,679	1,680	1,754	1,889	1,838
Total wages	$	7,040,283	7,909,914	7,081,328	7,051,290	7 289 422	7,497,976
Average per wage-earner	$	630	704	730	706	719	724
Gross value of products	$	55 926,685	57,721,763	49,171,420	46,745,355	49 178,836	53 128,888
Average per establishment	$	169,475	142,876	130,778	146,079	156,123	180,712
Average per employee	$	4,388	4,432	4,289	3,909	4,106	4,255
Value added by manufacture	$	25,813,770	25,075,054	25,447,393	23,517,388	25,534 581	27,979,460
Average per establishment	$	78,223	62,067	67 679	73,492	81 062	95 168
Average per employee	$	2,026	1,925	2,215	1,967	2 132	2,241
Power employed	H.P.	13,145	.....	14,521	17,438	16,050	18,654
Average per establishment	H.P.	40	.....	39	54	51	63
Average per wage-earner	H.P.	1·2	.....	1·5	1·7	1·6	1·8

Capital Invested.—The amount of capital invested in the biscuit confectionery and chewing gum industry from 1919 to 1927 is shown in table 76 under two heads: (1) fixed capital represented by land, buildings, machinery and tools and (2) working capital by stocks of materials, supplies and finished products on hand, cash, trading and operating accounts and bills receivable. All provinces with the exception of Saskatchewan, and British Columbia, which reported a drop in the amount of capital, show increases for the nine-year period with Quebec reporting the greatest increase, its capital having risen from $4,084,949 to $9,967,473 or an increase of 144 p.c.

Fixed capital throughout the Dominion increased from $14,149,791 in 1919 to $28,583,385 in 1927, an increase of 102 p.c. while working capital decreased from $18,651,153 to $17,864,926, a drop of 4 p.c.; making a net increase in the total capital of 42 p.c. As a result, the proportion between fixed and working capital also changed. In 1919, 43 p.c. of the capital was represented by fixed and 57 p.c. by working capital while in 1927, the proportion was changed to 62 p.c. and 38 p.c. respectively.

Apportioned by provinces, Ontario came first with a total capital investment of $26,358,812, Quebec, second with $9,697,473, followed by the Maritimes, with $6,470,443, and the Western Provinces $3,921,583.

Table 76.—The Biscuit, Confectionery and Chewing Gum Industry: Capital Invested 1919-27

Year and Provinces	Fixed capital	Working capital		Total capital
	Land, buildings, fixtures, machinery and tools	Materials and supplies on hand, finished products, etc.	Cash trading and operating accts., etc.	
	$	$	$	$
1919	14,149 791	7 988 581	10,662,572	32,800,944
1920	18,204,825	8,155,020	8,740,773	35,100,618
1921	18,924,301	6,718,578	7,509,822	33,152,701
1922	22,032,571	6,212 932	7,543,352	35,788,835
1923	22,252,987	6,696,691	7,877,439	36,827,117
1924	23,719,658	7,006,582	7,830,877	38,557,117
1925	24,923,724	6,726,871	9,119,501	40,770,096
1926	27,016,666	6,770,258	8,635,454	42,422,378
1927	.....	.....	.....	.....
Canada	**28,583,385**	**7,331,655**	**10,533,271**	**46,448,311**
Prince Edward Island	4 900	655	839	6,394
Nova Scotia	2,567,630	695,128	931,636	4,194,394
New Brunswick	938,519	604,877	726,259	2,269,655
Quebec	6,095 305	1,569,914	2,032,254	9,697,473
Ontario	16,532,359	3,705,093	6,121,360	26,358,812
Manitoba	1,131,764	278,895	330,738	1,731,397
Saskatchewan	66,554	8,195	884	75,633
Alberta	665,840	203 853	99,158	968 851
British Columbia	580,514	265,045	290,143	1,135,702

Production.—Production statistics for the biscuit, confectionery and chewing gum industry are given in tables 77-79. As was stated previously, statistics relating to specific products are not to be regarded as comprehensive, since products like biscuits and confectionery are also found as secondary products of the following other industries:—

1. Bread and other bakery products.
2. Cocoa and chocolate.
3. Coffee and spices.
4. Medicinal and pharmaceutical preparations.

The total production of ice-cream, for example, amounted to $10,301,217 in 1927. Of this amount, $3,094,468 was produced in confectionery plants, $7,098,109 in dairy plants and $108,640 in bakeries.

On examining table 77 which gives the value of production by classes from 1919 to 1927, it is found that the selling value of the products, decreased by $2,797,797; the largest item being that of chocolate and sugar confectionery, which shows a drop of $2,770,544 for the nine-year period. The physical volume produced, however, did not decrease to any great extent; the production of biscuits of all kinds, increased from 36,177 tons to 50,473 tons while ice-cream declined from 2,118,454 gals. to 2,094,313 gals. during the same period.

Table 77.—Biscuit, Confectionery and Chewing Gum Industry: Production by Classes of Product, 1919-27

—	1919	1920	1921	1922	1923	1924	1925	1926	1927
	$	$	$	$	$	$	$	$	$
Bread	620,351	628,849	438,083	381,937	348,646	324,286	311,569	328,964	343,233
Buns	31,200	24,036	144,783	91,663	76,899	83,601	62,347	76,125	99,449
Pies, cakes, etc	147,925	465,631	1,045,149	359,242	515,572	425,099	592,995	664,260	804,648
Puddings	65,000	547,821	17,870	263,811	20,807	35,160	19,187	19,716	31,202
Biscuits, plain and fancy	15,235,972	16,013,215	14,051,997	12,552,958	13,559,129	13,216,605	13,877,199	14,802,404	16,338,476
Chocolate, confectionery	30,625,528[2]	30,547,044[2]	26,500,527[2]	24,366,231[2]	16,567,077	15,977,345	17,343,447	16,413,133	18,201,413
Sugar confectionery	.....	.....	.....	.....	8,788,867	8,793,892	7,935,075	9,852,176	9,653,571
Cocoa	[2]	[2]	39,481	34,433	21,749	17,243	.....	15,794	.....
Ice cream	2,866,264	4,023,161	3,492,138	2,836,003	3,840,476	2,662,095	2,674,726	3,035,486	3,094,468
Pop corn	[2]	[2]	[2]	189,272	270,976	288,875	13,599	116,393	251,224
All other products[1]	6,334,445	5,472,066	3,441,392	3,674,312	3,373,977	3,299,428	3,915,211	3,854,376	4,311,204
Total Value	**55,926,685**	**57,721,763**	**49,171,420**	**44,749,262**	**48,394,175**	**45,123,679**	**46,745,355**	**49,178,856**	**53,128,888**

Table 78.—Biscuit, Confectionery and Chewing Gum Industry: Production by Items for Canada and Provinces, 1927

Items of production	Canada		P.E. Island		Nova Scotia		New Brunswick		Quebec	
	Quantity	Selling value	Quantity	Selling value	Quantity	Selling value	Quantity	Selling value	Quantity	Selling value
		$		$		$		$		$
Bread ... lb.	4,822,489	343,233	.....	.....	4,493,444	315,803	.....	.....	.....	.....
Buns	.....	99,449	.....	.....	.....	.....	.....	.....	.....	575
Pies, cakes, etc	.....	804,648	.....	.....	.....	167,624	.....	51,000	.....	254,350
Puddings	.....	31,202	.....	.....	.....	.....	.....	4,000	.....	112
Biscuits, plain and fancy ... ton	50,473	16,338,476	.....	.....	1,272	330,282	2,309	812,831	18,229	4,832,721
Chocolate confectionery ... lb.	61,020,409	18,201,413	3,016	754	3,394,715	1,545,208	5,082,573	1,138,527	14,243,865	4,413,397
Sugar confectionery ... lb.	44,412,302	9,653,571	12,036	2,390	3,404,265	644,454	2,502,325	512,035	10,237,433	1,807,168
Cocoa ... lb.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ice cream ... gal.	2,094,313	3,094,468	3,755	5,400	157,262	262,598	9,370	13,403	10,365	10,605
Popcorn	1,006,255	251,224	.....	.....	.....	.....	.....	.....	321,974	82,155
All other products[1]	.....	4,311,204	.....	370	.....	29,330	.....	.....	.....	358,106
Total value	.....	**53,128,888**	.....	**8,914**	.....	**3,295,299**	.....	**2,531,796**	.....	**11,759,189**

[1]Includes macaroni, mincemeat, peanut butter, chewing gum, syrups, salted and roasted peanuts and chocolate coatings.
[2]Included in all other products.
[3]Includes sugar confectionery.

Table 78.—Biscuit, Confectionery and Chewing Gum Industry: Production by Items for Canada and Provinces, 1927—Concluded

Items of production	Ontario		Manitoba		Saskatchewan		Alberta		British Columbia	
	Quantity	Selling value	Quantity	Selling value	Quantity	Selling value	Quantity	Selling value	Quantity	Selling value
		$		$		$		$		$
Bread..... lb.	110,295	6,330	180,000	18,000	38,750	3,100	.....	.....	.....	.....
Buns.....	.....	62,874	.....	33,500	.....	2,500	.....	.....	.....	.....
Pies, cakes, etc.....	.....	192,365	.....	122,000	.....	11,250	.....	.....	.....	6,059
Puddings.....	.....	26,690	.....	100	.....	300	.....	.....	.....	.....
Biscuits, plain and fancy..... ton	22,817	8,137,613	1,800	519,953	.....	.....	1,823	899,534	2,223	805,542
Chocolate confectionery..... lb.	32,855,268	9,831,626	4,272,976	902,300	6,032	3,363	357,312	81,333	804,712	284,905
Sugar confectionery lb.	21,959,009	5,350,892	3,053,733	564,728	52,500	12,910	595,361	118,519	2,595,640	640,475
Cocoa..... lb.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ice cream..... gal.	1,406,761	2,063,372	161,622	241,940	1,330	3,765	520	1,040	343,388	492,345
Popcorn.....	679,011	167,831	.....	.....	.....	.....	600	150	4,670	1,088
All other products[1]....	.....	3,806,406	.....	.....	.....	.....	.....	110	.....	116,882
Total value.....	.....	**29,645,999**	.....	**2,402,521**	.....	**37,188**	.....	**1,100,686**	.....	**2,347,296**

[1]See footnote 1, page 85.

The total and per capita production and consumption of biscuits, confectionery and ice-cream from all sources, except that made in private homes, hotels, restaurants and boarding houses where it is made for home consumption, is presented in table 79 for the years 1925-27.

Table 79.—Per Capita Production of Biscuits, Confectionery and Ice Cream for the Calendar Years 1925, 1926 and 1927

Articles	1925		1926		1927	
	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$
Total production—						
Biscuits, plain, etc..... ton	38,572	13,988,175	42,527	14,909,828	50,813	16,465,732
Confectionery..... lb.	103,799,327	27,083,076	105,297,615	27,646,451	111,525,857	29,947,638
Ice cream..... gal.	5,895,694	7,974,108	6,897,810	9,394,422	7,466,346	10,301,217
Per capital production—						
Biscuits, plain, etc..... lb.	8·32	1·51	9·06	1·58	10·68	1·73
Confectionery..... lb.	11·20	2·92	11·21	2·94	11·72	3·15
Ice cream..... gal.	0·63	0·86	0·72	1·00	0·78	1·08
Total and per capita consumption being production plus imports less exports, 1925, 1926, 1927						
Totals—						
Biscuits, plain, etc..... lb.	78,927,665	14,226,228	87,037,581	15,158,463	104,172,142	16,783,439
Confectionery..... lb.	106,240,956	27,436,356	108,599,298	28,357,836	114,606,036	30,476,078
Ice cream..... gal.	5,895,694	7,974,108	6,897,810	9,394,422	7,466,346	10,301,217
Per capita consumption—						
Biscuits, plain, etc..... lb.	8·51	1·53	9·27	1·60	10·94	1·77
Confectionery..... lb.	11·46	2·96	11·56	3·02	12·04	3·20
Ice cream..... gal.	0·63	0·86	0·72	1·00	0·78	1·08

Materials Used.—The cost value at the factory of the materials used by the biscuit, confectionery and chewing gum industry in 1927 is shown in table 80. Of the total cost of the materials used which amounted to $25,149,428, $4,726,837 was for sugar, $2,314,561 for flour, $2,262,426 for chocolate and the balance for other baking materials and containers.

Table 80.—Biscuits, Confectionery and Chewing Gum Industry: Materials Used, by Quantity and Cost Value, 1927

Classes of materials	Unit of measure	Quantity	Cost value at the factory
			$
Flour	Barrels	369,912	2,314,561
Salt	"	12,244	30,462
Sugar	Pound	74,141,656	4,726,837
Butter	"	1,540,855	547,843
Cooking oils	"	582,197	81,736
Lard	"	2,036,817	290,991
Shortening	"	6,433,298	880,087
Cream	Gallon	631,364	833,742
Milk, fresh and skim	"	1,177,711	209,085
Milk, condensed	Pound	3,768,828	353,032
Milk, powdered	"	1,575,131	228,351
Eggs	Dozen	392,471	142,559
Fruits	Pound	3,384,157	540,447
Nuts	"	6,576,148	1,138,216
Glucose	"	24,994,453	999,760
Chocolate and cocoa	"	9,583,460	2,262,426
Cocoanut	"	1,648,196	254,623
Cocoa beans	"	4,542,617	797,648
Cocoa butter	"	3,292,616	1,190,781
All other materials (value only)	.....	.....	3,821,717
Containers of all kinds	.....	.....	3,504,524
Total cost of materials	.....	.....	**25,149,428**

Employment and Hours of Labour.—The employment statistics of the biscuit, confectionery and chewing gum industry are given in the following tables:—

Table 74—Salaried employees and wage-earners by sex and provinces, 1919-27.

Table 81—Monthly employment of wage-earners by sex, 1926 and 1927.

Table 82—Hours worked by wage-earners in month of highest employment 1926 and 1927.

During the nine years the number of salaried employees increased from 1573 to 2,123, the increase being confined chiefly to the male employees while the number of wage-earners on the other hand, declined from 11,171 to 10,363, the decrease in this case being mainly in the number of female wage-earners employed. The maximum employment occurred in 1920 when 1,786 salaried employees and 11,247 wage-earners were at work. The depression of the following year affected the female wage-earners to a greater degree than the other classes of employees, the number employed decreasing from 6,663 in 1920 to 5,460 in 1921.

The average salary, amounting to $1,580 in 1919 rose to $1,838 in 1927 while the average wage rose only from $630 to $724. The low wages prevailing in this industry as compared with other industries of the vegetable products group, is due in great measure to the large number of female wage-earners employed, viz., 57 p.c. of the total.

From table 82 which shows the number of hours worked by wage-earners in the month of highest employment, it appears that the eight-hour day prevails in British Columbia, Alberta, Saskatchewan and Prince Edward Island; the nine-hour day in Manitoba, Ontario, Quebec and New Brunswick and the ten-hour day in Nova Scotia. In the Dominion as a whole in 1927, 42·7 p.c. of the wage-earners worked 9 hours per day, 21·0 p.c. worked 10 hours and 31·4 p.c. worked 8 hours or less. It may be noted that in Quebec in 1927, 11·6 p.c. of the wage-earners worked 8 hours or less per day compared with 42·8 p.c. in Ontario.

Table 81.—Biscuit, Confectionery and Chewing Gum Industry: Employment of Wage-earners, 1926 and 1927

—	1927			1926		
	Male	Female	Total	Male	Female	Total
January	3,961	5,072	9,033	4,040	5,120	9,160
February	4,091	5,461	9,552	4,136	5,288	9,424
March	4,153	5,558	9,711	4,098	5,261	9,359
April	4,153	5,498	9,651	4,217	5,092	9,309
May	4,320	5,476	9,796	4,325	5,229	9,554
June	4,452	5,730	10,182	4,464	5,399	9,863
July	4,556	5,903	10,459	4,507	5,428	9,935
August	4,654	6,241	10,895	4,546	5,735	10,281
September	4,737	6,694	11,431	4,712	6,254	10,966
October	4,736	6,661	11,397	4,796	6,592	11,382
November	4,686	6,454	11,140	4,803	6,468	11,271
December	4,436	6,030	10,466	4,570	5,787	10,357
Average monthly employment	**4,433**	**5,930**	**10,363**	**4,473**	**5,668**	**10,141**

Table 82.—Biscuit, Confectionery and Chewing Gum Industry: Hours Worked by Wage-earners in Month of Highest Employment, 1926 and 1927

—		Number of wage-earners working per day				Percentage of wage-earners working per day			
		8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
Canada	1926	2,896	4,975	2,959	1,170	24·1	41·5	24·7	9·7
	1927	3,950	5,373	2,648	612	31·4	42·7	21·0	4·9
Prince Edward Island	1926	1	1	.....	.....	50·0	50·0	.....	.....
	1927	3	1	.....	.....	75·0	25·0	.....	.....
Nova Scotia	1926	8	269	1,063	3	0·6	20·0	79·2	0·2
	1927	10	133	943	21	0·9	12·0	85·2	1·9
New Brunswick	1926	18	425	1	298	2·4	57·3	0·1	40·2
	1927	.....	404	1	291	.....	58·1	0·1	41·8
Quebec	1926	322	1,347	1,439	156	9·9	41·3	44·1	4·7
	1927	385	1,614	1,161	169	11·6	48·5	34·9	5·0
Ontario	1926	1,036	2,418	453	712	35·1	43·8	8·2	12·9
	1927	2,641	2,864	538	131	42·8	46·4	8·7	2·1
Manitoba	1926	226	280	.....	.....	44·7	55·3	.....	.....
	1927	266	258	.....	4	50·4	48·9	.....	0·7
Saskatchewan	1926	8	1	.....	1	80·0	10·0	.....	10·0
	1927	9	1	.....	.....	90·0	10·0	.....	.....
Alberta	1926	44	126	3	.....	25·4	72·8	1·8	.....
	1927	165	92	.....	.....	64·2	35·8	.....	.....
British Columbia	1926	333	108	.....	.....	75·5	24·5	.....	.....
	1927	471	6	1	.....	98·5	1·3	0·2	.....

Working Hours and Wages.—The average number of hours worked per day and per week, the average number of days that establishments operated on full time, and the nominal and real wages paid in the biscuit, confectionery and chewing gum industry are given in table 83 for 1919 to 1927.

The average number of hours worked per day in the Dominion increased from 8·8 hours in 1919 to 9·0 hours in 1927 while the number of days that establishments operated on full time fluctuated from a maximum of 279 in 1919 to a minimum of 248 in 1923. It is interesting to contrast these figures with those of the bread industry where for the same period, the maximum was 302 days in 1924 and the minimum 288 in 1920.

Wages paid in the Dominion as a whole increased from $630 in 1919 to $724 in 1927, while in Quebec, wages rose from $534 to $604, an increase of 13 p.c. and in Ontario from $655 to $799, an increase of 22 p.c. It should be noted that higher wages are paid in Ontario. This, however, is not due to a larger proportion of male wage-earners. On the contrary the proportion of male wage-earners in Quebec in 1927 was 44 p.c. compared with 42 p.c. in Ontario. The higher wages in Ontario are due to the general higher level of wages prevailing in almost every industry of Ontario, compared with that of Quebec.

Table 83.—Biscuit, Confectionery and Chewing Gum Industry: Hours of Labour and Wages Paid, 1919-27

—	Average number of hours worked		Average number of days establishments on full time operation	Nominal wages	Cost of living index 1917=100	Real wages
	Per day	Per week				
				$		$
1919						
Canada	8·8	51·9	279	630	125·2	503
Quebec	9·2	53·9	273	534	125·2	427
Ontario	8·8	51·5	278	655	125·2	523
1920						
Canada	8·6	50·4	260	704	145·0	486
Quebec	8·7	50·2	265	587	145·0	405
Ontario	8·6	50·5	259	737	145·0	508
1921						
Canada	8·0	44·8	254	730	127·5	573
Quebec	9·3	52·4	264	570	127·5	447
Ontario	7·8	43·2	246	797	127·5	625
1922						
Canada	8·3	48·4	269	710	116·8	608
Quebec	9·1	52·5	267	560	116·8	479
Ontario	8·2	47·7	267	774	116·8	663
1923						
Canada	8·3	48·3	248	694	116·8	594
Quebec	9·0	51·9	254	555	116·8	475
Ontario	8·3	48·5	248	753	116·8	645
1924						
Canada	8·9	47·4	250	700	114·5	611
Quebec	9·1	54·6	303	563	114·5	492
Ontario	8·7	46·9	257	768	114·5	671
1925						
Canada	9·1	49·4	265	706	116·0	609
Quebec	9·4	50·9	253	588	116·0	507
Ontario	8·9	49·7	267	774	116·0	667
1926						
Canada	9·2	50·8	269	719	116·8	616
Quebec	9·4	52·8	265	617	116·8	528
Ontario	9·0	50·6	269	777	116·8	665
1927						
Canada	9·0	48·9	265	724	116·0	624
Quebec	9·3	52·4	270	604	116·0	521
Ontario	8·7	48·3	266	799	116·0	689

Fuel Consumption and Power Installation.—The fuel used by the biscuit, confectionery and chewing gum industry is given in table 84 and the power installation in table 85. Of the total cost of fuel amounting to $557,305 in 1927, $257,397 was for bituminous coal, $99,973 for anthracite coal and $119,413 for gas. Since 1919 the use of anthracite coal for fuel decreased from 11,563 tons to 7,742 tons while the amount of gas consumed increased from 86,199 to 194,422 M cu. ft. For the same period the power installation was increased by 5,509 h.p. from 13,145 h.p. to 18,654 h.p. while the amount spent for electricity rose from $113,481 in 1919 to $202,034 in 1927.

Table 84.—Fuel Consumption in the Biscuit, Confectionery and Chewing Gum Industry, 1919-27

Year	Bituminous coal		Anthracite coal		Lignite coal		Coke		Gasoline	
	Tons	Value	Tons	Value	Tons	Value	Tons	Value	Gallons	Value
		$		$		$		$		$
1919	38,215	283,267	11,563	129,905	695	6,837	1,879	18,516	39,563	13,529
1920	40,814	422,434	10,769	155,880	417	4,621	1,308	15,284	74,077	28,562
1921	41,022	372,051	10,789	145,810	876	8,605	3,874	43,319	69,613	24,883
1922	41,555	315,886	11,929	174,729	1,358	9,747	2,154	23,862	34,928	12,501
1923	48,599	352,188	9,192	145,146	1,473	7,844	2,397	28,961	110,644	37,771
1924	41,991	278,426	8,897	127,644	161	1,652	1,334	16,857	66,150	17,920
1925	39,357	269,515	8,726	118,294	660	7,755	1,248	13,174	69,970	20,129
1926	39,248	257,374	8,826	118,488	223	2,418	1,673	17,309	59,008	16,673
1927	39,079	257,397	7,742	99,973	675	5,905	2,042	16,404	11,508	3,232

Year	Oil		Wood		Gas, Artificial and Natural		Other fuel	Total Value	Cost of electricity
	Gallons	Value	Cords	Value	M cu. ft.	Value	Value		
		$		$		$	$	$	$
1919	134,318	9,382	1,152	6,765	86,199	73,617	7,825	549,643	113,481
1920	153,695	14,572	1,541	11,748	108,422	99,388	3,703	756,192	149,021
1921	9,809	1,121	1,041	6,545	123,991	97,350	872	700,556	161,542
1922	69,566	4,880	1,621	13,207	175,109	105,278	3,673	663,763	[1]
1923	138,318	8,571	1,656	12,345	117,734	95,412	536	688,774	212,073
1924	270,534	18,645	2,063	13,162	142,525	119,375	5,377	599,058	185,147
1925	416,188	29,962	797	5,406	145,592	109,735	3,286	577,256	202,108
1926	392,561	31,883	1,109	7,115	232,283	106,430	2,944	560,364	182,932
1927	538,489	46,872	1,171	7,133	194,422	119,413	976	557,305	202,034

[1]Not given in 1922.

Table 85.—Power Installed in the Biscuit, Confectionery and Chewing Gum Industry, 1919-27

Year	Steam engines turbines		Oil, gas and gasoline engines		Hydraulic turbines or water wheels		Electric motors operated by purchased power	
	Units	h.p.	Units	h.p.	Units	h.p.	Units	h.p.
1919	32	2,920	6	42	2	250	1,110	9,933[2]
1920[1]	.....	.....	.....	.....	.....	.....	.....	.....
1921	36	2,851	9	54	2	250	1,392	11,366
1922	47	3,617	12	91	14	470	1,125	7,621
1923	59	4,195	10	300	19	508	1,445	14,268
1924	47	3,535	9	165	2	250	1,662	13,804
1925	47	3,440	8	35	3	252	1,817	13,711
1926	43	3,175	8	34	2	250	1,729	12,591
1927	39	2,935	3	32	2	250	2,072	15,437

Year	Total power used for manufacturing		Electric motors operated by power generated by establishments		Total electric motors		Boilers installed	
	Units	h.p.	Units	h.p.	Units	h.p..	Units	h.p.
1919	1,150	13,145	40	3,212[2]	1,150	13,145	78	5,983
1920[1]	.....	.....	.....	.....	.....	.....	95	7,585
1921	1,439	14,521	.....	[1]	1,392	11,366	91	7,763
1922	1,198	11,799	591	5,712	1,716	13,333	77	5,606
1923	1,533	19,171	428	3,116	1,873	17,384	81	6,936
1924	1,720	17,754	346	1,792	2,008	15,596	69	5,516
1925	1,875	17,438	115	902	1,932	14,613	77	5,624
1926	1,782	16,050	95	777	1,824	13,368	90	5,784
1927	2,116	18,654	95	777	2,167	16,214	104	8,564

[1]Figures not available. [2]Estimated.

Imports and Exports.—The imports and exports of biscuits, confectionery, chewing gum, etc., by countries during the calendar years 1926 and 1927 are shown in tables 86 and 87. Of the total imports in 1927 amounting to $2,067,774, $1,076,469 was for confectionery of all kinds and $561,050 for chicle or sappato gum which is used by the chewing gum industry. Of the con-

fectionery imported about 70 p.c. came from Britain and of the chicle gum 82 p.c. came from the United States and 15 p.c. from British Honduras.

The exports in 1927 amounted to $1,047,152. Of this amount $483,476 was represented by candy and $386,575 by chewing gum, these products being exported chiefly to countries within the British Empire.

Table 86.—Imports of Biscuits, Confectionery, etc., during the Calendar Years 1926 and 1927

Articles by countries	1927		1926	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Biscuits, not sweetened—				
United Kingdom	984,008	86,662	876,970	81,833
United States	826,723	108,813	753,181	88,821
Other countries	51,840	11,074	41,684	6,860
Totals	1,862,571	206,549	1,671,835	177,514
Biscuits, sweetened—				
United Kingdom	233,209	75,168	161,944	52,389
United States	1,179,460	136,883	1,052,563	128,094
Other countries	67,302	11,655	37,139	6,228
Totals	1,479,971	223,706	1,261,646	186,711
Confectionery, coated with or containing chocolate—				
United Kingdom	956,495	311,739	1,561,515	513,148
United States	159,920	42,475	103,864	28,713
Other countries	234,163	72,282	258,182	67,759
Totals	1,350,578	426,496	1,923,561	609,620
Sugar candy and confectionery of all kinds, n.o.p.—				
United Kingdom	2,397,993	434,125	2,313,410	505,028
United States	956,430	169,691	776,383	139,602
Other countries	252,222	46,157	225,992	39,220
Totals	3,606,645	649,973	3,315,785	683,850
Chicle or sappato gum, crude—				
United States	962,417	458,197	693,817	343,928
British Honduras	176,545	83,727	550,480	271,448
Other countries	31,354	19,126	.....	.....
Totals	1,170,316	561,050	1,244,297	615,376
Total imports by countries (value only)—				
United Kingdom	.....	907,694	.....	1,152,398
United States	.....	916,059	.....	729,158
British Honduras	.....	83,727	.....	271,448
Other countries	.....	160,294	.....	120,067
Total imports	.....	**2,067,774**	.....	**2,273,071**

Table 87.—Exports of Biscuits, Confectionery, etc., during the Calendar Years 1926 and 1927

Articles by countries	1926		1927	
	Quantity	Value	Quantity	Value
		$		$
Biscuits and bread— cwt.				
United States	1,104	10,667	1,051	17,682
British Guiana	2,207	20,939	873	12,824
British Honduras	309	4,420	.....	.....
Bermuda	470	6,248	.....	.....
Barbados	396	6,396	.....	.....
Jamaica	2,027	19,984	1,890	18,037
Other British West Indies	1,467	20,910	2,282	33,905
Other countries	1,579	26,026	1,868	30,100
Totals	9,499	115,590	7,964	112,548
Candy— lb.				
United Kingdom	15,705	6,737	52,233	16,580
United States	17,774	6,899	2,922	1,056
British South Africa	370,544	98,167	465,127	128,365
Newfoundland	422,683	141,562	425,845	141,250
New Zealand	562,415	163,345	417,835	127,770
Australia	12,438	4,840	.....	.....
Bermuda	34,148	9,889	.....	.....
Other British West Indies	17,256	5,407	.....	.....
Other countries	154,320	62,644	190,317	68,449
Total	1,607,283	499,490	1,554,279	483,476
Confectionery, n.o.p. (value only)—				
United Kingdom	.....	18,377	.....	1,168
United States	.....	1,028	.....	1,130
Other countries	.....	63,190	.....	62,255
Totals	.....	82,595	.....	64,553
Chewing gum (value only)—				
United Kingdom	.....	188,298	.....	334,772
Other countries	.....	15,374	.....	51,803
Totals	.....	203,672	.....	386,575
Total export by countries (value only)—				
United Kingdom	.....	213,412	.....	352,520
United States	.....	18,594	.....	19,868
British South Africa	.....	98,167	.....	128,365
Newfoundland	.....	141,562	.....	141,250
New Zealand	.....	163,345	.....	127,770
Australia	.....	4,840	.....	.....
British possessions	.....	67,876	.....	12,824
British West Indies	.....	26,317	.....	51,942
Other countries	.....	167,234	.....	212,607
Grand total	.....	**901,347**	.....	**1,047,152**

THE MACARONI AND VERMICELLI INDUSTRY

The principal statistics of the macaroni industry by provinces are given in table 88 for the years 1917-27. Of the 11 establishments engaged in the production of macaroni and vermicelli in 1927, 4 were located in Ontario, 3 in Quebec, 2 in Manitoba, 1 in Alberta and 1 in British Columbia. These establishments had a capital of $1,239,819; they gave employment to 54 salaried employees and 251 wage-earners and produced goods to the value of $1,547,359. The centre of the industry is in Quebec where the three establishments employed 65·8 p.c. of the total capital, and 70 p.c. of the employees and had an output equal to 64·3 p.c. of the production of the whole industry.

During the eleven years under review, the amount of capital invested rose from $704,380 in 1917 to $1,239,819 in 1927 while the number of employees increased from 104 to 305 and production from $1,006,750 to $1,547,359. It should be noted that these figures include only the production of macaroni and vermicelli by those establishments which make macaroni and vermicelli as their principal products. Some of the products of this industry are also found as secondary products of other industries, such as "biscuits and confectionery" and "pickles, sauces, etc."

Other statistics of this industry are given in the following tables 89-91.

Table 88.—Macaroni and Vermicelli Industry: Principal Statistics, 1917-27

Year	Number of establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1917													
Canada	9	704,380	8	1	14,560	55	40	87,139	7,441	611	545,263	1,006,750	461,487
Ontario	4	53,107	.....	.....	.....	17	4	15,646	1,507	126	96,493	158,450	61,957
Other provinces	5	651,273	8	1	14,560	38	36	71,483	5,934	485	448,770	848,300	399,530
1918													
Canada	7	760,881	14	4	22,402	114	102	100,909	10,176	432	669,246	1,213,732	544,486
Ontario	3	86,113	1	.....	1,200	32	13	30,189	1,085	117	156,985	257,941	100,956
Other provinces	4	674,768	13	4	21,20.	82	89	70,720	9,091	315	512,261	955,791	443,530
1919													
Canada	9	873,442	23	4	32,549	114	93	132,617	11,823	455	657,942	1,152,652	494,710
Ontario	4	140,807	7	.....	7,896	35	19	43,912	2,168	102	219,989	350,388	130,399
Other provinces	5	732,635	16	4	24,653	79	74	88,705	9,655	353	437,953	802,264	364,311
1920													
Canada	10	1,233,005	31	7	53,715	132	110	158,435	21,713	593	1,077,452	1,523,613	446,161
Quebec	3	764,973	24	6	40,875	85	77	91,640	15,430	404	700,665	978,535	277,870
Ontario	4	350,672	3	.....	4,700	35	15	47,115	4,179	122	255,119	366,567	111,448
Other provinces	3	117,360	4	1	8,140	12	18	19,680	2,104	67	121,668	178,511	56,843
1921													
Canada	8	1,105,095	33	9	50,290	106	74	140,145	21,609	618	820,200	1,449,711	629,511
Ontario	4	388,482	8	3	11,059	42	19	56,957	3,422	249	330,488	547,632	217,144
Other provinces	4	716,613	25	6	39,231	64	55	83,188	18,187	369	489,712	902,079	412,367
1922													
Canada	8	1,054,717	37	9	66,125	105	88	132,722	13,824	738	738,501	1,318,037	579,536
Ontario	4	333,479	7	3	14,185	34	19	47,173	2,796	254	363,855	551,622	187,767
Other provinces	4	721,238	30	6	51,940	71	69	85,549	11,028	484	374,646	766,415	391,769
1923													
Canada	9	1,091,171	38	9	71,812	100	87	122,671	12,422	691	515,908	1,000,334	484,426
Ontario	4	313,922	10	3	19,574	27	15	35,441	2,760	231	137,251	288,087	150,836
Other provinces	5	777,249	28	6	52,238	73	72	87,230	9,662	460	378,657	712,247	333,590
1924													
Canada	11	1,227,925	49	17	103,618	102	97	127,634	13,368	820	712,711	1,217,285	504,574
Quebec	3	647,997	24	7	53,843	68	69	83,382	8,974	510	464,227	804,415	340,188
Ontario	4	469,406	20	10	40,867	28	17	33,610	2,838	241	206,628	335,129	128,501
Other provinces	4	110,522	5	.....	8,908	6	11	10,642	1,556	69	41,856	77,741	35,885
1925													
Canada	11	1,292,049	41	11	94,058	111	98	130,420	10,173	825	795,203	1,250,949	455,746
Quebec	3	769,135	26	7	52,591	76	74	82,620	7,301	510	540,732	828,061	287,329
Ontario	4	400,156	10	4	32,305	28	13	34,733	1,434	244	206,085	328,173	122,088
Other provinces	4	122,758	5	.....	9,162	7	11	13,057	1,438	71	48,386	94,715	46,329
1926													
Canada	11	1,286,097	49	14	106,091	133	121	144,378	10,917	847	960,373	1,560,510	600,137
Quebec	3	819,320	35	10	77,475	90	87	89,102	6,493	528	581,627	999,562	417,935
Ontario	4	345,914	10	4	22,748	34	19	40,542	2,832	238	319,110	442,959	123,849
Other provinces	4	120,863	4	.....	5,868	9	15	14,734	1,592	81	59,636	117,989	58,353
1927													
Canada	11	1,239,819	42	12	81,748	130	121	161,501	10,555	974	970,402	1,547,359	576,957
Quebec	3	816,220	34	9	62,560	88	83	99,414	5,735	498	621,686	995,098	373,412
Ontario	4	287,317	5	3	8,601	30	21	43,835	2,866	348	271,316	413,407	142,091
Other provinces	4	136,282	3	.....	10,587	12	17	18,252	1,954	128	77,400	138,854	61,454

Table 89.—Macaroni and Vermicelli Industry: Cost of Fuel and Electricity and Power Installation, 1917-27

—	Cost of fuel	Cost of electricity	Power installation
	$	$	h.p.
1917	7,441	10,134	611
1918	10,176	2,480	432
1919	11,823	9,667	455
1920	21,713	11,821	593
1921	21,609	8,033	618
1922	13,824	[1]	738
1923	12,422	11,044	691
1924	13,368	15,657	820
1925	10,173	17,438	825
1926	10,917	18,020	847
1927	10,555	17,610	974

[1]Not given for 1922.

Table 90.—Macaroni and Vermicelli Industry: Hours of Work and Salaries and Wages Paid, 1917-27

—	Average number of hours worked		Average number of days establishment on full time operation	Average salary	Average wage
	Per day	Per week			
				$	$
1917	9·4	56·1	279	1,618	917
1918	9·4	54·9	284	1,248	467
1919	9·5	56·8	233	1,206	641
1920	9·6	57·1	264	1,414	655
1921	9·7	56·8	292	1,197	779
1922	9·9	57·4	284	1,437	688
1923	9·5	56·9	287	1,528	656
1924	9·2	55·2	277	1,570	641
1925	9·9	56·1	278	1,809	624
1926	9·8	53·4	289	1,684	568
1927	9·4	54·6	282	1,514	643

Table 91.—Imports and Exports of Macaroni and Vermicelli, 1926 and 1927

Countries	1927		1926	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Imports—				
United Kingdom	1,275	165	738	88
United States	1,772,895	169,321	1,364,984	135,005
France	124,283	8,959	186,991	13,503
Italy	98,629	10,042	209,873	16,041
Other countries	50,916	4,957	80,175	8,223
Total	**2,047,398**	**193,444**	**1,842,761**	**172,860**
Exports—				
United Kingdom	172,771	14,346	84,885	6,997
United States	2,800	243	3,290	272
Bermuda	37,208	2,802	34,886	2,575
Barbados	6,496	518	9,031	692
Jamaica	18,088	1,400	34,862	2,704
Trinidad and Tobago	49,879	3,963	41,450	3,396
Other British West Indies	1,678	109	260	35
Hayti	.....	.....	4,725	466
Newfoundland	27,562	2,293	34,297	3,280
New Zealand	45,116	4,110	36,740	2,942
Other countries	15,539	1,424	25,522	2,240
Total	**376,537**	**31,202**	**309,948**	**25,599**

ICE CREAM CONE INDUSTRY

In 1927 there were 10 establishments engaged in the manufacture of ice cream cones and wafers, 3 of which were located in Quebec, 3 in Ontario, 3 in British Columbia, and 1 in Alberta. The three establishments in Ontario employed over 80 p.c. of the capital and 70 p.c. of the persons engaged in the industry while they produced goods to the extent of 72 p.c. of the total value of production of the whole industry.

The expansion of this industry from 1917 to 1927 was quite steady, the capital increasing from $149,138 to $694,902, the number of employees from 56 to 94 and the production from $269,868 to $451,228. The peak of production was reached in 1920 when goods to the value of $835,698 were produced. The depression of the following year did not affect this industry to any great extent; this depression was not felt until 1922 when production decreased by $326,306 and the number of persons employed by 20.

As may be seen from table 93, employment in this industry is seasonal; the maximum employment occurring in the summer months when the consumption of ice cream is greatest. In spite of the seasonal nature of employment, the average wage paid compares quite favourably with that paid in other industries where employment is steadier. For example, in the biscuit, confectionery and chewing gum industry, the establishments operated 265 days on full time in 1927 and the average wage was $724 while the average wage paid by this industry was $708, although the plants operated only 203 days on full time.

The principal statistics of the industry are given in table 92, employment by months in table 93 and the hours worked and wages and salaries paid in table 94.

Table 92.—Ice Cream Cone Industry: Principal Statistics, 1917-27

Year	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1917	7	149,138	9	4	20,823	28	15	26,250	6,774	319	112,600	269,868	157,268
1918	6	140,366	11	4	21,994	33	21	47,176	16,443	26	120,204	306,154	185,950
1919	8	261,583	16	5	31,630	55	29	78,871	42,843	48	216,034	510,058	294,024
1920	13	343,138	24	4	46,478	61	27	95,666	76,844	69	329,825	835,698	505,873
1921	11	375,945	17	4	33,022	58	45	84,601	66,812	81	355,751	711,583	355,832
1922	10	637,697	14	3	21,276	60	27	69,268	54,814	22	138,411	385,257	246,846
1923	7	674,955	12	6	24,510	31	18	44,395	35,483	17	126,839	352,437	225,538
1924	7	645,159	9	7	25,596	37	19	46,947	22,442	70	174,563	432,847	258,284
1925	8	731,300	6	1	18,570	41	20	54,054	24,133	72	125,041	438,138	313,097
1926	7	642,405	5	1	17,245	44	24	48,632	25,957	62	119,198	425,059	305,861
1927	10	694,902	6	2	22,290	56	30	60,873	25,314	70	114,246	451,228	330,982

Table 93.—Ice Cream Cone Industry: Employment of Wage-earners by Months, 1926 and 1927

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	33	13	46	23	8	31
February	50	18	68	32	15	47
March	58	29	87	36	17	53
April	72	34	106	39	24	63
May	74	45	119	54	29	83
June	68	40	108	51	29	80
July	57	35	92	50	24	74
August	55	32	87	49	24	73
September	25	14	39	29	10	39
October	27	10	37	22	8	30
November	27	11	38	21	8	29
December	27	12	39	21	9	30
Average	**56**	**30**	**86**	**44**	**24**	**68**

Table 94.—Ice Cream Cone Industry: Hours of Work and Salaries and Wages Paid 1917-27

Year	Hours worked		Number of days establishment on full time operation	Average salary	Average wage
	Per day	Per week			
				$	$
1917	9·6	54·7	211	1 602	610
1918	9·3	52·7	238	1,466	874
1919	9·0	51·9	232	1,506	939
1920	8·5	47·4	185	1,660	1,087
1921	8·6	50·2	198	1,571	824
1922	9·6	54·7	238	1,252	796
1923	10·1	55·4	224	1,363	906
1924	10·0	52·7	159	1,594	838
1925	9·7	49·4	142	2,653	886
1926	9·7	53·0	171	2,874	715
1927	9·6	51·9	203	2,786	708

STARCH AND GLUCOSE INDUSTRY

As may be seen from table 95, which gives the principal statistics of the starch and glucose industry from 1917 to 1927, this industry did not progress very much during the period under review. With the exception of capital invested which rose from $3,670,806 to $5,121,901 and the value added by manufacture from $1,514,938 to $1,556,959, all other factors of production declined. The number of establishments decreased from 13 to 4, the number of persons employed from 691 to 493, value of production from $5,292,771 to $4,936,025, etc. The volume of production, however, did not decrease as much as its value. An increase in the physical volume of goods produced took place, but owing to a proportionately greater drop in prices, its monetary value declined.

This industry consists of two large establishments located in Ontario and a number of small establishments in Prince Edward Island and Quebec which do not operate every year. In 1927 there were only two establishments operating in Ontario and two in Prince Edward Island; the two establishments in Ontario producing practically the whole of the output.

Table 95.—Starch and Glucose Industry: Principal Statistics, 1917-27

Year	Establishments	Capital	Employees on salaries			Employees on wages			Cost of fuel	Power installation	Cost of materials used	Gross value of products	Value added manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1917	13	3,670,806	61	15	92,312	552	63	428,723	276,406	2,112	3,777,833	5,292,771	1,514,938
1918	12	3,784,664	48	23	98,594	556	80	541,550	362,900	1,952	4,992,705	7,788,742	2,796,037
1919	7	6,332,658	60	22	156,994	561	87	604,647	286,981	1,885	5,709,203	7,953,273	2,244,070
1920	5	6,112,124	74	41	172,560	694	76	889,544	447,411	2,252	5,936,610	8,379,185	2,442,575
1921	7	5,887,210	39	29	113,610	571	58	667,498	379,778	2,780	2,716,292	4,436,328	1,720,036
1922	9	5,674,843	48	32	120,402	442	29	422,754	289,684	3,200	2,242,282	3,871,977	1,629,695
1923	8	4,380,179	53	31	182,936	468	27	471,197	265,805	2,052	3,146,245	5,135,103	1,988,858
1924	7	4,803,422	42	26	144,879	461	27	505,101	227,650	2,055	3,665,350	5,241,908	1,576,558
1925	7	4,764,140	46	27	157,668	428	22	459,287	222,965	2,015	3,490,016	5,095,040	1,605,024
1926	3	4,964,775	37	28	152,566	426	20	485,842	245,179	1,920	3,199,003	4,958,860	1,789,857
1927	4	5,121,901	40	19	155,769	418	16	456,124	249,822	1,945	3,379,075	4,936,025	1,556,950

Production.—The production of the starch and glucose industry in 1926 and 1927 is given by quantities and values in table 96.

Table 96.—Starch and Glucose Industry: Production, 1926 and 1927

Classes of products	1927		1926	
	Quantity	Selling value	Quantity	Selling value
	lb.	$	lb.	$
Edible corn starch	17,802,434	919,333	18,251,791	973,459
Laundry starch (corn)	9 014,869	461,174	8,050,296	424,382
Potato starch	419,587	20,570	97,176	4,606
Glucose or dextrose	40,621,391	1,420,458	38,913,850	1,437,350
Grape sugar	4,831,359	154,784	4,821,308	161,665
Corn syrup	17,233,966	761,047	16,305,582	715,873
Corn oil (crude)	3 310,042	277,545	3,407,294	332,440
Corn oil (refined)	1,843,068	281,805	1,834,233	284,490
Gluten	36,680,568	627,700	35,377,310	640,993
All other products	.....	11,609	.....	13,602
Total value	.....	**4,936,025**	.....	**4,988,860**

Materials Used.—The quantity and cost value of the materials used by the starch and glucose industry in 1926 and 1927 are given in table 97.

Table 97.—Starch and Glucose Industry: Materials Used, 1926 and 1927

Principal materials	1927		1926	
	Quantity	Cost value	Quantity	Cost value
	lb.	$	lb.	$
Corn	135,993,032	2,272,960	133,751,072	1,974,900
Corn starch	794	41	.....	.....
Potatoes	2,460,000	8,802	266,280	935
Sugar	123,700	8,180	131,700	8,140
Cane syrup for mixing	1,552,708	39,250	1,402,935	38,492
Crude corn oil	2,195,565	189,012	2,133,758	213,222
Boneblack (purchased)	250,137	15,116	459,922	23,183
Hydrochloric acid	489,603	7,072	559,310	7,932
Sulphuric acid 50° Be	11,396	342	9,384	328
Other chemicals, soda ash, etc	.....	24,737	.....	22,903
Containers and labels	.....	653,527	.....	655,335
All other materials	.....	160,036	.....	253,633
Total	.....	**3,379,075**	.....	**3,199,003**

Employment and Salaries and Wages Paid.—The employment of wage-earners by months is given in table 98 for 1926 and 1927. As may be seen, employment in this industry is fairly steady, there being no determinate seasonal fluctuation. The figures for the number of days that establishments operated on full time given in table 99 lead one to believe that employment in this industry is seasonal. This is not the case, however. The small number of days that establishments operate on full time, is due to the fact that the few small establishments in Prince Edward Island usually operate only in the fall of the year, thereby reducing the average for the whole industry.

The salaries and wages paid amounting to an average in 1927 of $2,640 and $1,051 respectively compare quite favourably with that paid in other industries.

Table 98.—Starch and Glucose Industry: Employment of Wage Earners by Months, 1926 and 1927

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	403	17	420	385	24	409
February	411	16	427	393	22	415
March	402	15	417	411	21	432
April	399	16	415	394	15	409
May	391	15	406	446	19	465
June	394	16	410	401	19	420
July	386	16	402	443	20	463
August	385	17	402	435	19	454
September	387	17	404	432	19	451
October	414	16	430	420	18	438
November	395	17	412	445	19	464
December	382	15	397	403	19	422
Average	**418**	**16**	**434**	**420**	**20**	**440**

Table 99.—Starch and Glucose Industry: Hours of Work and Salaries and Wages Paid, 1917-1927

Year	Hours worked		No. of days est. on full time operation	Average salary	Average wage
	Per day	Per week			
				$	$
1917	9·7	56·9	199	1,215	697
1918	9·8	58·6	140	1,389	851
1919	9·5	57·6	176	1,915	933
1920	9·2	52·8	234	1,500	1,155
1921	9·4	56·0	196	1,671	1,061
1922	9·6	56·7	140	1,505	898
1923	9·4	54·5	114	2,178	952
1924	9·8	57·4	133	2,131	1,035
1925	9·4	55·7	134	2,151	1,021
1926	9·6	55·7	185	2,347	1,089
1927	9·8	54·5	146	2,640	1,051

Fuel Consumption.—The consumption of fuel is shown in table 100 by classes, quantities and cost value delivered at the factory. Coal of all kinds represented over 97 p.c. of the fuel used in 1926 and 1927.

Table 100.—Starch and Glucose Industry: Fuel Consumption, 1926 and 1927

Kinds of fuel	Unit of measure	1926		1927	
		Quantity	Cost value	Quantity	Cost value
			$		$
Bituminous coal	Ton	40,200	232,353	41,533	238,285
Anthracite coal	Ton	1,139	5,695	1,013	5,227
Fuel oil	Gal.	72,454	7,131	65,950	6,310
Total cost of fuel used			**245,179**		**249,822**

Power Installation.—The power equipment employed in the starch and glucose industry in 1926 and 1927 is given in table 101.

Table 101.—Starch and Glucose Industry: Power Installation, 1926 and 1927

Description	1926		1927	
	Number of units	Horse power according to manufacturers' rating	Number of units	Horse power according to manufacturers' rating
Steam engines	5	1,920	6	1,945
Total primary power equipment	5	1,920	6	1,945
Electric motors operated by power generated by establishment	203	2,936	224	2,520
Total power installation	**208**	**4,856**	**230**	**4,465**

Imports and Exports.—The quantity and value of starch and similar preparations imported into and exported from Canada during the calendar years 1926 and 1927 are given in tables 102 and 103. The total value of the imports in 1927 was $703,648, compared with $614,585. the previous year, while the exports amounted to $38,266 in 1927 and $59,527 in 1926.

Table 102.—Imports by Classes and Countries, Calendar Years 1926 and 1927

Articles imported by countries	1926		1927	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Starch, including farina, corn starch, potato starch, potato flour and similar preparations—				
United Kingdom	121,001	7,579	221,718	13,348
United States	2,464,943	141,587	2,706,651	156,529
Netherlands	2,118,923	75,924	3,108,155	110,016
Other countries	93,921	4,285	273,524	12,638
Total	4,798,788	229,375	6,310,048	292,531
British gum, dry sizing cream and enamel sizing—				
United Kingdom	127,843	5,571	159,489	8,287
United States	513,828	31,397	515,508	40,612
Total	641,671	36,968	674,997	46,899
Dextrine, dry—				
United Kingdom	27,726	1,294	19,537	987
United States	3,521,842	161,374	4,474,546	190,438
Germany	44,000	1,861	.....	.....
Netherlands	353,992	14,377	431,036	22,636
Other countries	.....	.....	.....	.....
Total	3,947,560	178,906	4,925,119	214,061
Glucose or grape sugar, glucose syrup and corn syrup or any syrups containing admixtures thereof—				
United Kingdom	35,986	2,906	18,928	1,484
United States	5,071,383	166,417	4,137,355	148,665
Other countries	110	13	110	8
Total	5,107,479	169,336	4,156,393	150,157
Grand Total	**14,495,498**	**614,585**	**16,066,557**	**703,648**

Table 103.—Exports by Classes and Countries, 1926 and 1927

Articles exported by countries	1926		1927	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Corn starch—				
United States	.....	.....	506	27
New Zealand	1,031,270	57,398	778,780	37,984
Other countries	17,207	1,556	2,659	141
Total	1,048,477	58,954	781,939	38,152
Potato starch—				
United States	.....	.....	.....	.....
Other countries	4,920	434	1,130	114
Glucose or glucose syrup—				
United Kingdom	.....	30	.....	.....
United States	.....	109	.....	.....
Total	.....	139	.....	.....
Grand Total	**1,053,397**	**59,527**	**783,069**	**38,266**

MISCELLANEOUS FOOD PRODUCTS INDUSTRY

The growth of the industry producing miscellaneous food products is shown in table 104. From a humble position in 1917 when the capital employed amounted to only $1,014,305, number of employese 341 and a production of $1,567,630, this industry expanded very rapidly so that by 1927 the capital invested stood at $8,470,618, persons employed numbered 987 and the goods produced had a selling value at the factory of $9,878,350. As may be seen, the industry experienced the most rapid expansion from 1917 to 1919 when a maximum employment of 1,127 persons and a production of $10,147,308 was attained. In 1920, however, contrary to all expectations, a severe depression set in, at a time when in almost every other industry production and employment were at their highest level. This depression lasted for two years, after which the industry recovered quite rapidly. The progress of the industry is also indicated by the increase in the value added by manufacture which rose from $743,094 in 1917 to $5,057,456 in 1927; the power installation which was increased from 628 h.p. to 4,328 h.p. and the cost of fuel which rose from $8,909 to $103,903.

This industry is practically confined to Ontario where in 1927 31 out of the 53 mills were located; these mills employed 92 p.c. of the capital, 78 p.c. of the employees and produced 85 p.c. of the value of production of the entire industry. Of the remaining mills, 12 were in Quebec, 5 in Manitoba, 2 in Prince Edward Island, 1 in Nova Scotia, and 2 in British Columbia.

Table 104.—Miscellaneous Food Products Industry: Principal Statistics, 1917-27

—	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1917	26	1,014,305	82	20	121,746	138	101	114,888	8,909	628	824,536	1,567,630	743,094
1918	49	5,129,713	144	42	290,409	348	195	367,458	73,912	1,807	4,162,972	6,295,222	2,132,250
1919	60	7,097,351	266	102	521,776	490	269	385,251	107,979	3,810	6,555,507	10,147,308	3,591,801
1920*	31	5,392,211	132	50	311,634	318	144	511,866	97,537	7,083	4,207,915	6,511,061	2,303,146
1921	30	4,346,560	98	45	247,443	207	76	331,394	83,281	2,917	2,063,555	4,028,989	1,965,434
1922													
Canada	47	5,389,742	181	57	380,200	348	153	535,965	82,534	4,105	3,059,601	6,247,262	3,187,661
Quebec	9	141,903	13	4	20,445	33	12	26,008	2,340	62	207,730	358,047	150,317
Ontario	32	5,132,993	155	51	339,942	305	134	493,223	78,576	3,905	2,698,467	5,619,116	2,920,649
Manitoba	3	36,805	4	.....	3,860	4	2	4,332	499	108	26,979	43,054	16,075
Other provinces	3	78,041	9	2	15,953	6	5	12,402	1,119	30	126,425	227,045	100,620
1923													
Canada	52	6,261,973	195	67	405,007	393	174	587,954	106,427	5,189	3,514,917	6,929,401	3,414,484
Quebec	9	174,990	21	2	23,707	40	16	22,051	2,280	51	211,187	393,770	182,583
Ontario	32	5,872,213	151	61	346,410	327	144	537,262	100,888	4,937	3,072,082	6,128,944	3,056,862
Manitoba	5	74,734	5	1	5,090	6	3	5,769	609	108	43,386	77,455	34,069
Other provinces	6	140,036	18	3	29,800	20	11	22,872	2,650	93	188,262	329,232	140,970
1924													
Canada	52	6,349,659	147	57	299,458	408	149	599,013	68,021	3,531	3,499,036	6,773,644	3,274,608
Quebec	10	189,449	21	5	28,770	38	11	25,881	2,154	51	270,816	403,418	132,602
Ontario	33	5,965,303	112	49	240,699	348	128	544,654	61,594	3,287	2,952,431	5,932,420	2,979,989
Manitoba	3	52,121	3	1	5,364	3	.....	4,315	432	98	41,534	63,970	22,436
Other Provinces	6	142,786	11	2	24,625	19	10	24,163	3,841	95	234,255	373,836	139,581
1925													
Canada	51	7,002,238	168	58	354,724	427	202	657,733	79,903	4,531	4,172,707	8,334,941	4,162,234
Quebec	10	211,776	24	5	36,551	39	12	27,539	3,475	44	280,365	431,321	150,956
Ontario	32	6,558,972	134	50	295,735	363	169	588,811	71,777	4,311	3,520,221	7,255,480	3,735,259
Manitoba	4	114,702	3	1	4,164	6	13	16,876	914	62	159,323	299,759	140,436
Other provinces	5	116,788	27	2	18,274	19	8	24,507	3,737	114	212,798	348,381	135,583
1926													
Canada	50	8,097,986	178	60	432,519	470	242	713,656	103,185	3,882	4,467,723	8,925,132	4,457,409
Quebec	11	418,531	28	8	51,662	78	28	63,128	9,455	142	394,009	744,422	350,413
Ontario	31	7,457,169	137	49	353,827	367	194	613,068	88,333	3,566	3,730,135	7,564,269	3,834,134
Manitoba	4	118,410	5	1	8900	7	13	16,374	1,072	65	146,309	279,797	133,488
Other Provinces	4	103,876	8	2	18,130	18	7	21,086	4,325	109	197,270	336,644	139,374
1927													
Canada	53	8,470,618	168	70	444,595	504	245	757,410	103,903	4,328	4,820,894	9,878,350	5,057,456
Quebec	12	373,858	29	10	55,206	86	30	76,587	9,211	125	470,433	833,138	362,705
Ontario	31	7,838,030	125	57	358,135	395	195	643,278	90,145	4,046	4,004,270	8,425,604	4,421,334
Manitoba	5	151,630	5	1	12,824	8	13	17,482	1,331	60	166,641	332,687	166,046
Other Provinces	5	107,100	9	2	18,430	15	7	20,063	3,216	97	179,550	286,921	107,371

*Prior to 1920 establishments producing syrups as their principal product were included with the Miscellaneous Food Industry.

Production.—The establishments engaged in the miscellaneous food products industry produce a variety of products as may be seen from table 105 which gives the production by quantities and classes for 1926 and 1927. Cereal products are first in importance with a value of $5,707,062 in 1927 followed by stock and poultry foods amounting to $2,035,332; these two items make up 78·4 p.c. of the total production of $9,878,350. A list of the more important articles produced is given in the table and footnotes.

Table 105.—Miscellaneous Food Products Industry: Production by Classes of Product, 1926 and 1927

Products	1927		1926	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Prepared cereal products	.....	5,133,564	.....	4,619,613
Other cereal products	.....	573,498	.....	519,059
Stock and poultry foods and remedies	.....	2,035,332	.....	1,860,977
Cocoanut, prepared and desiccated	2,867,835	477,431	2,691,807	366,261
Peanut butter	2,002,367	380,228	1,891,851	379,197
Peanuts, roasted and salted	1,033,724	450,327	1,000,781	383,263
Prepared and self-raising flour, etc	3,875,077	243,164	3,993,921	266,502
Preparations of cocoa, malt, etc	.....	[1]	236,383	102,819
All other products	.....	584,806[2]	.....	436,441[2]
	.....	9,878,350	.....	8,925,132

[1]Included under "all other products." [2]Includes almond paste, prepared mustard, olives, jelly powders, cider, baking powder, washing powder, confectionery, flour paste, etc.

Employment and Salaries and Wages Paid.—Employment in this industry is fairly steady throughout the year, there being only a slight seasonal variation. The maximum employment occurs in the fall, November or October usually being the month of highest employment. During the ten years under review, establishments operated on full time on an average of 254 days during the year.

The hours worked per day and per week, the number of days that establishments were on full time operation, and the average salary and wage from 1917 to 1927 are given in table 107. Although the number of days that establishments operated on full time decreased from 268 to 247, the average salary increased from $1,194 in 1917 to $1,868 in 1927 while the average wage increased from $481 to $1,011 for the same period. The salaries and wages paid compare quite favourably with that prevailing in other industries, considering that out of 749 wage-earners in 1927, 245 were females and that establishments operated only 247 days on full time during the year.

Table 106.—Miscellaneous Food Products Industry: Employment of Wage-earners by Months, 1926-27

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	474	222	696	438	212	650
February	531	259	790	476	236	712
March	520	247	767	464	244	708
April	514	252	766	479	229	708
May	478	254	732	452	239	691
June	479	245	724	446	234	680
July	489	232	721	430	249	679
August	504	242	746	444	236	680
September	489	239	728	470	238	708
October	507	241	748	478	224	702
November	490	236	726	498	256	754
December	497	197	694	487	230	717
Average	**504**	**245**	**749**	**470**	**242**	**712**

Table 107.—Miscellaneous Food Products Industry: Hours of Work and Salaries and Wages Paid, 1917-27.

Year	Hours worked		Number of days establishments on full time operation	Average salary	Average wage
	Per day	Per week			
				$	$
1917	8·9	52·0	268	1,194	481
1918	8·9	51·7	252	1,562	677
1919	8·9	51·8	260	1,418	507
1920	8·7	50·0	252	1,712	1,108
1921	8·5	49·3	259	1,730	1,171
1922	8·8	51·0	256	1,597	1,070
1923	8·8	50·8	257	1,546	1,037
1924	8·9	50·8	250	1,468	1,075
1925	9·2	48·8	252	1,570	1,046
1926	9·3	48·2	243	1,817	1,002
1927	9·1	47·7	247	1,868	1,011

Power Installation.—The power equipment installed in the miscellaneous food products industry in 1926 and 1927 is shown in table 108. The total power used for manufacturing purposes was 4,328 h.p. in 1927, an increase of 446 h.p. over the preceding year; the main sources of power being derived from electric motors operated by purchased power.

Table 108.—Miscellaneous Food Products Industry: Power Installation, 1926 and 1927

—	1926		1927	
	Units	Horse power capacity	Units	Horse power capacity
Steam engines and turbines	6	247	7	259
Oil, gas and gasoline engines	1	15	.....	.....
Hydraulic turbines and water wheels	8	255	8	260
Electric motors operated by purchased power	380	3,365	434	3,809
Total power used for manufacturing	395	3,882	449	4,328
Electric motors operated by power generated by the establishment reporting	7	194	.....	.....
Total electric motors	387	3,559	434	3,809
Boilers installed	20	1,698	24	2,084

Fuel Consumption.—The miscellaneous food products industry spent $103,903 for fuel in 1927. The chief source of fuel was coal for which $72,601 was spent for bituminous and $11,814 for anthracite. These two items make up over 80 p.c. of the total fuel bill.

Table 109.—Miscellaneous Food Products Industry: Fuel Consumption, 1926 and 1927

—	Unit of measure	1926		1927	
		Quantity	Value	Quantity	Value
			$		$
Bituminous coal	Ton	9,611	61,233	12,156	72,601
Anthracite coal	"	2,389	22,775	896	11,814
Lignite coal	"	91	1,306	.....	56
Coke	"	264	2,414	287	2,639
Gasoline	Gallon	4,714	1,374	1,152	299
Fuel oil	"	68,124	5,633	107,356	8,291
Wood	Cord	68	425	73	676
Gas	M cu. ft.	8,080	6,643	7,390	6,54
Other fuel	.....	.....	1,382	.....	984
Total cost	.....	.....	**103,185**	.....	**103,903**
Cost of electricity	.....	.....	78,147	.....	86,466

CHAPTER IV

FRUIT AND VEGETABLE PREPARATIONS

The art of hermetically sealing food products—a method of preserving certain foods without depriving them of their natural qualities—led to the foundation of the canning industry, a relatively important branch of manufacture in the Dominion of Canada. The honour of discovery belongs to M. Nicolas Appert, a Frenchman, who in the reign of the third Napoleon and between the years 1840 and 1845 was awarded a pension of 12,000 francs and the title of Chevalier, which his male descendants bear to this day. He died at the age of 91, neglected and alone, and was buried in "Père La Chaise," one of the oldest and most celebrated cemeteries in Paris.

The production of canned foods in Canada experienced a remarkable expansion since the beginning of the twentieth century. In 1900, the total value did not exceed $8,250,000, whilst in 1927 it had increased to nearly $49,000,000 or six times as much. The principal commodities used in the canning industry are fish, fruits and vegetables, milk and meats, while the industry itself forms an adjunct of considerable importance to other industries, notably the tin can industry, the wooden box industry and the paper and printing industry. The development of the canned foods trade has effected great changes in the relation of foods to seasons. Fruits and vegetables of many kinds are to be had at all times of the year, not always with all the flavour of the freshly gathered product, but nevertheless with much of their original flavour and freshness. The producers in the country are provided with an enormously extended market and the consumers in both city and country with cheap and wholesome food in great variety. The consumers also enjoy protection by frequent inspection under the "Meat and Canned Foods Act 1907" and subsequent amendments, administered by the Health of Animals Branch of the Federal Department of Agriculture.

Expansion of the Industry Since 1917.—The fruit and vegetable preparations industry is divided into four sections (1) Canned Fruits and Vegetables, (2) Dried or Evaporated Fruits and Vegetables, (3) Preserved Fruits and (4) Vinegar, Pickles, Sauces and Relishes. The most important branch of this industry is the canning of fruits and vegetables which is carried on most extensively in Ontario, British Columbia and Quebec, where climatic conditions for the growing of fruits and vegetables are favourable. The principal fruits canned in Ontario are apples, pears, plums, peaches, cherries, currants, gooseberries, blueberries, raspberries and strawberries. In addition British Columbia has the apricot and loganberry. The vegetables canned include tomatoes, peas, corn, beans, beets, carrots, pumpkins, squash, spinach and asparagus. The canning season begins in June and continues throughout the summer and autumn until October, being at its height in July, August and September. In 1927, employment was furnished by the canneries to 4,937 people of whom 1,804 were males and 3,133 females with a payroll of $1,942,602; the amount of capital invested was $20,819,307 and the goods produced had a selling value at the factory of $14,332,914. Vinegar, pickles, sauces and relishes were next in importance. This industry which is carried on chiefly in Ontario employed a capital of $7,104,602, produced goods to the value of $8,710,951 and gave employment to 1,232 persons who received $1,125,660 in salaries and wages. The preserved fruit industry ranked third with a capital investment of $5,596,011, a production of $6,980,198 and a labour force of 1,023 persons who received $874,150 for the year. The entire industry is practically located in the three provinces of Ontario, Quebec and British Columbia. The dried or evaporated fruit and vegetable industry is the smallest of the whole group. It had in 1927 a capital of $392,312, a value of production of $309,959 and employed 597 persons who received $105,976 in salaries and wages. This industry is confined to Ontario, British Columbia and Nova Scotia.

During the eleven years 1917-27, the fruit and vegetable preparations industry made, with few exceptions, steady progress. Production increased from $24,801,639 to $30,334,022, value added by manufacture from $10,124,205 to $13,121,123, capital invested from $14,723,871 to $33,912,232 and number of employees from 4,711 to 7,789. It should be remembered, however, that the large increase in the number of persons employed is due in part to the change in method adopted in 1925 of computing the annual employment. With the exception of the evaporated fruit and vegetable section which shows a decrease, all the other sections of the industry reported an increase in the number of establishments, capital invested, number of employees, and value added by manufacture, as table (111a) shows:—

Table 110.—Fruit and Vegetable Preparations: Principal Statistics, 1917-27

Industry	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel,	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1917													
Fruits and vegetables, canned	118	8,354,097	191	52	314,325	1,309	1,292	1,047,382	200,564	7,051	10,463,221	16,385,964	5,922,743
Fruits and vegetables, dried or evaporated	49	1,300,779	39	5	63,341	416	277	407,137	87,436	825	1,162,757	2,470,344	1,307,587
Fruits, preserved	31	2,752,600	76	36	134,278	245	262	260,339	40,007	748	1,783,769	2,997,782	1,214,013
Vinegar, pickles, sauces and relishes	39	2,316,395	75	26	456,106	238	172	226,423	29,698	647	1,267,687	2,947,549	1,679,862
Total	**237**	**14,723,871**	**381**	**119**	**968,050**	**2,208**	**2,003**	**1,941,281**	**357,705**	**9,271**	**14,677,434**	**24,801,639**	**10,124,205**
1918													
Fruits and vegetables, canned	130	9,777,305	195	55	309,720	1,276	1,418	1,291,431	208,256	5,513	8,751,574	14,027,855	5,276,281
Fruits and vegetables, dried or evaporated	94	3,708,452	53	12	96,971	609	393	643,485	203,359	640	3,105,784	4,873,572	1,767,788
Fruits, preserved	30	2,787,517	79	36	168,176	258	283	296,773	50,414	710	3,167,129	4,802,656	1,635,527
Vinegar, pickles, sauces and relishes	33	2,848,248	89	22	156,121	254	207	297,194	33,748	452	1,651,107	3,473,727	1,822,620
Total	**287**	**19,121,522**	**416**	**125**	**730,988**	**2,397**	**2,301**	**2,528,883**	**495,777**	**7,315**	**16,675,594**	**27,177,810**	**10,502,216**
1919													
Fruits and vegetables, canned	122	10,133,682	205	65	344,926	1,361	1,335	1,562,073	181,149	5,820	9,450,632	16,013,392	6,562,760
Fruits and vegetables, dried or evaporated	77	1,225,485	46	7	47,030	216	181	227,771	101,128	559	951,814	1,676,317	724,503
Fruits, preserved	40	4,597,528	125	55	298,981	436	469	614,799	79,754	458	6,540,795	9,042,851	2,502,056
Vinegar, pickles, sauces and relishes	34	3,487,223	96	25	198,819	303	225	460,844	58,367	969	2,122,324	4,267,568	2,145,244
Total	**273**	**19,443,918**	**472**	**152**	**889,756**	**2,316**	**2,210**	**2,865,487**	**420,398**	**7,806**	**19,065,565**	**31,000,128**	**11,934,563**
1920													
Fruits and vegetables, canned	133	14,017,856	259	73	473,810	1,532	1,468	1,973,501	327,962	6,454	11,102,409	17,586,303	6,483,894
Fruits and vegetables, dried or evaporated	66	365,602	19	3	9,906	96	142	127,557	69,521	245	184,633	461,709	277,076
Fruits, preserved	49	8,681,252	126	53	293,565	494	513	758,262	100,300	1,016	6,436,857	9,745,185	3,308,328
Vinegar, pickles, sauces and relishes	59	5,634,542	159	39	321,738	520	345	697,657	110,648	1,576	3,622,294	7,083,214	3,460,920
Total	**307**	**28,699,252**	**563**	**168**	**1,099,019**	**2,642**	**2,468**	**3,556,977**	**608,431**	**9,291**	**21,346,193**	**34,876,411**	**13,530,218**
1921													
Fruits and vegetables, canned	103	10,623,851	220	54	410,128	786	544	975,241	161,180	6,586	5,688,504	9,709,213	4,020,709
Fruits and vegetables, dried or evaporated	61	576,668	35	4	31,564	173	118	149,174	80,021	513	353,726	852,429	498,703
Fruits, preserved	46	6,551,207	138	36	311,063	303	262	418,832	85,119	1,197	3,270,539	5,222,182	1,951,643
Vinegar, pickles, sauces and relishes	60	5,806,963	158	27	315,626	474	245	538,936	91,066	1,376	2,691,177	5,183,652	2,492,475
Total	**279**	**23,558,689**	**551**	**121**	**1,068,381**	**1,736**	**1,169**	**2,082,183**	**417,386**	**9,672**	**12,003,946**	**20,967,476**	**8,963,530**

1922													
Fruits and vegetables, canned	117	11,513,608	212	73	381,835	1,054	1,074	1,241,075	194,845	6,959	6,811,758	11,589,235	4,777,477
Fruits and vegetables, dried or evaporated	64	578,944	17	3	18,726	140	161	132,013	71,898	391	209,065	535,626	326,561
Fruits, preserved	48	6,541,287	139	40	307,041	340	410	499,123	79,328	1,957	3,811,935	5,911,558	2,099,623
Vinegar, pickles, sauces and relishes	67	5,443,519	164	30	298,284	420	227	544,803	120,958	2,052	2,679,760	5,459,366	2,779,606
Total	**296**	**24,077,358**	**532**	**146**	**1,005,886**	**1,954**	**1,872**	**2,417,014**	**467,029**	**11,359**	**13,512,518**	**23,495,785**	**9,983,267**
1923													
Fruits and vegetables, canned	103	11,257,410	195	60	339,495	1,021	1,007	1,108,634	127,422	6,957	5,323,968	9,513,722	4,189,754
Fruits and vegetables, dried or evaporated	30	204,779	7	2	4,082	42	60	47,793	24,307	315	68,072	186,500	118,428
Fruits, preserved	49	5,726,975	142	45	302,308	299	447	459,384	64,670	1,353	3,722,196	5,503,209	1,781,013
Vinegar, pickles, sauces and relishes	70	5,917,416	155	38	328,699	514	285	670,584	113,645	1,481	2,904,468	5,697,891	2,793,423
Total	**252**	**23,106,580**	**499**	**145**	**974,584**	**1,876**	**1,799**	**2,286,395**	**330,044**	**10,106**	**12,018,704**	**20,901,322**	**8,882,618**
1924													
Fruits and vegetables, canned	113	14,419,185	163	59	311,572	1,278	1,370	1,338,736	157,918	8,378	6,965,912	12,716,568	5,750,656
Fruits and vegetables, dried or evaporated	45	352,691	6	2	7,387	161	227	67,957	33,594	114	145,118	319,633	174,515
Fruits, preserved	48	6,261,941	136	52	318,946	362	577	556,196	64,298	1,552	4,217,836	6,165,565	1,947,729
Vinegar, pickles, sauces and relishes	60	5,841,649	137	30	284,040	507	294	679,719	106,636	1,835	3,250,249	7,846,197	4,595,948
Total	**266**	**26,875,466**	**442**	**143**	**921,945**	**2,308**	**2,468**	**2,642,608**	**362,446**	**11,879**	**14,579,115**	**27,047,963**	**12,468,848**
1925													
Fruits and vegetables, canned	142	18,565,317	212	56	372,426	1,854	2,984	1,659,633	181,176	8,874	9,297,590	15,944,468	6,646,878
Fruits and vegetables, dried or evaporated	57	494,622	8	1	8,836	477	671	152,890	69,292	281	272,198	606,469	334,271
Fruits, preserved	43	5,364,125	110	42	271,136	303	450	479,707	58,715	1,213	3,958,044	5,825,376	1,867,332
Vinegar, pickles, sauces and relishes	60	6,238,644	139	35	283,242	635	391	720,142	101,768	1,891	3,521,914	7,962,804	4,440,890
Total	**302**	**30,662,708**	**469**	**134**	**935,640**	**3,269**	**4,496**	**3,012,372**	**410,951**	**12,259**	**17,049,746**	**30,339,117**	**13,289,371**
1926													
Fruits and vegetables, canned	136	21,755,537	214	80	415,878	1,736	3,116	1,695,230	185,603	9,359	9,383,098	16,233,960	6,850,862
Fruits and vegetables, dried or evaporated	34	485,917	14	1	6,966	249	375	79,748	24,830	310	115,218	270,389	155,171
Fruits, preserved	45	5,861,957	122	64	319,125	393	514	562,115	68,262	1,535	4,538,300	6,726,249	2,187,949
Vinegar, pickles, sauces and relishes	57	5,850,102	108	30	246,841	499	343	645,948	103,300	1,643	3,178,261	7,004,034	3,825,773
Trtal	**272**	**33,953,513**	**458**	**175**	**988,810**	**2,877**	**4,348**	**2,983,041**	**381,995**	**12,847**	**17,214,877**	**30,234,632**	**13,019,755**
1927													
Fruits and vegetables, canned	130	20,819,307	215	77	414,458	1,589	3,056	1,528,144	156,988	8,864	8,375,780	14,332,914	5,957,134
Fruits and vegetables, dried or evaporated	36	392,312	12	.....	11,400	224	361	94,576	27,889	336	132,910	309,959	177,049
Fruits, preserved	46	5,596,011	140	64	352,102	342	477	522,048	67,317	1,203	4,595,096	6,980,198	2,385,102
Vinegar, pickles, sauces and relishes	60	7,104,602	143	45	301,471	604	440	824,189	103,514	1,909	4,108,813	8,710,951	4,602,138
Total	**272**	**33,912,232**	**510**	**186**	**1,079,431**	**2,759**	**4,334**	**2,968,957**	**355,708**	**12,312**	**17,212,599**	**30,331,022**	**13,121,423**

Table 111.—Fruit and Vegetable Preparations: Principal Statistics, by Provinces, 1927

—	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
Fruits and vegetables, canned—													
Nova Scotia	6	286,152	3	1	3,340	46	144	30,785	7,447	110	77,385	147,003	69,618
New Brunswick	5	269,083	4	1	9,120	27	116	19,694	4,180	38	88,271	134,920	46,649
Quebec	17	840,269	22	.....	24,339	221	296	88,382	12,807	861	1,005,574	1,365,893	360,319
Ontario	86	16,386,240	134	52	275,449	1,059	1,873	925,254	102,331	7,228	5,133,476	9,418,678	4,285,202
Manitoba and British Columbia	16	3,037,563	52	23	102,210	236	627	464,029	30,223	627	2,071,074	3,266,420	1,195,346
Total	**130**	**20,819,307**	**215**	**77**	**414,458**	**1,589**	**3,056**	**1,528,144**	**156,988**	**8,864**	**8,375,780**	**14,332,914**	**5,957,134**
Fruits and vegetables, dried or evaporated—													
Ontario	26	170,715	3	.....	650	111	240	30,520	15,142	119	59,682	141,617	81,935
Nova Scotia and British Columbia	10	221,597	9	.....	10,750	113	121	64,056	12,747	217	73,228	168,342	95,114
Total	**36**	**392,312**	**12**	.....	**11,400**	**224**	**361**	**94,576**	**27,889**	**336**	**132,910**	**309,959**	**177,049**
Fruits, preserved—													
Quebec	10	1,472,195	35	25	73,569	82	159	143,396	20,972	153	1,075,759	1,667,924	592,165
Ontario	22	3,559,207	82	36	239,660	185	242	288,867	37,761	807	2,809,303	4,167,682	1,358,379
British Columbia	8	517,001	20	2	36,223	67	67	82,709	7,688	227	681,439	1,098,147	416,708
Other provinces	6	47,608	3	1	2,650	8	9	7,076	896	16	28,595	46,445	17,850
Total	**46**	**5,596,011**	**140**	**64**	**352,102**	**342**	**477**	**522,048**	**67,317**	**1,203**	**4,595,096**	**6,980,198**	**2,385,102**
Vinegar, pickles, sauces and relishes—													
Nova Scotia	3	98,264	3	3	11,950	31	14	20,856	5,048	64	58,356	131,090	72,734
Quebec	6	323,121	10	1	26,000	30	2	30,787	1,098	17	151,869	297,643	145,774
Ontario	38	6,076,648	109	33	203,808	499	357	685,894	91,872	1,677	3,454,104	7,560,227	4,106,123
Manitoba	5	344,282	13	4	40,512	20	48	51,164	3,471	99	281,569	446,671	165,102
British Columbia	5	112,967	2	1	5,720	14	13	16,981	1,221	37	81,753	130,608	48,855
Other provinces	3	149,320	6	3	13,481	10	6	13,507	804	15	81,162	144,712	63,550
Total	**60**	**7,104,602**	**143**	**45**	**301,471**	**604**	**440**	**821,189**	**103,514**	**1,909**	**4,108,813**	**8,710,951**	**4,602,138**

Table 111 (a)—Summary Statistics of the Growth of the Fruit and Vegetable Preparations Industry.

Industry		Establishments	Capital	Employees	Production	Value added by manufacture
		No.	$	No.	$	$
Canning	1917	118	8,354,097	2,844	16,385,964	5,922,743
	1927	130	20,819,307	4,937	14,332,914	5,957,134
Evaporating	1917	49	1,300,779	737	2,470,344	1,307,587
	1927	36	392,312	597	309,959	177,049
Preserving	1917	31	2,752,600	619	2,997,782	1,214,013
	1927	46	5,596,011	1,023	6,980,198	2,385,102
Vinegar, etc	1917	39	2,316,395	511	2,947,549	1,679,862
	1927	60	7,104,602	1,232	8,710,951	4,602,138

The general depression of 1921 also affected this industry. The number of establishments and employees, capital invested, value of production and value added by manufacture, all declined sharply. The fruit and vegetable canning section of the industry was the most affected, but did not take long to recover.

The principal statistics for the Dominion from 1917 to 1927 are given in table 110 and by provinces for 1927 in table 111.

Capital Invested.—The capital invested in the fruit and vegetable preparations industry from 1923 to 1927 is shown in table 112. Fixed capital, comprising land, buildings, machinery and tools increased from $13,862,444 in 1923 to $16,508,620 in 1927 and working capital, comprising inventories, cash, trading and operating accounts increased from $9,244,156 to $17,403,612 during the same period. The ratio between fixed and working capital also changed considerably. In 1923, 60 p.c. of the capital invested was represented by fixed assets compared with 49 p.c. in 1927.

Table 112.—Fruit and Vegetable Preparations: Capital Invested, 1923-27

	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Materials and stocks on hand, etc.	Cash, trading, and operating accounts, etc.	
	$	$	$	$
1923				
Fruits and vegetables, canned	8,155,803	2,532,867	568,740	11,257,410
Fruits and vegetables, dried, etc	178,789	22,270	3,720	204,779
Fruits, preserved	2,563,478	1,872,247	1,291,250	5,726,975
Vinegar, pickles, sauces and relishes	2,964,374	2,524,084	428,958	5,917,416
Total	13,862,444	6,951,468	2,292,668	23,106,580
1924				
Fruits and vegetables, canned	9,663,230	4,290,863	465,092	14,419,185
Fruits and vegetables, dried, etc	284,483	51,121	17,087	352,691
Fruits, preserved	2,817,294	2,106,188	1,338,459	6,261,941
Vinegar, pickles, sauces and relishes	2,730,494	2,765,470	345,685	5,841,649
Total	15,495,501	9,213,642	2,166,323	26,875,466
1925				
Fruits and vegetables, canned	10,899,898	7,100,833	564,586	18,565,317
Fruits and vegetables, dried, etc	395,047	75,244	24,331	494,622
Fruits, preserved	2,512,431	1,727,115	1,124,579	5,364,125
Vinegar, pickles, sauces and relishes	2,857,997	3,001,891	378,756	6,238,644
Total	16,665,373	11,905,083	2,092,252	30,662,708
1926				
Fruits and vegetables, canned	11,149,095	9,654,647	951,795	21,755,537
Fruits and vegetables, dried, etc	363,099	61,325	61,493	485,917
Fruits, preserved	2,581,016	2,121,789	1,159,152	5,861,957
Vinegar, pickles, sauces and relishes	2,683,962	2,552,030	614,110	5,850,102
Total	16,777,172	14,389,791	2,786,550	33,953,513

Table 112.—Fruit and Vegetable Preparations: Capital Invested, 1923-27—Concluded

—	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Materials and stocks on hand, etc.	Cash, trading, and operating accounts, etc.	
	$	$	$	$
1927				
Fruits and vegetables, canned—				
New Brunswick	144,773	110,693	13,617	269,083
Nova Scotia	207,080	55,796	23,276	286,152
Quebec	420,122	303,277	116,870	840,269
Ontario	8,304,758	7,727,307	354,175	16,386,240
British Columbia and Manitoba	1,284,944	1,300,680	451,939	3,037,563
Canada	**10,361,677**	**9,497,753**	**959,877**	**20,819,307**
Fruits and vegetables, dried—				
Nova Scotia	106,428	21,713	8,438	136,579
Ontario	131,820	28,359	10,536	170,715
British Columbia	68,613	11,620	4,785	85,018
Canada	**306,861**	**61,692**	**23,759**	**392,312**
Fruits, preserved—				
Ontario	1,746,806	1,155,129	657,272	3,559,207
British Columbia	149,216	248,570	119,215	517,001
Quebec	670,503	561,358	240,334	1,472,195
Other provinces	28,652	13,847	5,109	47,608
Canada	**2,595,177**	**1,978,904**	**1,021,930**	**5,596,011**
Vinegar, pickles, sauces and relishes—				
Ontario	2,656,331	2,921,181	499,136	6,076,648
Quebec	229,818	43,338	49,965	323,121
Manitoba	210,503	102,019	31,760	344,282
British Columbia	44,846	56,321	11,800	112,967
Other provinces	103,407	107,676	36,501	247,584
Canada	**3,244,905**	**3,230,535**	**629,162**	**7,104,602**
Total	**16,508,620**	**14,768,884**	**2,634,728**	**33,912,232**

Production.—The products manufactured by the fruit and vegetable preparations industries are given by classes and quantities in table 113 (b) for the years 1926 and 1927.

To the total production of $30,334,022 in 1927, the canned fruit and vegetable section contributed $14,332,914, the vinegar, pickles, and relishes section $8,710,951, the preserved fruit section $6,980,198 and the evaporated fruit section $309,959, Canned vegetables were first in importance with a production of $9,963,449, followed in order by preserved fruits, canned fruits, sauces and relishes, etc.

A collective summary of the commodities produced in the fruit and vegetable canning and kindred industries is shown in table 113 (a) for the year 1927.

Table 113 (a).—Collective Summary of Products in the Fruit and Vegetable Packing and Kindred Industries, 1927

——	Unit	Quantity	Value
			$
Fruits, canned—			
Apples	Case	108,080	285,463
Cherries	"	39,361	190,517
Peaches	"	77,671	315,495
Pears	"	145,193	476,764
Plums	"	42,274	107,663
Raspberries	"	56,347	294,603
Strawberries	"	50,138	269,687
All other fruits	"	78,258	316,009
Vegetables, canned—			
Beans, green or wax	"	131,205	387,897
Beans, baked	"	1,051,345	3,133,600
Corn	"	593,353	1,477,444
Peas	"	984,079	2,460,859
Tomatoes	"	1,562,682	3,789,909
All other vegetables	"	134,830	385,154
Fruits, preserved—			
Jams	Pound	40,557,812	4,980,735
Jellies	"	2,219,667	279,065
Marmalades	"	6,439,546	739,136
Syrups and fruit juices	Gallon	.....	2,294,615
Fruits, glacés	Pound	878,134	272,177
All other preserved fruits		.....	425,247
Fruits, dried or evaporated—			
Apples	Pound	3,030,712	317,587
Apple chop and waste	"	1,102,553	32,371
Vinegar, pickles, sauces, etc—			
Vinegar	Gallon	4,416,122	1,429,782
Pickles, all kinds	"	1,272,745	1,927,172
Catsup, sauces and relishes	"	1,524,696	2,504,130
Cider	"	533,292	243,225
Miscellaneous products—			
Canned soups	Case	304,509	1,014,086
Canned macaroni	"	72,227	224,708
Canned chicken	"	6,917	75,653
Apple butter	Pound	77,761	8,178
Peanut butter	"	3,333,873	592,202
Candied peel	"	1,263,877	246,070
Mincemeat	"	2,652,536	285,499
Powders, ice-cream, jelly, etc	"	.....	1,326,339
Mustard, prepared	Gallon	288,383	285,030
Horseradish	Pound	108,950	25,116
Sauerkraut	"	2,846,119	107,758
Salad dressing	Gallon	30,238	99,589
Almond paste	Pound	99,700	49,225
Fruit butter	"	310,410	32,258
Sugar butter	"	650,411	70,521
Tomato pulp, purée, etc	.....	.....	94,176
Olives	Gallon	201,226	575,941
			34,448,745

Table 113b.—Fruit and Vegetable Preparations: Production by Classes, 1926 and 1927

	Unit	1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Fruits and vegetables, canned—					
Canned fruits—					
Apples	Cases	108,080	285,463	142,305	311,074
Cherries	"	39,331	190,397	70,361	311,150
Peaches	"	77,611	315,285	107,108	441,236
Pears	"	144,493	474,664	176,332	665,109
Plums	"	42,249	107,588	133,057	335,800
Raspberries	"	56,347	294,603	78,163	461,932
Strawberries	"	50,138	269,687	27,062	155,044
Other small fruits	"	41,241	167,151	54,839	189,538
All other fruits	"	37,017	148,858	47,344	185,432
Canned vegetables—					
Beans, green or wax	"	131,205	387,897	132,119	431,070
Beans, baked	"	570,381	1,491,536	500,266	1,229,724
Corn	"	593,353	1,477,444	930,549	2,297,565
Peas	"	984,079	2,460,859	1,291,215	3,451,355
Tomatoes	"	1,550,682	3,761,309	1,587,028	3,805,145
All other vegetables	"	134,530	384,404	83,827	243,603
Preserved fruits—					
Jams	Lb.	8,004,160	969,057	6,803,440	781,225
Jellies	"	194,705	23,384	334,552	35,576
Marmalades	"	793,968	79,130	1,080,036	103,753
Preserved or crushed fruits	Gallon	.....	70,685	50,000	100,000
Miscellaneous products—					
Catsup and relishes	Gallon	225,652	233,564	151,298	190,091
Canned soups	Cases	137,345	515,732	96,704	361,808
Canned chicken	"	6,917	75,653	3,997	43,080
Evaporated apples	Lb.	116,425	11,642	87,400	8,740
Apple chop and waste	"	44,901	898	211,020	3,530
Sauerkraut	Lb.	230,000	7,525	84,668	2,833
Vinegar	Gallon	67,500	13,500	91,250	13,250
Cider	"	48,000	7,600	195,000	15,600
All other products	"	.....	107,399	.....	59,697
Total	.....	.....	**14,332,914**	.....	**16,233,960**
Fruits and vegetables, dried or evaporated—					
Evaporated apples	Lb.	2,463,061	262,256	2,763,966	256,095
Apple chop and waste	"	1,057,652	31,473	541,603	12,494
Cider	Gallon	50,000	9,000	12,000	1,800
All other products	.....	.....	7,230	.....	.....
Total	.....	.....	**309,959**	.....	**270,389**
Fruits, preserved—					
Jams	Lb.	31,987,640	3,934,215	30,603,105	3,909,293
Jellies	"	2,014,602	254,127	2,135,351	274,869
Marmalades	"	5,474,034	639,436	6,491,637	734,064
Preserved fruits and juices	Gallon	125,877	345,399	138,504	408,586
Syrups	"	370,743	298,328	123,362	209,708
Catsup and relishes	"	525,838	491,417	276,443	231,907
Pickles, all kinds	"	257,030	202,970	191,567	186,125
Mince meat	Lb.	1,316,778	131,405	1,302,788	141,399
Fruits glacés	"	818,134	257,177	520,114	161,240
Candied peel	"	1,235,391	240,373	1,196,704	248,647
Jewelers, jelly, etc.	"	207,911	23,762	189,558	21,629
All other products[2]	"	.....	161,589	.....	198,782
Total	.....	.....	**6,980,198**	.....	**6,726,249**
Vinegar, pickles, sauces and relishes—					
Catsup, sauces and relishes	Gallon	765,826	1,767,062	817,864	1,810,228
Baked beans	Cases	480,964	1,642,064	351,201	1,190,307
Vinegar	Gallon	4,299,622	1,401,782	3,918,898	1,184,519
Pickles, all kinds	"	973,315	1,677,189	671,709	1,008,062
Prepared mustard	"	79,582	152,701	82,864	120,079
Fruit juices, etc.	"	522,645	496,318	496,543	465,770
Sauerkraut	Lb.	2,616,119	100,233	1,127,407	37,962
Cider	Gallon	266,451	65,904	313,839	73,459
Salad dressing	"	24,238	78,689	17,153	60,052
All other products[3]	.....	.....	1,329,009	.....	1,053,566
Total	.....	.....	**8,710,951**	.....	**7,004,034**
Recapitulation—					
Fruits and vegetables, canned	.....	.....	14,332,914	.....	16,233,960
Fruits and vegetables, dried or evaporated	.....	.....	309,959	.....	270,389
Fruits, preserved	.....	.....	6,980,198	.....	6,726,249
Vinegar, pickles, sauces and relishes	.....	.....	8,710,951	.....	7,004,034
Total production	.....	.....	**30,334,022**	.....	**30,234,632**

[2] Includes canned soups, canned macaroni, mincemeat, jams, etc., evaporated apples, apple butter, peanut butter, and other miscellaneous products.

[3] Includes canned fruits, fruit pulp, peanut butter, vinegar, salad dressing, and other miscellaneous products.

WHOLESALE PRICES—FRUIT AND VEGETABLE PREPARATIONS

APPLES, EVAPORATED

Price per pound at Toronto—Monthly quotations from Canadian Grocer and other sources.

Averages		Averages	
1917	$0·1515	1922	$0·1760
1918	0·1992	1923	0·1275
1919	0·1910	1924	0·1516
1920	0·2060	1925	0·1600
1921	0·1400	1926	0·1500
		1927	0·1283

CANNED CORN, STANDARD 2's

Price per dozen at Toronto—Monthly quotations from Canadian Grocer and dealers

Averages		Averages	
1917	$2·048	1922	$1·350
1918	2·496	1923	1·377
1919	2·152	1924	1·651
1920	1·836	1925	1·821
1921	1·492	1926	1·838
		1927	1·490

CANNED PEAS, STANDARD 2's

Price per dozen at Toronto—Monthly quotations from Canadian Grocer and dealers

Averages		Averages	
1917	$1·586	1922	$1·644
1918	1·952	1923	1·519
1919	1·827	1924	1·606
1920	2·145	1925	1·654
1921	1·715	1926	1·567
		1927	1·477

CANNED TOMATOES, STANDARD 2½'s

Price per dozen at Toronto—Monthly quotations from Canadian Grocer and dealers.

Averages		Averages	
1917	$2·41	1922	$1·67
1918	2·49	1923	1·59
1919	2·01	1924	2·17
1920	1·91	1925	1·79
1921	1·71	1926	1·52
		1927	1·53

VINEGAR, PROOF SPIRIT

Price per gallon at Toronto—Monthly quotations from manufacturer.

Averages		Averages	
1917	$0·40	1922	$0·39
1918	0·42	1923	0·39
1919	0·45	1924	0·45
1920	0·45	1925	0·45
1921	0·43	1926	0·45
		1927	0·45

Table 114.—Fruit and Vegetable Preparations: Materials Used, 1926 and 1927

—	Unit	Fruits and vegetables, canned		Fruits and vegetables, dried or evaporated		Fruits, preserved		Vinegar, pickles, sauces and relishes		Total materials used by the four sections of the industry	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$		$		$
1926											
Fruits for canning, preserving, etc.	Lb.	35,419,704	1,219,938	24,308,029	91,874	19,848,505	1,410,413	23,444,203	154,126	103,020,441	2,876,351
Vegetables for canning, etc.	"	222,958,514	2,546,678			6,194,731	73,139	45,227,937	532,333	274,381,182	3,152,150
Sugar	"	10,013,782	584,868			26,390,123	1,554,809	2,971,788	189,199	39,375,703	2,328,876
Salt	"	1,197,829	15,036			404,179	4,438	2,637,652	13,246	4,239,660	32,720
Pectin	"	313,212	36,838			1,240,663	133,764			1,553,875	170,602
Glucose	"	49,987	2,357			3,826,306	149,783	350,000	14,175	4,226,293	166,315
Spices, all kinds	"	33,594	6,463			27,532	6,725	93,449	20,836	154,575	34,024
Vinegar	Gallon	6,345	1,985			104,116	28,593	424,613	118,901	535,074	149,479
Alcohol (incl. duty)	Proof Gal.					238	1,282	375,341	242,304	375,579	243,586
Cider	"							78,880	7,319	78,880	7,319
Vinegar materials, n.e.s.									78,640		78,640
Containers, labels, etc.			4,657,978		17,995		950,987		1,316,820		6,943,780
All other materials not specified			310,957		5,349		224,367		490,362		1,031,035
Totals			**9,383,098**		**115,218**		**4,538,300**		**3,178,261**		**17,214,877**
1927											
Fruits for canning, preserving, etc.	Lb.	37,366,979	1,064,181	20,458,047	111,502	18,337,552	1,242,405	19,944,855	188,367	102,107,433	2,606,455
Vegetables for canning, etc.	"	192,226,914	2,123,346			7,782,592	121,509	45,355,855	688,292	245,365,361	2,933,147
Sugar	"	10,025,901	606,768			26,893,294	1,607,665	4,121,704	261,382	41,040,899	2,475,815
Salt	"	1,245,649	15,032			536,045	4,404	1,703,394	13,816	3,485,088	33,252
Pectin	"	232,847	29,080			1,317,433	139,655	6,548	688	1,556,828	169,423
Glucose	"	141,953	5,993			5,981,880	206,749	52,593	2,084	6,176,426	214,826
Spices, all kinds	"	11,358	4,605			27,263	6,620	142,606	41,615	181,227	52,840
Vinegar	Gal.	33,943	6,647			97,492	24,990	401,045	111,677	532,480	143,314
Alcohol (incl. duty)	Proof Gal.					1,171	3,465	482,898	331,153	484,069	334,618
Cider	"							830	513	830	513
Vinegar materials, n.e.s.									100,376		100,376
Containers, labels, etc.			4,137,114		17,783		988,270		1,763,088		6,906,255
All other materials not specified			383,014		3,625		249,364		605,762		1,241,765
Total			**8,375,780**		**132,910**		**4,595,096**		**4,108,813**		**17,212,599**

Materials Used.—The quantity and cost value of the materials used by the fruit and vegetable preparations industries in 1926 and 1927 are given in table 114. In 1927, $2,933,147 was spent for vegetables, $2,606,455 for fruits and $2,475,815 for sugar. It should be noted that in this industry the cost of containers comes exceptionally high; $6,906,255 having been spent in 1927 for containers and labels with only an expenditure of $10,306,344 for raw materials.

Employment.—The seasonal nature of the employment afforded by the fruit and vegetable preparations industries may be seen on referring to table 115 which gives the employment of wage-earners by months during 1926 and 1927.

The canning of fruit and vegetables gives employment to about 5,000 people, mostly in the fall of the year. As may be noted, the annual employment is not obtained by dividing the sum of the monthly employment by 12, but by the addition of the averages of monthly employment in each plant. For example, if a plant operates only during August, September and October and employs 100 wage-earners the first month, 200 the second month and 75 the third month, the average for this plant is 375 divided by 3 or 125, the same as that of another plant that operates throughout the year with an average employment of 125 each month. In 1927, the average number of persons employed between the first of December and the first of July was only 1,027 compared with 4,997 the remaining months of the year; the maximum employment occurring in September when 2,884 male and 4,674 female wage-earners were employed. The proportion of males to females in this industry is about 3 to 5.

Conditions in the dried or evaporated fruit and vegetable industry are similar to that of the canning industry, except that the season is advanced about a month. After being idle all summer the plants begin operations towards the end of August and continue until the first of January, after which date employment declines sharply. In this industry during the first eight months of the year employment is furnished only to packers, shippers, etc., whilst manufacturing operations occupy the other four months.

Employment in the preserved fruit section, however, is of a more permanent nature. Operations are carried on throughout the year with the maximum employment occurring during the summer months. The average number of wage-earners employed during 1927 was 342 males and 477 females whilst from the first of June to the end of October the average employment was 917 compared with 655 the other months of the year.

The vinegar, pickles, sauces and relishes section of the industry is also carried on throughout the year, the summer months being the season of major activity with September the month of highest employment. Unlike the other sections of the industry where the majority of the wage-earners are females, this section employs a majority of male wage-earners, the proportion being about 3 to 2.

The permanency of employment in these industries may be better seen on referring to table 116 which shows the average number of days that establishments operated on full time from 1920 to 1927. The average for the eight years in each section is as follows:—

Fruits and vegetables, canned	144 days
Fruits and vegetables, dried or evaporated	54 days
Fruits, preserved	241 days
Vinegar, pickles, sauces and relishes	191 days

Owing to the fact that a large number of plants operate only in the fall of the year, thereby raising the average annual employment, as explained above, it therefore becomes extremely hazardous to generalize about average wages and employment.

Table 115.—Fruit and Vegetable Preparations: Employment of Wage-earners, by Months, 1926-27

Month	Fruits and vegetables, canned		Fruits and vegetables, dried or evaporated		Fruits, preserved		Vinegar, pickles, sauces and relishes		Total for whole industry		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
1927											
January	503	250	39	35	271	351	382	283	1,195	919	2,114
February	464	151	21	7	283	414	401	260	1,169	832	2,001
March	540	223	34	34	274	347	391	326	1,239	930	2,169
April	653	197	8	1	243	302	431	332	1,335	832	2,167
May	825	419	9	1	259	339	456	319	1,549	1,078	2,627
June	1,035	902	12	1	299	468	472	320	1,818	1,691	3,509
July	2,579	2,670	15	10	383	731	581	382	3,558	3,793	7,351
August	1,994	3,131	17	1	393	499	589	407	2,993	4,038	7,031
September	2,884	4,674	92	93	397	552	981	605	4,354	5,924	10,278
October	2,914	4,443	231	324	367	496	963	513	4,475	5,776	10,251
November	1,343	1,845	265	353	348	488	502	436	2,548	3,122	5,670
December	830	673	221	235	309	408	527	405	1,887	1,721	3,608
Average by individual plants	**1,589**	**3,056**	**224**	**361**	**342**	**477**	**604**	**440**	**2,759**	**4,334**	**7,093**
1926											
January	512	165	26	22	249	251	362	233	1,149	671	1,820
February	527	182	42	57	266	361	338	206	1,173	806	1,979
March	540	165	41	41	258	330	350	251	1,189	790	1,979
April	652	207	42	46	272	313	390	292	1,356	858	2,214
May	817	346	12	5	279	303	389	255	1,497	909	2,406
June	1,065	1,219	.....	.....	372	619	396	315	1,833	2,153	3,986
July	2,625	2,866	.....	.....	526	971	462	324	3,613	4,161	7,774
August	2,538	3,786	15	.....	476	576	524	357	3,553	4,719	8,272
September	3,385	5,172	75	79	447	526	918	447	4,825	6,224	11,049
October	2,802	3,734	245	308	433	502	602	348	4,082	4,892	8,974
November	1,411	1,699	262	369	363	484	484	304	2,520	2,856	5,376
December	832	703	113	130	314	357	405	243	1,664	1,433	3,097
Average by individual plants	**1,736**	**3,116**	**249**	**375**	**393**	**514**	**499**	**343**	**2,877**	**4,348**	**7,225**

Table 116.—Fruit and Vegetable Preparations: Working Time of Plants and Employees 1920-27

Year	Hours worked per day				Hours worked per week				No. of days establishments operated on full time			
	Fruits and vegetables, canned	Fruits and vegetables, dried or evaporated	Fruits, preserved	Vinegar, pickles, sauces and relishes	Fruits and vegetables, canned	Fruits and vegetables, dried or evaporated	Fruits, preserved	Vinegar, pickles, sauces and relishes	Fruits and vegetables, canned	Fruits and vegetables, dried or evaporated	Fruits, preserved	Vinegar, pickles, sauces and relishes
1920	9·8	9·6	8·9	9·1	58·8	57·4	50·2	53·0	155	51	244	295
1921	9·6	10·1	8·7	8·8	56·2	59·3	48·8	50·2	196	58	240	183
1922	9·2	9·3	8·8	8·9	54·9	54·3	49·7	50·7	146	59	248	189
1923	9·8	9·5	8·7	9·0	58·2	56·9	49·4	51·7	123	45	230	195
1924	9·6	9·6	9·3	9·4	56·9	56·2	58·9	48·5	133	48	246	177
1925	9·7	9·6	9·5	9·3	57·7	57·1	49·1	50·1	125	69	247	184
1926	9·6	9·5	9·6	9·9	57·0	57·4	50·0	48·8	134	46	233	191
1927	9·6	9·5	9·2	8·2	56·2	56·5	49·1	46·2	140	55	244	198

Fuel Consumption and Power Installation.—The quantity and value of the different classes of fuel consumed by the fruit and vegetable preparations industries during 1926 and 1927 are given in table 117 while the power installation by classes for the same period is shown in table 118.

Imports and Exports.—The imports of fruit and vegetable preparations into Canada in 1927 amounted to $5,173,730. Canned fruits valued at $2,250,727 was the most important item, followed by canned vegetables, $1,446,508, pickles, sauces, vinegar, etc., $749,412, dried fruits and vegetables $388,779, and jams and jellies $338,304. Of the canned fruits and vegetables imported, $1,520,169 and $842,307 respectively came from the United States, whilst the greater part of the jams, jellies, pickles and sauces came from the United Kingdom.

Of the exports amounting to $2,264,803 in 1927, $941,653 was represented by canned vegetables, $731,156 by pickles, sauces, vinegar, etc., $419,149, by canned fruits, $155,660, by dried fruits and $17,046 by jams and jellies. Also $362,537 of the canned fruits, $860,567 of the canned vegetables and practically all of the pickles exported went to the United Kingdom. In contrast with the imports which showed an increase of $455,188, exports in 1927 were lower by $335 948.

Table 117.—Fruit and Vegetable Preparations: Fuel Consumption, by Classes, 1926 and 1927

Class of fuel	Unit of measure	Fruits and vegetables, canned		Fruits and vegetables, dried or evaporated		Fruits, preserved		Vinegar, pickles, sauces and relishes		Total for the whole industry	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1926			$		$		$		$		$
Bituminous coal	Ton	24,480	148,964	199	1,833	7,990	53,443	14,520	85,365	47,189	289,605
Anthracite coal	"	615	6,141	236	3,550	80	839	105	1,754	1,036	12,284
Coke	"	47	667	1,542	15,932	213	871	6	91	1,808	17,561
Gasoline	Gallon	3,167	995	1,405	493	6,034	1,651	3,764	1,054	14,370	4,193
Fuel oil	"	117,800	5,899	.....	.....	7,108	1,040	3,772	458	128,680	7,397
Wood	Cord	1,723	8,927	140	670	1,152	5,657	1,732	13,419	4,747	28,673
Gas	M cu. ft.	958	564	309	196	4,909	4,761	2,370	936	8,606	6,457
All other fuel	.....	.....	13,446	.....	2,156	.....	.....	.....	223	.....	15,825
Total cost of fuel	.....	.....	**185,603**	.....	**24,830**	.....	**68,262**	.....	**103,300**	.....	**381,995**
Cost of electricity	.....	.....	32,400	.....	1,436	.....	11,958	.....	10,849	.....	56,643
1927											
Bituminous coal	Ton	19,684	130,183	357	2,376	7,980	54,579	15,294	92,112	43,315	279,250
Anthracite coal	"	429	4,893	664	8,427	237	1,659	276	2,877	1,606	17,856
Coke	"	48	649	1,537	14,062	80	564	18	248	1,683	15,523
Gasoline	Gallon	1,961	532	1,422	395	3,464	778	1,304	344	8,151	2,049
Fuel oil	"	140,100	6,012	.....	.....	.....	.....	3,881	424	143,981	6,436
Wood	Cord	849	4,814	181	1,223	1,200	5,600	817	5,934	3,047	17,571
Gas	M cu. ft.	2,093	1,569	29	18	3,814	3,887	2,624	1,575	8,560	7,049
All other fuel	.....	.....	8,336	.....	1,388	.....	250	.....	.....	.....	9,974
Total cost of fuel	.....	.....	**158,988**	.....	**27,889**	.....	**67,317**	.....	**103,514**	.....	**355,708**
Cost of electricity	.....	.....	41,508	.....	2,856	.....	11,710	.....	11,414	.....	67,548

Table 118.—Fruit and Vegetable Preparations: Power Installation, by Classes, 1926 and 1927

Class of power	Fruits and vegetables, canned		Fruits and vegetables, dried or evaporated		Fruits, preserved		Vinegar, pickles, sauces and relishes		Total for the whole industry	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
1926										
Steam engines and turbines	150	5,512	2	68	17	729	18	897	187	7,206
Oil, gas and gasoline engines	41	757	15	92	2	22	11	49	69	920
Hydraulic turbines or water wheels	.....	.....	1	15	.....	.....	3	94	4	109
Electric motors operated by purchased power	357	3,090	25	135	114	784	200	603	696	4,612
Total power installation for manufacturing purposes	548	9,359	43	310	133	1,535	232	1,643	956	12,847
Electric motors operated by power generated by the establishment	50	335	.....	.....	.....	.....	204	758	254	1,143
Boiler installation	176	15,530	6	371	31	1,941	38	4,011	251	21,853
1927										
Steam engines and turbines	136	5,167	2	68	13	426	16	845	167	6,506
Oil gas and gasoline engines	34	561	15	91	1	20	21	58	71	730
Hydraulic turbines or water wheels	.....	.....	1	15	.....	.....	3	94	4	109
Electric motors operated by purchased power	356	3,136	23	162	117	757	213	912	709	4,967
Total power installation for manufacturing purposes	526	8,864	41	336	131	1,203	253	1,909	951	12,312
Electric motors operated by power generated by the establishment	46	400	.....	.....	2	180	213	800	261	1,380
Boiler installation	191	16,762	6	371	37	2,141	42	4,789	276	24,063

Table 119.—Imports and Exports of Fruit and Vegetable Preparations, 1926 and 1927

—	Imports				Exports			
	1927		1926		1927		1926	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	lb.	$	lb.	$	lb.	$	lb.	$
Canned Fruits and Vegetables								
Peaches in cans or other air tight packages—								
United States	6,444,337	487,565	4,378,939	374,864	...	...	...	...
Other countries	114,607	9,436	481,460	39,130	...	...	...	...
Pineapples in cans or other air tight packages—								
United Kingdom	57,741	4,128	109,800	5,712	...	...	...	...
United States	4,287,168	388,467	4,221,205	372,794	...	...	...	...
British South Africa	1,370,515	108,019	233,275	15,227	...	...	...	...
Straits Settlements	5,957,421	324,078	7,684,040	381,162	...	...	...	...
Hawaii	1,866,696	169,570	1,327,087	124,021	...	...	...	...
Other countries	81,207	7,025	90,855	7,077	...	...	...	...
Fruits in cans or other air tight packages, n.o.p.—								
United Kingdom	20,270	2,634	112,060	8,459	4,769,919	362,537	...	675,036
United States	5,706,837	644,137	4,889,094	556,940	195,384	15,157	...	185,145
Australia	45,613	5,992	109,399	9,286	...	...	...	...
France	93,272	12,966	71,069	11,368	...	...	...	...
Netherlands	459,783	52,428	600,008	68,536	...	...	...	...
New Zealand	...	...	...	...	278,292	25,022	...	25,589
Spain	349,992	17,949	305,056	15,038	...	...	...	...
Other countries	106,687	16,333	103,756	17,307	169,292	16,433	...	60,891
Total Canned Fruits	26,961,546	2,250,727	24,717,103	2,006,921	5,412,887	419,149	...	946,661[2]
Beans, baked, in cans—								
United Kingdom	18	2	...	...	10,986,168	802,061	5,000,658	360,606
United States	1,216,130	73,380	2,064,831	125,913	514	60	340	54
Other countries	...	...	154	10	227,865	12,302	210,304	10,979
Corn in cans, etc.—								
United States	2,542,764	151,231	1,476,989	100,294	...	...	...	...
Other countries	...	...	30	9	...	...	...	...
Peas in cans, etc.—								
United Kingdom	7,904	671	...	...	...	...	...	...
United States	1,762,768	135,440	1,053,900	81,834	...	...	...	...
Belgium	2,066,722	148,559	1,882,314	130,156	...	...	...	...
Other countries	544,103	52,720	161,896	14,507	...	...	...	...
Tomatoes in cans, etc.—								
United Kingdom	240	30	...	...	92,055	5,162	69,550	3,510
United States	371,958	18,165	231,311	15,371	28,280	1,869	480	30
Italy	1,062,826	79,275	789,300	60,997	...	...	...	...
Other countries	60,494	4,508	15,552	1,327	126,295	7,894	155,142	9,704
Vegetables, n.o.p., in cans, etc.—								
United Kingdom	15,855	1,966	2,385	374	634,129	53,344	2,210,448	164,003
United States	4,606,173	459,091	3,408,288	340,538	700	120	9,216	841
Australia	...	...	...	...	...	...	...	...
Belgium	468,163	32,782	260,682	18,057	...	...	...	...
British South Africa	...	...	...	...	193,873	16,733	176,883	15,074
France	856,106	133,104	579,384	94,951	...	...	...	...
Hong Kong	341,080	34,499	286,554	32,666	...	...	...	...
Italy	242,260	20,574	173,570	18,524	...	...	...	...
Japan	163,880	52,536	184,675	49,432	...	...	...	...
Netherlands	45,309	4,892	366,648	42,994	...	...	...	...
New Zealand	...	...	...	...	228,265	20,170	380,234	30,043
Spain	366,833	35,757	285,390	27,766	...	...	...	...
Other countries	57,112	7,326	176,364	17,682	241,889	21,938	380,584	29,858
Total Canned Vegetables	16,798,698	1,446,508	13,400,217	1,173,402	12,760,033	941,653	8,593,839	624,702
Dried and Evaporated Fruits and Vegetables								
Apples, dried—								
United Kingdom	...	...	...	...	80,775	8,655	599,570	58,078
United States	970,424	25,320	1,510,353	40,825	...	...	43	3
Germany	...	...	...	...	787,585	82,270	1,056,565	99,439
Netherlands	...	...	...	...	380,280	36,885	930,623	91,136
Other countries	...	...	...	...	175,086	17,087	180,535	18,923
Apricots, dried—								
United States	776,840	121,833	780,577	152,639	...	...	...	...
Other countries	28,280	5,532	6,199	1,590	...	...	...	...
Peaches, dried—								
United States	1,498,525	141,721	1,575,716	216,351	...	...	...	...
Other countries	280	53	...	...	...	...	...	...
All other fruits, dried[1]—								
United Kingdom	40,946	3,368	8,629	803	...	...	...	...
United States	373,463	68,822	553,316	96,675	60,750	10,707	9,900	2,361
Hong Kong	68,492	12,982	80,741	14,417	...	...	...	...
Other countries	32,843	3,362	32,907	6,144	350	56	801	121
Total Dried Fruits	3,790,093	382,993	4,548,438	529,444	1,484,826	155,660	2,778,097	270,061

Table 119.—Imports and Exports of Fruit and Vegetable Preparations, 1926 and 1927—Concluded

—	Imports				Exports			
	1927		1926		1927		1926	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Dried and Evaporated Fruits and Vegetables—Concluded	lb.	$	lb.	$	lb.	$	lb.	$
Potatoes, dried, desiccated, etc.—								
United Kingdom	.....	51	.....	44	.....	.....	.....	.....
United States	.....	3,502	.....	11,363	.....	.....	.....	.....
Other countries	.....	2,233	.....	77	.....	.....	.....	.....
Vegetables, dried—								
United States	.....	.....	.....	.....	.....	60	100	30
Other countries	.....	.....	.....	.....	.....	79	.....	.....
Total Dried Vegetables	.....	5,786	.....	11,484	.....	139	100	30
Jams, Jellies and Preserved Fruits								
Jams, jellies and preserves, n.o.p.—								
United Kingdom	1,461,558	186,094	1,543,153	197,748	520	55	180	33
United States	109,386	20,658	59,862	14,017	28,176	3,940	78,232	11,200
France	345,447	69,380	316,806	80,219	.....	.....	.....	.....
Other countries	361,848	62,172	281,999	37,254	128,278	13,051	18,995	2,214
Fruits preserved in brandy—								
United States	.....	.....	1	12	.....	.....	.....	.....
Total	2,278,239	338,304	2,201,821	329,250	156,974	17,046	97,407	13,447
Pickles, Sauces, Vinegar, Etc.	Gal.		Gal.		Gal.		Gal.	
Pickles in bottles, jars, etc.—								
United Kingdom	63,702	115,595	58,187	94,207	.....	649,086	.....	677,344
United States	15,690	24,429	5,406	11,832	.....	32,783	.....	19,875
Newfoundland	.....	.....	.....	.....	.....	21,183	.....	18,060
Other countries	5,296	7,450	7,071	10,008	.....	4,293	.....	.....
Pickles in bulk—								
United Kingdom	2,586	3,174	369	521	.....	.....	.....	.....
United States	5,428	5,797	2,388	1,548	.....	.....	.....	.....
Japan	22,519	14,934	20,150	10,152	.....	.....	.....	.....
Other countries	1,422	1,333	2,747	1,815	.....	.....	.....	3,925
Total Pickles	116,643	172,712	96,318	130,083	.....	707,347	.....	719,204
Sauces and catsup in bottles—								
United Kingdom	122,980	235,024	114,153	215,210	.....	.....	.....	.....
United States	87,606	162,616	79,350	151,438	.....	.....	.....	.....
Other countries	7,393	9,348	8,681	11,903	.....	.....	.....	.....
Sauces and catsup in bulk—								
United Kingdom	1,788	1,130	120	201	.....	.....	.....	.....
United States	22,076	17,341	10,875	10,410	.....	.....	.....	.....
Other countries	14,485	8,957	9,029	4,435	.....	.....	.....	.....
Sauces, soy—								
United States	6,405	2,048	123	107	.....	.....	.....	.....
Japan	65,921	27,847	60,879	27,060	.....	.....	.....	.....
Other countries	31,011	12,245	36,470	16,718	.....	.....	.....	.....
Total Sauces and Catsup	359,665	476,556	319,686	437,473	.....	.....	.....	.....
Vinegar, any strength not above proof—								
United Kingdom	105,793	37,887	91,606	40,392	1,676	480	1,057	370
United States	73,965	50,467	62,061	50,433	39,376	16,967	.....	.....
Japan	.....	.....	.....	.....	.....	.....	35,774	15,889
Other countries	11,745	7,900	8,862	5,040	1,500	695	.....	.....
Vinegar, above proof strength—								
United Kingdom	64	32	24	50	.....	.....	.....	.....
United States	23,039	3,610	26,466	4,317	.....	.....	674	298
Other countries	47	17	.....	.....	.....	.....	.....	.....
Total Vinegar	214,653	99,913	189,022	100,232	42,552	18,142	37,505	16,557
Cider—								
United Kingdom	30	111	.....	.....	218	150	14,052	9,982
United States	152	100	321	248	8,100	4,769	.....	.....
Other countries	28	20	8	5	1,017	748	260	107
Total Cider	210	231	329	253	9,395	5,667	14,312	10,089
Total Pickles, Sauces, Vinegar, etc.	.....	749,412	.....	668,041	.....	731,156	.....	745,850
Recapitulation								
Canned fruits and vegetables	.....	3,697,235	.....	3,180,323	.....	1,360,802	.....	1,571,363
Dried and evaporated fruits and vegetables	.....	388,779	.....	540,928	.....	155,799	.....	270,091
Jam, jellies and preserved fruits	.....	338,304	.....	329,250	.....	17,046	.....	13,447
Pickles, sauces, vinegar, etc.	.....	749,412	.....	668,041	.....	731,156	.....	745,850
Grand Total	.....	5,173,730	.....	4,718,542	.....	2,264,803	.....	2,600,751

[1]Excluding such products as currants, dates, figs, prunes, etc., which do not properly enter into the Canadian fruit and and vegetable preparations industry.

[2]Includes fruit juices and fruit syrups.

CHAPTER V

COFFEE, COCOA AND SPICE

COCOA AND CHOCOLATE INDUSTRY[1]

In 1927 there were four establishments engaged in the production of cocoa and chocolate, two of them located in Quebec and two in Ontario. Until recently there was also one establishment in Nova Scotia, producing cocoa and chocolate, but this was closed in 1926.

From 1917 to 1919 this industry expanded rapidly; capital increased from $3,094,648 to $5,201,523, number of employees from 1,277 to 1,468, value of production from $5,270,316 to $9,718,185 and value added by manufacture from $2,398,098 to $4,015,376. Conditions in 1920 were almost as good as in the peak year 1919. The general depression of 1921, however, seriously affected this industry. Four establishments went out of business, and compared with the previous year, the capital invested declined by $1,736,500, the number of employees dropped from 1,400 to 550, value of production from $8,908,277 to $3,561,838 and the value added by manufacture from $3,267,684 to $1,238,322. Although the industry recovered somewhat from the depression, yet for the ten years under review a considerable decline took place, for with the exception of capital invested which shows an increase, the number of employees, value of production and value added by manufacture, all show marked decreases.

It should be noted that the statistics published in the present report include only the statistics of such manufacturing establishments as make cocoa and chocolate as their principal products. Statistics relating to specific products are therefore not to be regarded as comprehensive, since products like "chocolate," "confectionery of all kinds," "icing," etc., are also found as secondary products of other industries such as "Biscuits and Confectionery," "Coffee and Spices," etc.

The principal statistics for the cocoa and chocolate industry from 1917 to 1927 are given in table 120 for the Dominion as a whole. Statistics by provinces cannot be published as they would disclose the operations of individual establishments.

Table 120.—Cocoa and Chocolate Industry: Principal Statistics, 1917-27

Year	Total number of employees	Total salaries and wages	Employees on Salaries			Employees on Wages		
			Male	Female	Salaries	Male	Female	Wages
	No.	$	No.	No.	$	No.	No.	$
1917	12	3,094,648	117	49	205,926	449	662	397,291
1918	9	3,694,339	91	34	218,456	450	591	523,662
1919	10	5,201,523	106	40	230,136	614	708	925,595
1920	9	5,553,571	133	45	304,568	561	661	941,125
1921	5	3,817,071	64	22	175,412	250	214	420,663
1922	5	4,245,916	68	21	167,940	295	246	465,850
1923	5	3,986,501	74	17	174,936	290	259	446,372
1924	5	4,136,225	120	20	255,659	281	249	398,596
1925	5	4,518,332	106	20	249,034	258	225	414,829
1926	4	3,866,497	106	22	250,079	246	209	395,658
1927	4	5,319,652	123	32	336,221	249	271	424,371

Year	Establishments	Capital	Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
	No.	$	$	h.p.	$	$	$
1917	1277	603,217	80,771	1,783	2,872,218	5,270,316	2,398,098
1918	1166	742,118	69,438	2,530	3,835,479	6,306,379	2,470,900
1919	1468	1,155,731	60,672	3,635	5,702,809	9,718,185	4,015,376
1920	1400	1,245,693	77,718	3,503	5,640,593	8,908,277	3,267,684
1921	550	598,075	39,779	2,478	2,323,516	3,561,838	1,238,322
1922	630	633,790	47,278	1,458	2,411,663	3,982,145	1,570,482
1923	640	621,308	43,255	1,546	2,470,598	4,042,106	1,571,508
1924	670	654,255	36,074	2,805	2,329,025	3,839,963	1,510,938
1925	669	663,863	34,962	2,750	2,423,240	3,874,910	1,451,679
1926	583	645,737	32,801	2,597	2,364,882	3,906,087	1,541,205
1927	675	760,592	34,669	3,132	2,931,913	4,757,969	1,826,056

[1]Commencing with 1928, it is the intention of the Bureau to include this industry with that of "Biscuits, Confectionery and Chewing Gum."

Table 120(a).—Cocoa and Chocolate Industry: Capital Invested, 1923-27

Year	Fixed capital	Working capital		Total capital
		Materials and stocks on hand, etc.	Cash, trading and operating accounts, etc.	
	$	$	$	$
1923	2,872,119	779,549	334,833	3,986,501
1924	2,949,414	839,131	347,680	4,136,225
1925	3,057,780	1,011,803	448,749	4,518,332
1926	2,119,241	604,174	1,143,082	3,866,497
1927	2,936,187	1,427,818	955,647	5,319,652

Production.—The quantity and selling value at the factory of the various products produced by the cocoa and chocolate industry during 1926 and 1927, are shown in table 121. Chocolate, valued at $1,828,888 in 1927 was the most important product, followed in order by chocolate confectionery $1,583,903, cocoa $877,947 and cocoa butter $464,799. The total production for the year had a selling value of $4,757,969, an increase of $851,882 over that of 1926.

Table 121.—Cocoa and Chocolate Industry: Production, 1926-27

Products	Unit	1926		1927	
		Quantity	Selling value at factory	Quantity	Selling value at factory
			$		$
Cocoa	Lb.	2,201,415	634,093	2,536,123	877,947
Cocoa butter	"	922,324	294,310	1,205,718	464,799
Chocolate	"	8,853,725	1,845,530	7,893,559	1,828,888
Chocolate confectionery	"	3,691,871	1,132,154	4,305,687	1,583,903
Other products	"	.....	.....	12,798	2,432
Total value	.....	.....	**3,906,087**	.....	**4,757,969**

WHOLESALE PRICES OF COCOA AND CHOCOLATE

GREEN COCOA BEANS, "ESTATES, TRINIDAD"

Price per pound at New York—Monthly quotations from The Cowan Co., Ltd., Toronto.

Monthly averages		Monthly averages	
1917	$0·1308	1922	$0·1150
1918	0·1419	1923	0·0946
1919	0·2090	1924	0·1171
1920	0·1760	1925	0·1450
1921	0·0910	1926	0·1446
		1927	0·1670

GREEN COCOA BEANS, "CEYLON"

Price per pound at New York—Monthly quotations from The Cowan Co., Ltd., Toronto.

Monthly averages		Monthly averages	
1917	$0·2500	1922	$0·2110
1918	0·2877	1923	0·1908
1919	0·3540	1924	0·2000
1920	0·3560	1925	0·2442
1921	0·2310	1926	0·2233
		1927	0·2270

WHOLESALE PRICES OF COCOA AND CHOCOLATE—*Concluded*

UNSWEETENED CHOCOLATE, 10 POUND CAKE

Price per pound—Monthly quotations from The Cowan Co., Ltd., Toronto.

Monthly averages		Monthly averages	
1917	$0·270	1922	$0·247
1918	0·260	1923	0·245
1919	0·329	1924	0·240
1920	0·458	1925	0·260
1921	0·273	1926	0·276
		1927	0·328

Materials Used.—The quantity and cost value delivered at the factory, including freight and duty, of the materials used by the industry during 1926 and 1927 are shown in table 122. The total cost in 1927 amounted to $2,931,913, an increase of $567,031 over the preceding year

Table 122.—Cocoa and Chocolate Industry: .Materials Used, 1926-27

Kind of materials	Unit	1927		1926	
		Quantity	Cost value at works	Quantity	Cost value at works
			$		$
Cocoa beans	Pound	9,211,605	1,349,618	8,630,714	1,005,730
Cocoa butter	"	2,078,333	590,068	1,898,346	485,509
Vanilla beans	"	887	2,836	751	3,053
Sugar	"	5,773,252	367,005	5,702,620	330,471
Milk powder	"	694,631	125,025	602,442	106,339
Glucose	"	241,325	9,529	239,758	9,197
Nuts, all kinds	"	232,725	58,803	216,564	53,788
Flour	"	483	23	337	16
Spice materials, all kinds	"	42,122	6,760	81,583	6,614
Essences, essential oils, etc	Gallon	3,609	25,932	2,153	20,325
All other materials (value only)	.....	.....	26,305	.....	23,351
Containers, labels, etc. (value only)	.....	.....	370,009	.....	320,489
Total cost of materials and containers	.....	.....	**2,931,913**	.....	**2,364,882**

Employment and Salaries and Wages Paid.—Employment furnished by the cocoa and chocolate industry is quite steady throughout the year. For the first eight months employment fluctuates but little while during the last four months it is appreciably increased; the average for the first eight months in 1927 being 461 compared with 638 for the remaining four months. Also 52 p.c. of the wage-earners employed are females.

The average wage paid in 1917 was $358—a figure, much below the average paid in other industries. From 1919, however, wages have been increased more in keeping with that prevailing in other industries of the vegetable products group that employ a large proportion of female wage-earners; the average wage in 1927 being $816. Salaried employees have also fared well, average salaries having been increased from $1,241 in 1917 to $2,169 in 1927, an increase of 74·8 p.c., while the cost of living has only increased 16·0 p.c. for the same period.

It is interesting to note that although wages have increased, the number of hours worked per day and per week decreased from 9·3 and 52·6 to 8·8 and 49·0 hours respectively.

Table 123.—Cocoa and Chocolate Industry: Monthly Employment of Wage-earners, 1926-27

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	206	222	428	249	182	431
February	242	214	456	249	193	442
March	246	197	443	242	174	416
April	245	228	473	237	179	416
May	241	227	468	236	196	432
June	241	228	469	230	193	423
July	226	219	445	233	223	456
August	236	270	506	231	223	454
September	259	328	587	253	242	495
October	292	379	671	266	255	521
November	288	401	689	269	252	521
December	269	337	606	252	198	450
Average	**249**	**271**	**520**	**246**	**209**	**455**

Table 124.—Cocoa and Chocolate Industry: Hours of Work and Salaries, and Wages paid, 1917-27

Year	Hours worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
				$	$
1917	9·3	52·6	269	1,241	358
1918	9·4	53·4	296	1,748	503
1919	8·6	48·6	272	1,576	700
1920	8·9	49·8	293	1,711	770
1921	9·0	50·2	260	2,039	907
1922	9·0	50·4	253	1,887	861
1923	9·0	50·4	245	1,922	813
1924	9·0	49·6	246	1,826	752
1925	8·9	52·0	224	1,977	859
1926	8·8	48·3	277	1,954	870
1927	8·8	49·0	287	2,169	816

Power Installation and Fuel Consumption.—The power installed and the fuel used by the cocoa and chocolate industry during 1926 and 1927 are shown in tables 125 and 126.

Table 125.—Cocoa and Chocolate Industry: Power Installation, 1926-27

Description	1927		1926	
	Number of units	Horse power	Number of units	Horse power
Steam engines and turbines	4	110	4	110
Electric motors operated by purchased power	197	3,022	158	2,487
Total power used for manufacturing	**201**	**3,132**	**162**	**2,597**
Boilers installed	7	900	6	425

Table 126.—Cocoa and Chocolate Industry: Fuel Consumption, 1926-27

—	Unit of measure	1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Bituminous coal	Short ton	4,920	30,783	4,965	29,729
Anthracite coal	"	.....	.....	.....	.....
Gas	M cu. ft.	3,862	3,886	3,128	3,072
Total cost of fuel	.....	.....	**34,669**	.....	**32,801**
Cost of electricity	.....	.....	37,548	.....	34,853

Imports and Exports.—The quantity and value of raw and partly and fully manufactured articles relating to this industry imported for consumption in Canada during the calendar years 1926 and 1927 are shown by countries in table 127.

There are no exports of cocoa or chocolate in any form reported in the trade returns for the Dominion.

Table 127.—Imports of Cocoa and Chocolate Preparations, 1926-27

Articles by countries	Unit	1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Cocoa beans, not roasted, crushed or ground—					
United Kingdom	Cwt.	39,335	638,003	36,925	419,923
United States	"	36,770	612,815	32,001	417,827
Ceylon	"	5,846	85,559	4,862	60,701
British West Africa	"	22,672	351,008	54,966	536,142
Jamaica	"	11,870	169,530	6,189	58,758
Trinidad and Tobago	"	18,601	298,151	13,080	170,271
Other British West Indies	"	14,222	213,724	3,562	36,264
Other countries	"	1,605	28,969	1,570	26,431
Total	"	150,921	2,397,759	153,155	1,726,317
Cocoa butter—					
United Kingdom	Lb.	587,985	205,001	165,653	55,565
United States	"	360,276	135,572	915,922	277,592
Germany	"	405,545	141,341	10,634	2,898
Netherlands	"	3,925,191	1,362,811	4,251,909	1,084,023
Other countries	"	.....	.....	55	17
Total	"	5,278,997	1,844,725	5,344,173	1,420,095
Cocoa paste or liquor, chocolate paste or liquor, not sweetened, in blocks or cakes—					
United Kingdom	Lb.	.....	.....	2,146	204
United States	"	68,354	16,854	37,650	8,430
Other countries	"	2,666	657	3,120	781
Total	"	71,020	17,511	42,916	9,415
Cocoa and chocolate paste or liquor, sweetened, in blocks or cakes, not less than two pounds in weight—					
United Kingdom	Lb.	.....	.....	784	251
United States	"	72,452	20,333	55,697	14,816
Switzerland	"	500	142	24,100	8,663
Other countries	"	14,196	3,733	9,224	2,603
Total	"	87,148	24,208	89,805	26,333
Cocoa or chocolate, preparations of, in powdered form—					
United Kingdom	Lb.	117,468	22,156	213,129	36,361
United States	"	931,818	73,946	933,121	55,770
Netherlands	"	115,798	20,204	137,894	20,322
Other countries	"	3,584	628	21,396	2,027
Total	"	1,168,668	116,934	1,305,540	114,480
Cocoa or chocolate, preparations of, n.o.p.—					
United Kingdom	Lb.	3,083	1,286	40,766	14,861
United States	"	58,546	8,313	107,191	14,351
Other countries	"	25,570	6,654	9,053	2,755
Total	"	87,199	16,253	157,010	31,967
Total Cocoa and Chocolate	.....	.....	**4,417,390**	.....	**3,328,607**

THE COFFEE AND SPICE INDUSTRY

The growth of the industry producing coffee and spices as its principal commodities is shown in table 128 which gives the principal statistics from 1917 to 1927. By a study of this table it is found that in spite of the set-backs received in 1918 and 1921, the industry made satisfactory progress during the eleven years under review. The 49 establishments that composed the industry in 1917 employed a capital of $6,621,831, gave employment to 1,088 persons and produced goods that had a selling value of $9,840,159. The following year a depression set in, with the result that 12 establishments were closed; the capital invested declined by $1,006,965, the number of persons employed was reduced by 237 and production dropped $1,322,578. Before fully recovering from the slump of 1918, the depression of 1921 which was general throughout the country also affected this industry to some extent, although not as severely as some of the other industries of the vegetable products group. Recovery, however, was very rapid. By 1922, new records for number of establishments, capital invested, employment, production and value added by manufacture, were established. According to all standards, 1922 was the best year of the period 1917-27; 51 establishments operated that year, the capital invested stood at $8,032,569, number of employees at 1,116, value of production at $14,868,283 and the value added by manufacture at $4,362,171. From 1922, however, very little progress was made, production, number of employees and capital invested fluctuating within narrow limits.

In 1927 there were 61 establishments engaged in the production of coffee and spices, situated as follows: Ontario 23, Quebec 11, British Columbia 10, Manitoba 8, New Brunswick 5, Alberta 2 and Nova Scotia 2. The capital invested amounted to $13,593,564, 1,604 persons were given employment and the goods produced had a selling value of $26,288,506.

The large increase in the number of establishments, value of production, capital invested and number of employees in 1927 is due to the inclusion under this classification of firms engaged in blending and packing of tea. As may be seen on referring to table 129, the production of blended and packed tea was valued at $14,123,783 in 1927 as compared with $4,867,338 the previous year. The production of tea reported to the Bureau previous to 1927 was produced only by firms engaged in the production of coffee and spices.

From the nature of the industry, its operations must of necessity be confined to sea-ports or the centres of large population, since by far the greater part of its raw materials must be imported from abroad. The industry is therefore confined to the ports of Halifax, St. John, Quebec, Montreal, Vancouver and the larger cities of Ontario, Manitoba and Alberta.

Table 128.—Coffee and Spice Industry: Principal Statistics, 1917-27

—	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
1917	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
Canada	49	6,621,831	179	56	440,804	480	373	620,362	48,705	1,691	6,746,909	9,840,159	3,093,250
New Brunswick	2	65,845	4	–	4,800	14	18	16,900	1,442	28	84,301	133,243	48,942
Quebec	10	906,593	35	4	56,707	81	39	106,626	5,716	185	1,224,790	1,723,901	499,111
Ontario	21	2,797,557	69	36	175,674	216	134	238,758	33,205	1,069	2,840,023	4,310,760	1,470,737
Manitoba	6	2,124,564	48	8	153,833	114	133	187,327	3,909	184	1,921,441	2,600,286	678,842
British Columbia	5	648,556	19	7	41,390	44	40	56,695	3,505	151	541,082	845,676	304,594
Other provinces	4	78,716	4	1	8,400	11	9	14,000	926	74	135,269	226,293	91,024
1918													
Canada	37	5,614,866	203	56	340,421	342	250	384,955	30,289	1,401	6,258,527	8,517,581	2,259,054
Quebec	8	826,954	36	8	75,099	42	21	47,474	9,795	246	1,273,026	1,715,806	442,780
Ontario	14	1,945,636	96	29	122,071	113	99	141,384	10,811	580	1,981,065	2,928,126	947,061
Manitoba	4	1,650,769	28	9	72,125	48	47	57,949	1,814	276	1,830,928	2,219,686	388,758
British Columbia	6	1,008,324	35	9	57,738	132	68	121,863	6,506	153	945,699	1,350,542	404,843
Other Provinces	5	183,189	8	1	13,388	7	15	16,285	1,363	146	227,809	303,421	75,612
1919													
Canada	39	6,112,630	196	66	510,813	293	236	405,921	27,517	1,748	8,113,554	10,892,892	2,779,338
Quebec	8	1,470,546	36	7	83,377	67	31	77,551	9,981	239	1,956,849	2,551,719	594,870
Ontario	15	2,241,772	85	31	211,760	127	117	183,092	10,946	876	2,247,462	3,325,914	1,078,452
Manitoba	5	1,489,687	38	13	141,016	56	33	74,140	2,807	329	2,445,903	2,976,968	531,065
British Columbia	6	631,867	22	9	40,710	29	37	54,642	2,675	151	1,003,780	1,505,043	441,263
Other Provinces	5	278,758	15	6	33,920	14	18	16,496	1,108	153	399,566	533,248	133,688
1920													
Canada	42	7,071,006	230	67	624,226	329	303	512,333	38,353	2,066	9,195,092	12,180,811	2,985,719
New Brunswick	3	281,934	10	2	18,013	17	40	32,943	3,109	82	142,882	263,315	120,433
Quebec	9	1,311,263	53	11	117,620	68	33	81,677	8,905	246	2,015,290	2,636,758	621,468
Ontario	15	2,264,608	90	31	233,900	131	103	197,589	15,983	1,048	2,554,700	3,537,537	982,837
Manitoba	6	2,519,266	50	12	198,381	70	66	120,375	5,998	420	2,675,762	3,432,400	756,638
British Columbia	6	500,596	16	8	32,162	35	40	63,413	3,018	170	1,519,849	1,898,407	387,558
Other Provinces	3	205,345	11	3	24,150	8	21	16,345	1,360	100	295,609	412,394	116,785
1921													
Canada	40	5,970,434	239	59	662,303	288	211	427,595	40,527	2,041	7,569,914	10,426,464	2,856,550
New Brunswick	3	113,670	2	2	8,493	13	22	23,309	2,755	177	209,970	290,769	80,799
Quebec	8	1,401,982	61	9	151,480	59	29	81,381	14,995	228	1,529,378	2,416,568	887,190
Ontario	16	2,502,456	93	27	255,696	133	93	178,872	14,458	1,170	2,374,985	3,283,159	908,174
Manitoba	5	1,555,718	52	13	179,600	54	38	93,654	3,719	244	2,679,627	2,612,623	532,996
British Columbia	4	236,217	17	4	37,382	18	23	35,714	2,583	97	997,973	1,305,330	307,357
Other provinces	4	140,391	14	4	29,652	11	6	14,665	2,017	125	377,981	518,015	140,034

1922													
Canada	51	8,032,569	331	93	867,810	370	322	583,949	48,816	2,323	10,506,112	14,868,283	4,362,171
New Brunswick	4	1,292,590	56	18	130,980	30	43	51,855	8,240	116	1,153,431	1,652,779	499,348
Quebec	11	1,510,371	65	11	137,897	71	36	89,388	12,395	274	1,642,603	2,485,608	843,005
Ontario	20	3,125,634	131	42	370,225	171	129	248,048	18,340	1,375	3,292,343	4,644,202	1,351,859
Manitoba	7	1,644,957	46	11	159,543	63	53	112,022	5,709	336	2,656,865	3,322,094	665,289
British Columbia	5	327,064	18	5	38,953	28	44	68,821	2,756	82	1,502,793	2,362,331	859,538
Other provinces	4	131,953	15	6	30,212	7	17	13,815	1,400	140	258,137	401,269	143,132
1923													
Canada	51	7,964,532	331	95	850,117	370	320	573,266	41,939	2,218	10,007,845	14,177,068	4,169,223
New Brunswick	5	1,250,758	53	20	137,641	39	47	64,305	6,430	144	1,485,111	2,093,566	608,455
Quebec	11	1,530,898	73	17	154,840	65	34	84,716	8,590	274	1,698,343	2,324,764	626,421
Ontario	17	2,766,384	132	39	349,725	166	124	237,644	17,241	1,301	2,895,559	4,298,124	1,401,565
Manitoba	6	1,788,534	34	9	136,532	55	47	86,803	4,342	247	2,143,795	2,676,534	532,739
British Columbia	7	486,036	22	4	37,659	36	61	82,607	3,547	127	1,496,739	2,367,295	870,556
Other provinces	5	141,922	17	6	33,720	9	17	17,191	1,819	125	287,298	416,785	129,487
1924													
Canada	52	9,030,658	314	85	843,998	363	328	596,961	37,519	2,344	11,462,773	15,285,645	3,822,872
New Brunswick	5	1,422,290	71	18	161,650	33	51	67,674	2,285	159	1,771,577	2,298,271	526,694
Quebec	11	1,716,737	63	12	136,992	70	40	101,681	11,376	303	2,020,679	2,722,769	702,090
Ontario	17	3,329,090	115	30	350,509	165	127	239,056	15,302	1,284	3,240,094	4,473,203	1,233,109
Manitoba	6	1,646,550	25	10	112,449	45	42	81,976	3,814	326	1,732,903	2,448,419	715,516
British Columbia	8	769,676	27	8	55,141	41	52	90,062	3,310	142	2,310,689	2,813,500	502,811
Other provinces	5	146,315	13	7	27,257	9	16	16,512	1,432	130	386,831	529,483	142,652
1925													
Canada	50	8,865,438	265	90	742,256	357	303	564,911	36,221	2,308	11,456,239	14,469,009	3,012,770
New Brunswick	4	1,255,375	17	6	55,798	31	48	56,818	2,371	139	1,693,055	1,924,164	231,109
Quebec	11	2,052,717	64	11	141,363	79	42	105,143	11,305	296	2,171,045	2,613,408	442,363
Ontario	18	3,426,639	128	54	379,222	166	119	247,309	16,368	1,286	3,241,970	4,501,171	1,259,201
Manitoba	5	1,326,192	24	10	106,409	38	43	73,304	3,490	287	1,797,464	2,220,544	423,080
British Columbia	8	647,826	19	5	36,541	35	36	65,415	1,493	180	2,177,281	2,731,406	554,125
Other provinces	4	156,689	13	4	22,923	8	15	15,922	1,194	120	375,424	478,316	102,892
1926													
Canada	50	9,650,748	257	78	759,824	376	329	614,848	36,649	2,684	12,289,936	15,499,273	3,209,337
New Brunswick	4	1,269,386	14	6	51,526	29	58	66,702	1,939	178	1,754,893	1,958,154	203,261
Quebec	11	2,034,038	60	13	146,554	93	48	126,162	13,020	320	2,383,200	3,023,271	640,071
Ontario	19	4,031,328	124	39	377,106	171	131	268,043	14,379	1,433	3,441,072	4,726,838	1,285,766
Manitoba	5	1,300,946	27	9	108,821	37	44	71,290	3,479	342	1,423,294	1,782,876	359,582
British Columbia	8	831,359	19	7	52,584	39	36	67,264	2,284	301	2,931,491	3,577,837	646,346
Other provinces	3	183,691	13	4	23,233	7	12	15,387	1,548	110	355,986	430,297	74,311
1927													
Canada	61	13,593,564	407	129	1,201,015	648	420	991,683	36,073	2,918	20,392,675	26,288,506	5,895,831
New Brunswick	5	2,112,170	18	8	65,960	38	72	84,790	1,486	154	2,443,848	2,833,026	389,178
Quebec	11	3,061,233	103	30	250,742	158	53	204,386	8,976	318	4,312,578	5,361,510	1,048,932
Ontario	23	5,658,233	213	76	672,467	345	181	504,974	17,323	1,554	7,594,536	10,347,378	2,752,842
Manitoba	8	1,605,522	33	11	128,201	54	57	105,790	4,782	390	2,661,752	3,435,268	773,516
British Columbia	10	936,776	22	6	56,780	42	38	71,667	2,288	347	3,001,342	3,809,361	808,019
Other provinces	4	219,630	18	4	26,865	11	19	20,076	1,218	125	378,619	501,963	123,344

Table 128(a).—Coffee and Spice Industry: Capital Invested, 1923-27

Provinces	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Materials, stocks and fuel on hand, etc.	Cash, trading and operating accounts, etc.	
	$	$	$	$
1923	2,143,940	3,475,603	2,344,989	7,964,532
1924	2,279,723	3,936,426	2,814,509	9,030,658
1925	2,329,111	3,602,355	2,933,972	8,865,438
1926	2,731,905	3,955,648	2,963,195	9,650,748
1927	.....	.....	.....	.....
Canada	3,421,031	6,243,910	3,928,623	13,593,564
New Brunswick	228,366	1,200,507	683,297	2,112,170
Quebec	777,120	1,471,352	812,761	3,061,233
Ontario	1,687,346	2,341,893	1,628,994	5,658,233
Manitoba	348,047	789,585	467,890	1,605,522
British Columbia	312,375	356,577	267,824	936,776
Other provinces	67,777	83,996	67,857	219,630

Production.—The quantity and selling value of the products of the coffee and spice industry are shown in table 129 for 1926 and 1927. Blended and packed tea, valued at $14,123,783 in 1927 was the principle commodity produced, followed in order by roasted coffee, valued at $6,874,167, mixed, whole or ground spices $1,412,654 and miscellaneous products $3,877,902.

Table 129.—Coffee and Spice Industry: Production, 1926 and 1927

Classes of Products	Unit	1927		1926	
		Quantity	Selling value	Quantity	Selling value
			$		$
Baking powder	Lb.	2,793,212	457,271	2,468,956	420,666
Cream of tartar, refined and substitutes	"	565,311	149,625	647,480	161,233
Coffee, roasted	"	16,421,307	6,874,167	14,004,491	5,940,890
Cocoanut, shredded or desiccated	"	16,361	3,893	13,400	3,180
Cocoa	"	64,145	9,621	221,351	19,940
Chocolate	"	2,326,500	484,835	1,741,760	328,452
Confectionery (bon bons, nut and chocolate bars)	"	736,568	182,068	550,513	108,220
Catsup and sauces	Gallon	2,489	3,282	2,654	3,382
Chicory, roasted	Lb.	336,692	28,280	397,120	36,476
Flavouring extracts and essences	Gallon	95,852	626,758	96,562	598,871
Mustard, dry	Lb.	265,944	67,245	250,889	55,862
Mustard, prepared	Gallon	175,769	101,993	125,904	86,951
Olives, bottled	"	110,041	344,140	87,052	262,609
Powders, pudding	Lb.	180,334	36,732	211,249	38,120
Powders, custard	"	52,567	9,862	13,899	2,566
Powders, jelly	"	1,815,210	374,413	1,580,197	338,248
Powders, ice cream	"	7,239	1,741	11,479	3,671
Powders, all other	"	43,050	9,119	29,601	9,413
Pie and cake fillings	"	47,470	16,184	33,578	11,895
Peanuts, roasted and salted	"	2,132,990	291,635	2,311,926	308,243
Peanut, butter	"	326,967	66,694	270,169	55,254
Spices, mixed, whole or ground	"	4,018,894	1,412,654	4,080,430	1,275,450
Syrups, sugar, table or fountain	Gallon	25,159	58,446	15,418	30,330
Tea, blended and packed	Lb.	24,641,914	14,123,783	9,408,095	4,867,338
All other products (value only)[1]	.....	.....	554,065	.....	532,013
Total value	.....	.....	**26,288,596**	.....	**15,499,273**

[1] Includes cereal products, egg substitute, icings, pickles, popcorn, salad dressing, prepared flour, yeast cakes and other unspecified products.

WHOLESALE PRICES OF COFFEE, TEA AND SPICES

GREEN COFFEE, SANTOS, GOOD QUALITY

Price per pound, freight and duty paid—Monthly quotations from dealers, Toronto.

Monthly averages		Monthly averages	
1917	$0·1500	1922	$0·2070
1918	0·1900	1923	0·2071
1919	0·3239	1924	0·2754
1920	0·3305	1925	0·3025
1921	0·2012	1926	0·2725
		1927	0·2340

GREEN COFFEE, RIO, GOOD QUALITY

Price per pound, freight and duty paid—Monthly quotations from dealers, Toronto.

Monthly averages		Monthly averages	
1917	$0·1350	1922	$0·1795
1918	0·1650	1923	0·1758
1919	0·2575	1924	0·2167
1920	0·2255	1925	0·2704
1921	0·1521	1926	0·2358
		1927	0·2015

TEA, PEKOE, CEYLON AND INDIA

Price per pound, delivered at warehouse, Toronto—Monthly quotations from dealers.

Monthly averages		Monthly averages	
1917	$0·3244	1922	$0·3808
1918	0·4387	1923	0·4629
1919	0·4146	1924	0·4750
1920	0·4767	1925	0·5308
1921	0·3183	1926	0·5325
		1927	0·5177

TEA, JAPAN

Price per pound at Toronto—Monthly quotations from dealers

Monthly averages		Monthly averages	
1917	$0·25	1922	$0·47
1918	0·45	1923	0·52
1919	0·47	1924	0·45
1920	0·56	1925	0·47
1921	0·45	1926	0·48
		1927	0·47

BLACK PEPPER—BULK IN BARRELS

Price per pound—Monthly quotations from dealers, Toronto.

Monthly averages		Monthly averages	
1917	$0·360	1922	$0·121
1918	0·440	1923	0·146
1919	0·375	1924	0·163
1920	0·355	1925	0·227
1921	0·165	1926	0·364
		1927	0·391

Materials Used.—The quantity and cost value delivered at the factory, including freight and duty, of the materials used by the industry during 1926 and 1927 are shown in table 130.

Table 130.—Coffee and Spice Industry: Materials Used, 1926-27

Principal materials	Unit	1927		1926	
		Quantity	Cost value	Quantity	Cost value
			$		$
Acid phosphate	Lb.	711,154	67,342	613,289	54,882
Alum	"	373,752	16,452	366,820	15,496
Ammonium bicarbonate	"	4,500	462	7,200	519
Cream of tartar	"	576,548	106,673	596,120	96,312
Sodium bicarbonate	"	831,564	23,920	793,519	22,440
Tartaric acid	"	23,673	5,994	32,728	7,810
Other baking powder materials	"	90,315	7,100	67,500	4,655
Salt	"	150,340	1,782	144,088	1,717
Flour	"	563,579	17,544	213,750	9,941
Corn starch	"	1,169,844	39,079	1,061,778	53,450
Coffee beans, green	"	19,658,215	4,968,430	16,548,389	4,316,052
Cocoa beans	"	1,260,262	186,649	1,235,206	143,370
Vanilla beans	"	19,938	51,419	18,849	61,943
Cocoa butter	"	357,486	128,783	186,078	53,072
Cocoanut shredded or desiccated	"	52,171	8,468	55,428	9,086
Chocolate	"	36,400	7,280	41,600	8,380
Cocoa	"	106,730	11,758	153,075	11,678
Nuts, all kinds	"	16,802	3,300	6,289	2,318
Tea, loose	"	24,654,379	11,017,301	9,467,585	4,170,928
Fresh fruits	.....	.....	547	.....	2,061
Olives in bulk	Gallon	108,576	138,092	91,733	96,475
Milk powder	Lb.	142,280	21,654	95,442	17,217
Sugar	"	3,869,601	252,382	3,673,184	209,394
Gelatine	"	244,858	79,221	234,068	75,608
Glucose	"	62,190	2,618	66,780	2,886
Peanuts, green for roasting	"	2,612,011	223,314	2,854,685	225,858
Malt or malt flour	"	1,080	71	620	40
Corn for popping	"	3,450	196	7,860	472
Mustard	"	395,892	48,797	326,016	46,148
Essences, essential oils, etc	Gallon	22,676	103,044	14,180	69,489
Wheat	Bushel	14,413	20,361	16,231	23,484
Chicory, green, for roasting	Lb.	1,280,000	10,592	1,404,438	10,385
Chicory, roasted	"	111,025	10,626	103,606	9,719
Alcohol	Proof gallon	35,587	100,902	26,310	105,719
Spice materials, all kinds	Lb.	4,055,144	930,346	4,127,313	828,062
Spice fruits	.....	.....	65,890	.....	4,500
Containers, labels, etc	.....	.....	1,427,107	.....	1,209,803
All other materials	.....	.....	266,279	.....	308,567
Total	.....	.....	**29,392,675**	.....	**12,289,936**

Employment and Salaries and Wages Paid.—Employment in this industry is very steady throughout the year, very little fluctuation taking place from month to month. The maximum employment occurs in October when 1,096 wage-earners were employed in 1927 and the minimum in January when the number dropped to 1,013. As may be seen the variation between the maximum and minimum is only 83. Also about 60 p.c. of the wage-earners are males.

The average wage amounting to $727 in 1917 was increased to $929 in 1927 while salaries rose from $1,876 to $2,241. The wages are about the same as that paid by the cocoa and chocolate industry, but the salaries, however, are much higher, although both salaries and wages compare favourably with that paid in other industries. It is rather interesting to note that the amount paid for salaries exceeds that paid for wages. This is no doubt due to the very little processing necessary to prepare the raw materials for market.

The number of hours worked per day and per week, the number of days that establishments operated on full time and the average salary and wage paid from 1917 to 1927 are shown in table 132.

Table 131.—Coffee and Spice Industry: Monthly Employment of Wage-earners, 1926-27

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	637	376	1,013	370	309	679
February	635	389	1,024	377	306	683
March	630	411	1,041	369	308	677
April	626	414	1,040	374	322	696
May	638	427	1,065	369	343	712
June	649	434	1,083	369	347	716
July	661	427	1,088	370	333	703
August	665	430	1,095	370	336	706
September	650	446	1,096	375	342	717
October	662	434	1,096	384	338	722
November	661	420	1,081	383	324	707
December	645	413	1,058	374	325	699
Average	**648**	**420**	**1,068**	**376**	**329**	**705**

Table 132.—Coffee and Spice Industry: Hours of Work and Salaries and Wages Paid, 1917-27

Year	Hours worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
				$	$
1917	8·6	50·4	283	1,876	727
1918	7·6	44·3	288	1,314	650
1919	8·3	47·6	281	1,988	767
1920	8·4	45·5	288	2,102	811
1921	8·3	48·8	296	2,223	857
1922	8·4	47·3	289	2,047	844
1923	8·4	47·5	280	1,996	831
1924	8·5	47·4	287	2,115	864
1925	8·4	47·6	284	2,091	856
1926	8·6	47·7	294	2,268	872
1927	8·4	47·3	298	2,241	929

Fuel Consumption and Power Installation.—The quantity and cost value of the different classes of fuel consumed by this industry during 1926 and 1927 is given in table 133, while the power installed is shown in table 134.

Table 133.—Coffee and Spice Industry: Fuel Consumption, 1926-27

Classes of fuel	Unit	1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Bituminous coal	Ton	1,541	11,876	1,909	14,416
Anthracite coal	"	414	5,306	428	5,948
Lignite coal	"	12	180	.....	.....
Coke	"	285	3,882	299	2,920
Gasoline	gallon	5,304	1,270	.....	.....
Wood	Cord	306	1,869	272	1,784
Gas	M. cu. ft.	11,362	11,690	11,188	11,581
Total Cost of Fuel	.....	.....	**36,073**	.....	**36,649**
Cost of electricity	.....	.....	43,325	.....	30,685

Table 134.—Coffee and Spice Industry: Power Installation, 1926-27

Classes of power	1927		1926	
	Units	Horse-power according to manufacturers' rating	Units	Horse-power according to manufacturers' rating
Steam engines and turbines	3	160	4	210
Electric motors operated by purchased power	351	2,758	273	2,474
Total power for manufacturing purposes	**354**	**2,918**	**277**	**2,684**
Electric motors operated by power generated by the establishment	8	54	8	54
Boilers installed	10	481	8	480

Imports and Exports.—The quantity and value of tea, coffee and spices imported into Canada during the calendar years 1926 and 1927 are shown by principal countries in table 135 and the exports in table 136.

Table 135.—Imports of Tea, Coffee and Spices, 1926 and 1927

Articles	Units	1927		1926	
		Quantity	Value	Quantity	Value
		Lb.	$	Lb.	$
Coffee, green, imported direct from country of growth or purchased in bond in U.K.	Lb.	25,421,284	5,295,664	23,955,128	5,628,653
United Kingdom	"	1,740,898	456,472	1,119,270	310,624
Brazil	"	10,450,004	1,817,025	9,309,028	2,064,174
Jamaica	"	6,328,140	1,265,267	6,994,633	1,494,550
Colombia	"	3,197,310	832,775	2,466,203	693,141
Trinidad and Tobago	"	131,040	23,599	.....	.....
Dutch East Indies	"	238,939	60,984	644,867	140,871
Guatemala	"	438,945	119,311	613,594	167,750
Mexico	"	908,233	250,053	806,959	228,480
Hawaii	"	426,231	110,872	.....	.....
Venezuela	"	986,040	214,523	741,717	195,055
Other countries	"	575,504	144,830	1,258,857	334,008
Coffee, green, n.o.p.	"	236,912	49,559	128,527	31,860
United States	"	120,912	27,791	110,165	28,367
Other countries	"	116,000	21,768	18,362	3,493
Coffee, roasted or ground, when not imported directly from country of production	"	369,947	146,783	220,006	93,744
United Kingdom	"	1,364	650	378	214
United States	"	368,487	146,064	219,628	93,530
Other countries	"	96	69	.....	.....
Coffee, roasted or ground, and imitations, etc., n.o.p.	"	484,556	197,013	443,758	208,936
United Kingdom	"	5,082	1,675	4,163	1,967
United States	"	479,459	195,333	436,345	206,779
Other countries	"	15	5	3,250	190
Coffee, extract of or substitute therefor, of all kinds	"	108,463	163,674	88,724	124,288
United Kingdom	"	57,228	24,840	48,174	20,948
United States	"	51,235	138,832	40,550	103,340
Coffee, condensed with milk	"	386	179	.....	.....
United Kingdom	"	386	179	.....	.....
Tea	"	38,116,897	11,839,891	37,629,652	12,516,579
United Kingdom	"	14,901,690	5,218,730	16,104,064	6,005,677
United States	"	126,189	32,939	134,698	32,419
Other countries	"	23,089,618	6,588,222	21,390,890	6,478,483
Chicory, raw or green	"	80,830	2,351	144,673	3,998
United Kingdom	"	.....	.....	534	30
United States	"	4,818	286	182	31
Belgium	"	54,012	1,192	80,850	1,897
Other countries	"	22,000	873	63,107	2,040
Chicory, kiln dried, roasted or ground	"	145,241	16,391	117,891	11,990
United Kingdom	"	4,738	456	4,592	462
United States	"	80,023	12,423	59,444	9,225
Belgium	"	15,282	1,659	9,001	477
France	"	33,838	1,336	17,336	570
Other countries	"	11,360	517	27,518	1,256
Total Coffee, Tea and Chicory	"	64,964,516	17,711,505	62,728,359	18,620,048
Cloves, unground	Lb.	172,718	27,349	190,308	35,761
United Kingdom	"	59,538	10,399	65,801	11,995
United States	"	3,874	789	22,860	5,846
Br. East Africa	"	107,806	15,541	96,040	16,470
Other countries	"	1,500	620	5,607	1,450
Ginger, unground	"	745,947	59,784	1,156,227	153,272
United Kingdom	"	216,721	15,150	117,333	12,350
United States	"	18,809	2,054	30,067	3,106
British India	"	45,276	7,849	51,970	9,274
Jamaica	"	239,410	26,116	262,423	35,034
Hong Kong	"	161,884	5,763	77,766	4,935
Japan	"	890	83	10,759	1,221
Other countries	"	62,957	2,769	605,909	87,352

Table 135.—Imports of Tea, Coffee and Spices, 1926 and 1927—Concluded

Articles	Units	1927		1926	
		Quantity	Value	Quantity	Value
		Lb.	$	Lb.	$
Mustard, French, liquid			27,160		16,619
United Kingdom			508		447
United States			25,888		14,842
France			731		1,330
Other countries			33		
Mustard, ground	Lb.	920,511	381,996	980,367	403,645
United Kingdom	"	678,832	353,235	683,265	369,033
United States	"	241,677	28,760	296,661	34,540
Other countries	"	2	1	441	72
Mustard seed	"	437,270	24,766	311,748	26,130
United Kingdom	"	131,539	7,755	86,342	8,566
United States	"	124,176	6,555	84,396	7,630
Netherlands	"	159,449	8,917	107,885	7,694
Other countries	"	22,085	1,539	33,125	2,240
Nutmegs and mace, whole	"	335,652	95,765	282,616	98,174
United Kingdom	"	36,198	8,517	35,367	9,760
United States	"	7,025	3,172	15,745	8,599
Straits Settlements	"	51,705	12,458	24,376	9,294
Other Br. West Indies	"	241,203	66,887	190,022	66,522
Other countries	"	19,521	4,731	17,106	3,999
Nutmegs and mace, ground	"	5,623	1,949	3,826	1,724
United Kingdom	"	3,864	1,532	3,396	1,600
United States	"	1,757	413	430	124
Other countries	"	2	4		
Pepper, unground	"	1,480,454	410,040	895,435	222,268
United Kingdom	"	572,598	167,004	180,554	42,909
United States	"	45,706	5,630	33,448	7,461
Br. India	"	235,296	47,433	227,053	61,964
Straits Settlements	"	615,563	188,604	376,536	92,406
Dutch East Indies	"	2,533	443	61,177	15,306
Other countries	"	8,758	926	16,670	2,162
Seeds, aromatic, crude	"	556,567	35,375	342,847	21,101
United Kingdom	"	188,345	13,840	86,922	5,086
United States	"	170,506	11,332	73,643	5,167
France	"	26,552	1,651	31,071	2,197
Netherlands	"	101,517	7,712	72,684	5,626
Other countries	"	69,647	2,840	78,527	3,025
Beans, tonquin and vanilla, crude	"	52,049	128,487	67,005	197,254
United Kingdom	"	2,868	6,290	3,531	7,161
United States	"	42,049	105,240	37,213	129,112
France	"	7,132	16,957	11,082	35,048
Other countries	"			15,179	25,933
Spices, n.o.p., unground	"	1,144,849	161,960	1,479,819	208,893
United Kingdom	"	60,416	13,745	152,978	25,883
United States	"	174,704	32,803	330,273	51,982
British India	"	22,564	4,347	57,960	15,682
Straits Settlements	"	122,926	43,169	172,641	40,691
Jamaica	"	226,041	32,247	230,205	33,019
China	"	321,645	11,159	279,377	10,295
Dutch East Indies	"	81,882	6,194	163,854	17,905
Hong Kong	"	54,518	3,025	19,268	1,476
Japan	"	12,500	2,345	28,008	3,315
Other countries	"	67,653	12,926	47,225	8,645
Ginger and spices, n.o.p., ground	"	177,600	55,630	131,462	36,219
United Kingdom	"	27,617	12,568	33,470	11,037
United States	"	66,031	22,050	52,032	13,954
Japan	"	56,450	13,048	19,950	3,475
Other countries	"	27,502	7,964	26,010	7,153
Total Spices, value only			1,410,261		1,421,060
Recapitulation—					
Coffee			5,852,872		6,087,481
Chicory			18,742		15,088
Tea			11,839,891		12,516,579
Spices			1,410,261		1,421,060
Total			19,121,766		20,041,108

Table 136.—Exports of Goods Produced by the Coffee and Spice Industry, 1926-27

Articles	1926		1927	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Coffee and imitations of	41,029	16,371	58,184	23,425
United Kingdom				
United States	23,071	9,127	18,754	8,594
Newfoundland	6,513	2,360		
Other countries	13,445	4,884	39,430	14,831

CHAPTER VI
SUGAR

SUGAR REFINING INDUSTRY

Although its progress was interrupted and retarded at times, yet on the whole the sugar refining industry made considerable progress during the period 1917-27. Although the number of establishments remained the same, the capital invested increased from $31,818,133 in 1917 to $50,039,122 in 1927 while the number of persons employed rose from 2,527 to 2,711. The gross value of production amounting to $61,429,787 in 1917 dropped to $60,502,664 in 1927 while the value added by manufacture increased from $8,249,876 to $13,363,810 during the same period. The volume of granulated sugar produced which comprises about 89 p.c. of the total value of production, amounted to 651,940,965 lbs. valued at $57,080,353 in 1919 and to 872,053,919 lbs. valued at $53,808,350 in 1927. This represents an increase of about 34 p.c. in the physical volume of production; the great drop in the price of sugar since 1920, shown in the appended table, accounts for the decline in the value of production.

All things considered, 1919 was a record year. The number of persons employed (3,491), the value added by manufacture ($16,321,882) and the exports ($22,953,135) were the highest recorded, while the volume of sugar manufactured was only 10 p.c. lower than that of the peak year 1925 when 1,171,496,690 lbs. were produced. Part of 1920 and the whole of 1921 were years of depression; the physical volume of production, value added by manufacture, number of employees and exports, all dropped considerably. The large capital investment reported in 1920 was due to the large stocks of raw materials and finished products on hand amounting to over $19,000,000, or more than twice the amount ordinarily held, while the record production of $119,086,731 was the result of the unprecedentedly high prices of raw and refined sugar, the physical volume produced that year being about 23 p.c. lower than that of 1919. By 1922, the industry recovered from the depression of the previous years, this improvement being maintained up to 1926. A slight decline in employment, production and value added by manufacture, however, took place in 1927.

The principal and summary statistics of the industry from 1917 to 1927 are given in tables 137 and 138. In order that there may be no disclosure of information regarding individual plants, the statistics are shown only for the Dominion as a whole.

The eight establishments reporting in 1927 were located as follows:—Ontario 2, (Chatham and Wallaceburg); Quebec 2 (both at Montreal); New Brunswick 1 (St. John); Nova Scotia 1 (Dartmouth); Alberta 1 (Raymond); and British Columbia 1 (Vancouver).

Table 137.—Sugar Refining Industry: Principal Statistics: 1917-27

Year	Establishments	Capital	Employees on Salaries			Employees on Wages		
			Male	Female	Salaries	Male	Female	Wages
	No.	$	No.	No.	$	No.	No.	$
1917	8	31,818,133	226	49	487,686	2,147	105	1,837,142
1918	8	37,256,851	270	63	576,489	2,100	109	2,050,400
1919	8	38,725,542	385	51	883,709	2,923	132	3,294,185
1920	8	46,719,034	377	68	1,029,930	2,573	100	3,602,884
1921	7	35,783,067	280	53	765,456	2,042	94	2,417,438
1922	7	36,691,472	271	46	773,366	2,331	97	2,492,606
1923	7	45,618,182	300	48	831,107	1,961	84	2,498,555
1924	7	46,229,188	285	50	834,178	1,955	97	2,565,648
1925	8	50,089,717	303	53	931,333	2,325	103	2,897,109
1926	8	49,748,404	299	53	1,002,218	2,458	106	2,965,922
1927	8	50,039,122	290	56	993,896	2,253	112	2,845,592

Year	Total numbers of employees	Salaries and wages paid	Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
		$	$	h.p.	$	$	$
1917	2,527	2,324,828	1,423,899	16,009	53,179,911	61,429,787	8,249,876
1918	2,512	2,626,889	1,560,218	17,865	45,403,037	58,812,219	13,409,182
1919	3,491	4,177,89[illegible]	2,073,315	14,755	86,308,204	102,630,086	16,321,882
1920	3,118	4,632,8[illegible]4	2,867,861	16,324	103,689,088	119,086,731	15,397,643
1921	2,469	3,182,891	1,810,176	16,565	56,882,242	69,509,827	12,627,585
1922	2,745	3,265,972	1,918,987	20,751	56,493,942	70,822,782	14,328,840
1923	2,393	3,329,632	1,510,367	22,116	61,817,862	77,004,026	15,186,164
1924	2,387	3,399,[illegible]	1,414,339	19,386	55,071,573	67,292,122	12,220,549
1925	2,784	3,8[illegible]8,442	1,815,135	18,904	54,457,385	68,445,879	13,988,494
1926	2,9[illegible]6	3,9[illegible]8,14[illegible]	1,634,993	19,406	48,848,507	64,270,687	15,422,180
1927	2,711	3,830,788	1,408,407	18,565	47,138,854	60,502,664	13,363,810

[1]Estimated.

Table 138 —Summary Statistics of the Sugar Refining Industry

—		1917	1920	1921	1926	1927
Number of establishments		8	8	7	8	8
Capital	$	31,818,133	46,719,034	35,783,067	49,748,404	50,039,122
Average per establishment	$	3,977,267	5,839,879	5,111,869	6,218,550	6,254,890
Average per employee	$	12,591	14,984	14,493	17,060	18,458
Salaries	$	487,686	1,029,930	765,456	1,002,218	993,896
Average per salaried employee	$	1,773	2,312	2,299	2,847	2,873
Wages	$	1,837,142	3,602,884	2,417,438	2,965,922	2,845,592
Average per wage-earner	$	816	1,310	1,132	1,157	1,203
Total number of employees		2,527	3,118	2,469	2,916	2,711
Average per establishment		316	390	353	364	339
Gross value of product	$	61,429,787	119,086,731	69,509,827	64,270,687	60,502,664
Average per establishment	$	7,678,723	14,885,841	9,929,975	8,033,836	7,562,833
Average per employee	$	24,309	38,193	28,153	22,041	22,317
Value added by manufacture	$	8,249,876	15,397,643	12,627,585	15,422,180	13,363,810
Average per establishment	$	1,031,234	1,924,705	1,803,941	1,927,772	1,670,451
Average per employee	$	3,265	4,938	5,114	5,289	4,929
Power employed	h.p.	16,099	16,324	16,565	19,406	18,565
Average per establishment	h.p.	2,012	2,041	2,366	2,426	2,321
Average per wage-earner	h.p.	7·2	6·1	7·8	7·6	7·8

Capital Invested.—The capital invested in the sugar refining industry is shown by classes in table 139 for the calendar years 1917-27. Fixed capital, comprising land, buildings, machinery and tools increased from $21,858,242 in 1917 to $31,423,368 in 1927 or 44 p.c. while working capital, comprising inventories, cash, trading and operating accounts increased from $9,959,891 to $18,615,754 or 87 p.c., making an increase in the aggregate capital of $18,222,989 or 57 p.c.

Table 139.—Sugar Refining Industry: Capital Invested by Classes, 1917-27

Year	Fixed capital	Working capital		Total capital
	Land, buildings, fixtures, machinery and tools	Materials and supplies on hand, finished products etc.	Cash trading and operating accounts, etc.	
	$	$	$	$
1917	21,858,242	5,196,898	4,762,593	21,818,133
1918	23,842,435	6,511,626	6,902,790	37,256,851
1919	20,497,660	8,240,942	9,986,940	38,725,542
1920	23,955,192	19,475,812	3,288,030	46,719,034
1921	27,364,416	5,159,532	3,259,119	35,783,067
1922	25,150,839	6,951,082	4,589,551	36,691,472
1923	33,886,361	5,684,815	6,047,006	45,618,182
1924	30,854,500	7,055,769	8,318,919	46,229,188
1925	32,144,498	9,978,454	7,966,765	50,089,717
1926	31,271,037	10,926,047	7,551,320	49,748,404
1927	31,423,368	8,963,517	9,652,237	50,039,122

Sugar Beet Production.—The acreage sown to sugar beets, the total and average yield per acre, the total value of the crop delivered at the factory and the production and value of refined beetroot sugar are shown in table 140 for the years 1918-27.

Table 140.—Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar Compared, 1918-27

Year	Acres grown	Yield per acre	Total yield	Average price per ton	Total value	Production and value of refined beetroot sugar		
	acres	tons	tons	$ cts.	$	lb.	$	cents per lb.
1918	18,000	11·25	204,000	12 71	2,593,715	50,092,835	4,358,077	8·70
1919	18,800	9·50	180,000	14 61	2,630,027	37,839,271	3,924,411	10·40
1920	34,491	9·94	343,000	15 47	5,307,243	89,280,719	12,856,424	14·40
1921	25,535	7·80	199,334	9 90	1,974,384	52,862,377	3,554,203	6·70
1922	14,955	8·55	127,807	7 56	966,521	29,911,770	1,645,885	5·50
1923	17,941	8·87	159,200	12 08	1,922,668	39,423,160	3,745,200	9·50
1924	31,111	9·50	295,177	5 78	1,704,791	85,770,709	6,192,645	7·30
1925	34,803	10·63	370,047	7 27	2,688,302	72,819,919	5,206,624	7·15
1926	30,073	8·90	267,754	8 54	2,286,701	70,388,105	4,269,076	6·06
1927	25,961	7·96	206,713	9 73	2,012,134	60,969,131	3,719,117	6·10

Production.—The production of sugar by classes, quantities and selling value at the refinery is shown in table 141 for the years 1918-27 while the production of sugar and its by-products is shown in table 142 for 1926 and 1927. Of the 8 refineries reporting, one had a value of production of less than a million dollars, one a production of less than three millions, three a production from five to ten millions and three a production exceeding ten millions in value. The estimated maximum daily capacity of the plants in 1926 was as follows:

	lb.
Granulated sugar	6,478,199
Soft sugar	577,388
Syrups	65,028

Table 141.—Sugar Refining Industry: Production, 1918-27

Kinds of sugar	Units	1927	1926	1925	1924	1923
Granulated sugar—						
Made from cane	Lb.	811,084,788	943,802,519	970,008,781	696,756,646	718,049,089
Made from beets	"	60,969,131	70,388,105	72,819,919	85,770,709	39,423,160
Value	$	53,808,350	56,780,393	60,093,130	59,152,471	68,990,279
Soft sugars, from cane	Lb.	107,079,213	124,591,115	128,667,990	89,100,877	84,506,388
Value	$	5,910,074	6,426,738	6,890,358	6,769,838	7,154,355
Total production, all sugars	Lb.	979,133,132	1,138,781,739	1,171,496,690	871,628,232	841,978,637
Value	$	59,718,424	63,207,131	66,983,488	65,922,309	76,144,634
Miscellaneous products	$	784,240	1,063,556	1,462,391	1,369,813	859,392
Total production	$	60,502,664	64,270,687	68,445,879	67,292,122	77,004,026

Kinds of sugar	Units	1922	1921	1920	1919	1918
Granulated sugars—						
Made from cane	Lb.	1,006,099,197	636,446,914	604,178,160	823,213,445	601,848,130
Made from beets	"	29,911,770	52,862,377	89,280,719	37,839,342	50,092,835
Value	$	63,518,155	60,185,249	104,697,061	86,423,297	57,080,353
Soft Sugars, from cane	Lb.	112,093,407	94,754,353	88,760,215	156,005,630	*
Value	$	6,148,861	8,442,174	12,649,281	14,288,582	*
Total production all sugars	Lb.	1,148,104,374	784,063,644	782,219,094	1,017,058,417	651,940,965
Value	$	69,667,016	68,627,423	117,346,342	100,711,879	57,080,353
Miscellaneous products	$	1,155,766	882,404	1,740,389	1,918,207	1,731,866
Total production	$	70,822,782	69,509,827	119,086,731	102,630,086	58,812,219

*Not reported in 1918.

Table 142.—Sugar Refining Industry: Production by Classes, 1926-27

Classes of Products	Unit of measure	1927 Products and By-Products		1926 Products and By-Products	
		Quantity	Selling value	Quantity	Selling value
			$		$
Granulated suagrs made—					
From cane	Pounds	811,084,788	50,089,233	943,802,519	52,511,317
From beets	"	60,969,131	3,719,117	70,388,105	4,269,076
Soft sugars made	"	107,079,213	5,910,074	124,591,115	6,426,738
Syrups	"	5,867,721	219,142	8,989,207	201,984
Molasses made—					
From cane	"	26,309,870	283,004	37,584,497	431,708
From beets	"	16,458,624		23,575,650	
Dried beet pulp	Ton	9,110	252,474	11,409	294,841
All other by-products (value only)	.....	.....	29,620	.....	135,023
Total value of products	.....	.....	**60,502,664**	.....	**64,270,687**

Consumption of Sugar in Canada.—A comparative study of the consumption of sugars in Canada for the past six years by classes, quantity and value is presented in table 143. Consumption of any commodity is computed on the basis of production plus imports less exports. The per capita consumption of sugar of all kinds by quantity and value based on an estimated population is shown for the years 1922-27.

Table 143.—Consumption of Sugar, 1922-27

—		1927	1926	1925	1924	1923	1922
Sugar production	lb.	979,133,132	1,138,781,739	1,171,496,690	871,628,232	841,978,637	1,148,104,374
Value	$	59,718,424	63,207,131	66,983,488	65,922,309	76,144,634	69,667,016
plus							
Sugar imports	lb.	34,822,300	30,550,386	17,719,936	42,926,370	17,039,979	2,654,290
Value	$	1,594,438	1,090,188	766,717	2,624,126	1,241,491	96,692
Total	lb.	1,013,955,432	1,169,332,125	1,189,216,626	914,554,602	859,018,616	1,150,758,664
	$	61,312,862	64,297,319	67,750,205	68,546,435	77,386,125	69,763,708
less							
Sugar exports	lb.	195,752,100	285,214,600	305,373,500	84,029,266	119,121,347	316,651,937
Value	$	8,933,619	15,990,794	19,117,527	7,412,153	12,023,173	20,566,055
Sugar available for consumption	lb.	818,203,332	874,117,525	883,843,126	830,525,336	739,897,269	834,106,727
	$	52,379,243	48,306,525	48,632,678	61,134,282	65,362,952	49,197,653
Per capita consumption	lb.	85·95	93·09	94·38	90·01	81·46	93·30
	$	5·50	5·14	5·19	6·62	7·20	5·50

Materials Used.—Table 144 shows the different materials used by the sugar refining industry during the years 1926 and 1927. The cost of the materials used in 1927 amounted to $47,138,854. This is a decrease from the previous year of $1,709,653 and is accounted for by an increase in the market prices of raw cane sugar and sugar beets, the average price of raw cane sugar laid down at Montreal rising from $3.88 per cwt. in 1926 to $4.29 per cwt. in 1927. Home grown sugar beets also show an advance in cost laid down at the factory from $8.54 per ton in 1926 to $9.73 in 1927, but this is counterbalanced by a reduction in the tonnage of beets used which in 1927 was 61,041 tons. This increase in the price of raw materials is reflected in the selling prices of refined sugar as indicated by the average wholesale prices for each grade of sugar in the appended table:—

Table 144.—Sugar Refining Industry: Materials Used, 1926-27

Kinds of materials	Unit of measure	1927		1926	
		Quantity	Cost value delivered at works	Quantity	Cost value delivered at works
			$		$
Raw cane sugar	Pounds	948,942,374	41,560,216	1,120,926,369	42,391,691
Sugar beets	Ton	206,713	2,012,134	267,754	2,286,761
Boneblack purchased	Pounds	3,046,104	117,089	2,771,261	157,110
Infusorial earth	"	1,315,923	35,181	1,590,934	36,316
Lime	"	1,170,585	8,097	2,257,115	14,504
Limestone	Ton	17,087	39,770	20,115	46,907
Other chemicals (sulphur, sulphuric acid, lead acetate, etc.)			43,849		74,538
Boxes, bags and other containers (value only)			2,256,445		2,824,454
All other materials (value only)			1,066,073		1,016,226
Total cost of materials			**47,138,854**		**48,848,507**

WHOLESALE PRICES OF SUGAR AND ITS PRODUCTS AND GLUCOSE

RAW SUGAR, CUBAN, 96° CENTRIFUGAL

Price per cwt. laid down in Montreal—Monthly quotations based on information from refiners

Monthly averages		Monthly averages	
1917	$ 6·850	1923	$ 7·006
1918	6·741	1924	5·655
1919	7·943	1925	3·971
1920	15·406	1926	3·880
1921	5·808	1927	4·290
1922	5·054		

WHOLESALE PRICES OF SUGAR AND ITS PRODUCTS AND GLUCOSE—*Concluded*

GRANULATED SUGAR

Price per cwt.—Monthly quotations based on information from refiners

Monthly averages		Monthly averages	
1917	$ 7·925	1923	$ 9·583
1918	8·704	1924	8·323
1919	9·903	1925	6·250
1920	17·022	1926	5·958
1921	8·909	1927	6·260
1922	6·672		

SUGAR No. 1—YELLOW

Price per cwt.—Monthly quotations based on information from refiners

Monthly average		Monthly average	
1917	$ 7·545	1923	$ 9·203
1918	8·324	1924	7·944
1919	9·523	1925	5·870
1920	16·596	1926	5·577
1921	8·529	1927	5·880
1922	6·311		

GLUCOSE, 44° BAUMÉ

Price per cwt., Montreal—Monthly quotations from Canada Starch Co.

Monthly average		Monthly average	
1917	$ 6·25	1923	$ 4·05
1918	6·25	1924	4·54
1919	6·84	1925	4·64
1920	7·60	1926	3·95
1921	3·57	1927	3·83
1922	3·34		

Employment and Salaries and Wages Paid.—From table 145 which gives the number of wage-earners employed each month during 1926 and 1927 it is found that employment is at a minimum during the winter months and that the fall of the year is the period of greatest activity. In 1927, the average monthly employment during the first five months was 2,210, during the next four months it was 2,443 and for October and November the average was 2,923.

Average salaries and wages paid by the sugar refining industry are almost the highest of the whole vegetable products group. The wages paid amounting to $1,203 in 1927 were $303 higher than the average for the whole group, and were exceeded only by the malt industry with an average wage of $1,585. In both of these industries the proportion of male wage-earners is very high, viz., 95·3 p.c. in the sugar refining industry and 100 p.c. in the malt industry.

The salaries paid amounting to $2,873 in 1927 were also the second highest of the vegetable products group being exceeded only by the tobacco industry where the average paid was $3,215.

The average number of hours worked per day and per week in the sugar refineries was 10·3 hours and 63·5 hours respectively. This makes the longest working day and week of the whole group. Although wages and the number of hours worked have increased, the number of days that establishments operated on full time, however, decreased from 284 in 1917 to 222 in 1927, the average for the eleven year period being 236.

Table 145.—Sugar Refining Industry: Employment of Wage-earners by months, 1926-27

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	1,954	85	2,039	1,892	90	1,982
February	1,887	83	1,970	1,950	77	2,027
March	2,035	93	2,128	2,102	108	2,210
April	2,171	94	2,265	2,205	86	2,291
May	2,541	109	2,650	2,192	93	2,285
June	2,374	124	2,498	2,498	105	2,603
July	2,447	123	2,570	2,529	109	2,638
August	2,390	106	2,496	2,581	112	2,693
September	2,115	93	2,208	2,526	85	2,611
October	2,781	147	2,928	2,946	99	3,045
November	2,773	146	2,919	3,142	128	3,270
December	1,586	102	1,688	2,925	126	3,051
Average	**2,253**	**112**	**2,365**	**2,458**	**106**	**2,564**

Table 146.—Sugar Refining Industry: Hours Worked and Salaries and Wages Paid, 1917-27

Year	Hours worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
				$	$
1917	10·1	61·0	284	1,773	816
1918	9·5	56·8	229	1,731	928
1919	10·4	67·4	239	2,027	1,078
1920	9·1	52·1	195	2,312	1,310
1921	10·6	63·4	262	2,299	1,132
1922	10·4	62·0	256	2,440	1,027
1923	10·4	62·0	224	2,388	1,222
1924	10·4	65·4	213	2,490	1,250
1925	10·3	65·0	233	2,616	1,193
1926	10·8	64·8	233	2,847	1,157
1927	10·3	63·5	222	2,873	1,203

Fuel Consumption.—The quantity and value laid down at the works of the different classes of fuel consumed by the sugar refineries from 1917 to 1927 are given in table 147. The principal fuels used are bituminous coal and fuel oils. The increasing use of fuel oil as a source of fuel should be noted, the amount spent having risen from $84,228 in 1917 to $469,013 in 1927, while on the other hand the use of anthracite coal has been entirely discontinued, having dropped from a maximum of $341,428 in 1918 to zero in 1926 and 1927.

Power Installation.—The power installed in the sugar refineries is shown in table 148 by classes, number of units and the horsepower according to manufacturers' rating.

Imports and Exports.—The imports and exports of sugar and its products are shown by classes from 1918 to 1927 in tables 149-50 and by classes and countries for 1926 and 1927 in tables 151-2.

The imports and exports of sugar fluctuate within rather wide limits, depending on the prices of sugar in the domestic and foreign markets. For example, imports of refined sugar in 1921 amounted to 20,571,959 lbs., then dropped to 2,654,178 the following year and rose again to 18,555,515 lbs. in 1923. The same is true of exports. In 1919, the exports of sugar amounted to 242, 972,128 lbs. in 1920 it dropped to 69,014,171 lbs. and in 1923 rose to 316,651,937 lbs.

Of the raw sugar imported into Canada in 1927 which amounted to $33,781,314, $11,042,676 came from the British West Indies, $3,756,978 from Cuba, $4,305,779 from San Domingo, and the balance from British Guiana, Australia, Fiji Islands and other countries, while practically all the molasses imported came from Barbados. The refined sugar exported in 1927 amounted to $8,933,619, a decrease of $7,057,175 as compared with 1926. Of this amount $4,805,667 went to the United Kingdom, $735,291 to Uruguay, $534,339 to France, $1,155,690 to Norway and the balance to other countries.

Table 147.—Sugar Refining Industry: Cost of Fuel and Electricity, 1917-27

Year	Bituminous coal		Anthracite coal		Coke		Fuel oil		Gas		Total including items not specified	Cost of electricity
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value		
	ton	$	ton	$	ton	$	gal.	$	M cu. ft.	$	$	$
1917	175,993	1,110,380	9,181	103,215	872	17,705	4,093,000	84,228	106,990	107,025	1,423,899	24,588
1918	128,863	1,013,342	52,196	341,428	2,359	30,118	4,951,968	131,888	338,780	40,653	1,560,218	30,925
1919	297,208	1,809,618	84	1,029	2,223	22,875	.....	214,731	208,085	25,062	2,073,315	45,679
1920	284,582	2,502,725	4,192	50,509	4,319	63,649	4,063,205	172,075	101,264	18,714	2,807,672	70,320
1921	183,444	1,237,313	657	6,033	2,576	26,052	10,827,624	540,737	.....	.....	1,810,176	85,367
1922	206,135	1,250,412	658	6,058	2,660	32,663	14,532,360	629,854	.....	.....	1,918,987	[1]
1923	188,549	985,483	100	775	2,533	26,277	9,764,484	497,832	.....	.....	1,510,367	[1]
1924	208,529	937,028	79	926	3,098	30,788	8,888,179	443,376	.....	.....	1,414,339	138,601
1925	250,126	1,113,720	264	2,501	3,511	35,117	11,730,124	660,689	178	201	1,815,135	144,317
1926	213,574	948,316	.....	.....	2,647	30,349	10,554,518	652,024	262	295	1,634,993	132,386
1927	200,467	912,735	.....	.....	2,410	26,223	8,687,284	469,013	326	342	1,408,407	117,672

[1]Not shown on schedules.

Table 148.—Sugar Refining Industry: Power Installation according to Manufacturers' Rating, 1917-27

Year	Steam engines and turbines		Oil, gas and gasoline engines		Electric motors operated by purchased power		Total power used for manufacturing		Electric motors operated by power generated by the establishments		Total electric motors		Boilers installed	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
1917	69	12,072	.....	.....	98	4,027	167	16,099	610	6,985	708	11,012	.....	[2]
1918	99	13,527	.....	.....	143	4,338	242	17,865	621	7,522	764	11,860	49	15,018
1919	85	10,727	.....	.....	291	4,028[1]	376	14,755	581	7,936[1]	872	11,964	96	29,723
1920	133	11,864	.....	.....	398	4,460	531	16,324	485	7,496	884	11,956	97	30,741
1921	126	12,242	.....	.....	286	4,323[1]	412	16,565	571	8,645[1]	857	12,968	61	21,967
1922	127	12,332	.....	.....	390	8,419	517	20,751	475	4,651	865	13,070	78	26,994
1923	128	12,532	.....	.....	445	9,584	573	22,116	490	5,309	935	14,893	76	23,669
1924	89	11,000	1	5	378	8,381	468	19,386	577	9,886	955	18,267	78	22,269
1925	93	11,410	1	5	365	7,489	459	18,904	662	11,792	1,027	19,281	73	21,446
1926	94	11,410	1	5	398	7,991	493	19,406	653	8,933	1,051	16,924	87	25,769
1927	89	13,494	1	5	257	5,066	347	18,565	842	11,658	1,099	16,724	76	25,699

[1]Estimated. [2]Not shown on schedules.

Table 149.—Imports of Sugar and its Products, by Classes, Calendar Years 1918-27

Articles	Unit	1927		1926		1925		1924		1923	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$		$		$
Sugar raw, n.o.p., not above No. 16 D.S. in colour, etc.	Lb.	936,864,200	33,781,314	1,119,093,896	32,431,281	1,171,067,379	33,744,861	828,030,881	39,586,649	847,016,372	44,562,830
Sugar above No. 16 D.S. and all refined sugar whatever grade or standard	"	34,822,300	1,504,438	30,550,386	1,090,188	17,719,936	766,717	42,926,370	2,624,126	18,555,515	1,326,615
Sugar cane, shredded	.....	.....	2,249	.....	8,250	.....	4,595	.....	2,157	.....	1,494
Glucose, glucose syrup and corn syrup	Lb.	4,156,393	150,157	5,107,479	169,336	2,460,606	103,385	3,618,783	149,247	3,641,660	120,990
Molasses of cane testing under 35° but not less than 20°	Gal.	1,680,035	170,579	959,994	69,267	103,387	41,388	250,799	59,745	160,444	41,670
Molasses produced from the manufacture of cane sugar, etc., testing not less than 35° or more than 56°	"	42,111	12,479	28,790	12,626	11,232	6,150	11,143	7,344	224,755	118,010
Molasses, testing not more than 56°, the produce of any British country entitled to preferential tariff, etc.	"	5,137,506	2,249,471	4,982,188	1,818,403	5,143,631	2,256,025	4,285,275	2,756,133	4,237,710	2,557,547
Molasses and syrups of all kinds, the product of sugar cane or beet, n.o.p. and all imitations or substitutes	Lb.	13,869,823	388,389	11,817,512	416,756	9,735,028	262,558	9,046,552	264,012	13,669,913	317,968
Molasses testing over 56°	"	292	173	258	74	3,333	118	.....	.....	.....	.....
Total	.....	.....	**38,259,249**	.....	**36,016,121**	.....	**37,185,797**	.....	**45,449,412**	.....	**49,647,124**

Articles	Unit	1922		1921		1920		1919		1918	
Sugar raw, n.o.p., not above No. 16 D.S. in colour, etc.	Lb.	1,197,609,110	33,822,577	749,163,894	54,381,011	771,187,636	75,198,252	1,059,175,934	60,639,545	657,846,109	31,000,378
Sugar above No. 16 D.S. and all refined sugar whatever grade or standard	"	2,654,178	96,685	20,571,959	2,051,780	9,684,531	1,375,932*	716,984	58,058*	74,632	5,176
Sugar cane, shredded	.....	.....	2,050	.....	1,874	.....	1,476	.....	187	.....	275
Glucose, glucose syrup and corn syrup	Lb.	5,187,973	141,899	6,094,036	211,414	3,439,553	269,497	2,345,905	151,183	2,852,516	169,362
Molasses of cane testing under 35° but not less than 20°	Gal.	153,048	33,832	244,914	30,312	549,535	124,658	534,000	106,740	471,900	132,025
Molasses produced from the manufacture of cane sugar, etc., testing not less than 35° or more than 56°	"	103,973	30,416	237,961	117,566	92,759	67,877	142,221	47,935	162,298	50,919
Molasses, testing not more than 56°, the produce of any British country entitled to preferential tariff, etc.	"	5,292,181	2,417,797	2,807,033	1,521,931	5,571,410	6,298,303	5,744,591	3,580,674	5,856,649	3,214,453
Molasses and syrups of all kinds, the product of sugar cane or beet, n.o.p., and all imitations or substitutes	Lb.	8,456,450	247,049	4,201,278	184,940	10,528,959	452,949	8,421,437	287,642	5,557,641	225,161
Molasses testing over 56°	"	.....	.....	.....	.....	.....	.....	.....	.....	109,332	3,021
Total	.....	.....	**36,792,305**	.....	**58,500,828**	.....	**83,788,944**	.....	**64,871,964**	.....	**34,800,770**

*Imports by refineries only.

Table 150.—Exports of Sugar and its Products, by Classes, Calendar Years 1918-27

Articles	Unit	1927		1926		1925		1924		1923	
		Quantity	Vlaue	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$		$		$
Sugar of all kinds, n.o.p.	Lb.	195,752,100	8,933,619	285,214,600	15,990,794	305,373,500	19,117,527	84,029,266	7,412,153	119,121,347	12,023,173
Molasses and syrups of all kinds	Gal.	1,137,850	80,102	1,855,544	97,786	1,168,307	109,565	1,085,965	96,433	464,814	31,435
Sugar house syrup	Gal.	.....	.....	.....	.....	848	260	1,794	544	1,656	534
Glucose and glucose syrup	.....	.....	.....	.....	139	.....	55,504	.....	271	.....	274
Sugar beets	Ton	54,005	328,412	61,753	385,048	43,028	258,368	22,032	132,855	10,762	61,965
Total	.....	.....	**9,342,133**	.....	**16,473,767**	.....	**19,541,224**	.....	**7,642,256**	.....	**12,117,381**

		1922		1921		1920		1919		1918	
Sugar of all kinds, n.o.p.	Lb.	316,651,937	20,566,055	86,765,970	7,383,245	69,014,171	12,278,795	242,972,128	22,113,389	2,324,818	178,374
Molasses and syrups of all kinds	Gal.	1,064,188	31,319	1,004,921	59,002	.....	247,607	.....	749,758	*	*
Sugar house syrup	"	.....	.....	*	*	232,779	104,903	216,955	89,988	*	*
Glucose and glucose syrup	.....	.....	19,257	*	11,581	*	*	*	*	*	*
Sugar beets	Ton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	.....	.....	**20,616,631**	.....	**7,453,828**	.....	**12,631,305**	.....	**22,953,135**	.....	**178,374**

*Indicates that quantity or value was not reported.

Table 151.—Imports of Sugar and its Products, by Countries and Classes during the Calendar Years 1926-27

Articles by countries		1926 Quantity	1926 Value	1927 Quantity	1927 Value
			$		$
Sugar, raw, n.o.p., not above No. 16 D.S. in colour, etc... Total	Lb.	1,119,093,896	32,431,281	936,864,200	33,781,314
United States	"	38,421,516	863,212	31,889,500	1,006,427
Australia	"	56,099,900	3,239,933	70,021,100	3,606,064
British Guiana	"	123,009,860	3,830,516	148,872,900	5,650,794
Barbados	"	62,663,496	1,902,993	104,206,100	3,864,469
Jamaica	"	82,744,416	2,615,917	76,963,200	2,986,688
Trinidad and Tobago	"	82,112,700	2,564,503	37,102,900	1,443,635
Other British West Indies	"	54,818,200	1,808,959	67,472,000	2,747,884
Cuba	"	241,890,124	5,948,252	126,259,800	3,756,978
Fiji Islands	"	54,959,787	1,772,567	90,274,400	3,309,971
Hayti	"	6,425,500	163,757	10,174,500	313,181
Honduras	"	36,835,600	917,906	20,469,000	564,103
Peru	"	11,283,297	242,476	7,203,500	169,748
San Domingo	"	249,209,710	5,717,252	144,686,300	4,305,779
Other countries	"	17,719,790	783,038	1,269,000	55,593
Sugar above No. 16 D.S. and all refined sugar of whatever grade or standard... Total	"	30,550,386	1,090,188	34,822,300	1,504,438
United Kingdom	"	333,600	12,428	224,600	10,679
United States	"	4,752,944	206,824	4,141,600	214,749
Barbados	"	216,900	7,577	.....	.....
Jamaica	"	199,833	7,375	.....	.....
Trinidad and Tobago	"	56,900	1,858	.....	.....
Guatemala	"	1,208,717	32,246	.....	.....
Hong Kong	"	2,610	131	.....	.....
Nicaragua	"	2,886,712	87,212	.....	.....
Other countries	"	20,892,110	734,537	30,456,100	1,279,010
Sugar cane, shredded—					
United States		.....	5,614	.....	179
Other countries		.....	2,636	.....	2,070
Glucose, glucose syrup and corn syrup or any admixture thereof..	Lb.				
United Kingdom	"	35,986	2,906	18,928	1,484
United States	"	5,071,383	166,417	4,137,355	148,665
Other countries	"	110	13	110	8
Molasses of cane testing under 35° but not less than 20°	Gal.				
United States	"	302,530	28,965	418,490	30,143
Other countries	"	657,464	40,242	1,261,545	140,436
Molasses produced from the manufacture of cane sugar, etc., testing not less than 35° nor more than 56°	Gal.				
United States	"	17,565	9,285	42,111	12,479
Other countries	"	11,225	3,341	.....	.....
Molasses, testing not more than 56° the produce of any British Country entitled to benefits under preferential tariff, etc.,	Gal.				
Barbados	"	4,740,665	1,742,192	4,753,830	2,115,584
Trinidad and Tobago	"	37,602	9,649	.....	.....
Other British West Indies	"	201,553	65,626	374,384	130,231
Other countries	"	2,368	936	9,292	3,656
Molasses and syrups of all kinds the product of sugar cane or beet n.o.p., and all imitations or substitutes	Lb.				
United Kingdom	"	647,414	55,750	590,563	50,607
United States	"	1,166,312	360,828	13,276,359	337,609
Other countries	"	3,786	178	.....	173
Molasses testing over 56°	"				
United States	"	258	74	.....	173
Summary of import values by countries—					
United Kingdom		.....	72,020	.....	62,770
United States		.....	1,641,219	.....	1,750,424
British West Indies		.....	10,786,649	.....	13,288,491
British Possessions		.....	8,843,016	.....	12,698,964
Cuba		.....	5,948,252	.....	4,863,372
San Domingo		.....	5,717,252	.....	4,305,779
Honduras		.....	917,906	.....	564,103
Hayti		.....	163,757	.....	313,181
Peru		.....	242,476	.....	169,748
Guatemala		.....	32,246	.....	.....
All other countries		.....	1,651,328	.....	242,417
Total value		.....	36,016,121	.....	38,259,249

Table 152.—Exports of Sugar and its Products, by Countries and Classes during the Calendar Years 1926-27.

Articles by countries		1926		1927	
		Quantity	Value	Quantity	Value
			$		$
Sugar of all kinds, n.o.p.—Total	Lb.	285,214,600	15,990,794	195,752,100	8,933,619
United Kingdom	"	154,714,600	8,741,834	117,382,300	4,805,667
United States	"	1,758,200	102,564	632,100	42,296
Belgium	"	1,276,800	49,796	134,400	7,389
Bermuda	"	1,590,400	90,159	1,484,700	82,342
British Guiana	"	890,200	53,676	934,900	50,495
British Honduras	"	1,461,300	89,476	1,306,300	77,747
Barbados	"	1,097,700	63,503	985,000	59,591
Jamaica	"	1,326,500	78,239	2,079,000	122,401
Trinidad and Tobago	"	2,558,200	145,985	3,260,300	185,117
Other British West Indies	"	1,553,100	93,910	2,026,400	126,189
France	"	27,585,700	1,469,795	12,992,000	534,339
Newfoundland	"	13,130,000	820,279	15,395,100	912,787
Norway	"	17,596,200	1,086,614	21,660,500	1,155,690
St. Pierre and Miquelon	"	730,600	46,901	549,500	33,937
Uruguay	"	40,036,000	2,138,224	14,873,600	735,291
Netherlands	"	22,400	1,277	.....	.....
Other countries	"	17,886,700	918,562	56,000	2,311
Molasses and syrups of all kinds	Gal				
United States	"	1,854,588	97,362	1,136,932	79,632
Other countries	"	950	424	918	470
Sugar house syrup	Gal.				
United States	"	.....	.....	.....	.....
Glucose and glucose syrup		.....	.....	.....	.....
United Kingdom		.....	30	.....	.....
Other countries		.....	109	.....	.....
Sugar beets	Ton				
United States	"	61,753	385,048	54,005	328,412
Summary of export values by countries—					
United Kingdom		.....	8,741,864	.....	4,805,667
United States		.....	584,974	.....	450,340
British Possessions		.....	963,431	.....	1,041,029
British West Indies		.....	471,796	.....	575,670
Belgium		.....	49,796	.....	7,389
France		.....	1,469,795	.....	534,339
Norway		.....	1,086,614	.....	1,155,690
St. Pierre-Miquelon		.....	46,901	.....	33,937
Uruguay		.....	2,138,224	.....	735,291
Netherlands		.....	1,277	.....	.....
Other countries		.....	919,095	.....	2,781
Total Value of Exports		.....	**16,473,767**	.....	**9,342,133**

THE MAPLE SUGAR AND MAPLE SYRUP INDUSTRY

History and Progress.[1]—Sugar making from the maple, which is confined entirely to this continent, had a very early beginning. The early settlers from the Old Land learned from the Indians the art of sugar making and followed for many years their crude methods of manufacture. The maple products thus made were strong in flavour, dark in colour and variable in quantity. Until about sixty years ago there was little improvement made in the methods of sugar makers; but since that time, the advance has kept pace with that of other branches of agriculture, until it has become a more or less highly organized commercial industry. An early improvement was the substitution of the auger for the axe in tapping, coopered buckets took the place of the birch bark "caso" or hewn sap trough, while the kettle gave way to the evaporating pan which has in later years developed into the modern evaporator with corrugated bottom and separate compartments.

The importance of the maple sugar industry is scarcely realized in many parts of Canada where it has long ceased to be carried on. From 1850 to 1890, according to Dominion statistics, the production of maple sugar, together with its equivalent in syrup, increased year by year, but since that time it has steadily fallen. The average yearly production from 1851 to 1861 was about

[1]Abridged from "The Maple Sugar Industry" by J. B. Spencer, B.S.A., 1920.

13,500,000 pounds; from 1861 to 1871 about 17,500,000 pounds; from 1871 to 1881, 19,000,000 pounds; from 1881 to 1891, an average of 22,500,000 pounds was reached. During the next decade the average fell to some 21,200,000 pounds, while in more recent years it has dropped to little less than 20,000,000 pounds. Even though a decrease in production is being experienced, the industry still bulks large and with the more general use of modern methods and proper encouragement there is no reason why it should not return to and even surpass the high figures of the eighties.

The industry is confined in Canada to Quebec, Ontario, New Brunswick and Nova Scotia. In the Maritime Provinces the yearly output has rarely exceeded half a million pounds. Quebec turns out about 14,300,000 pounds and Ontario 5,000,000 pounds per year.

Progress of the Industry since 1917.—The production of maple sugar and maple syrup is essentially an industry of small-scale production. Only about 10 p.c. of the output is produced in modern factories. And even these factories, of which there were 6 in 1927, are only comparatively small plants having an average capitalization of $60,467, employing on an average only 9 persons and producing goods that had an average selling value of $82,271 in 1926 and $215,777 in 1927. The bulk of the output is still produced on the farm.

With the exception of 1927 when a large increase in the capital invested, production and value added by manufacture was reported, the production of maple sugar and maple syrup in factories had shown a tendency to decline. Although since 1917 the number of establishments has risen to 6, yet with the exception of the capital invested, all other factors recorded a decline, the number of employees dropping from 179 in 1917 to 48 in 1926, production from $604,622 to $493,626 and value added by manufacture from $254,928 to $157,016.

The principal statistics which are given in table 153 and the production given in table 154 refer only to that part of the product which is produced in factories while the figures given in tables 155-7 include the production on the farm as well.

Of the exports of maple sugar which amounted to $1,141,783 in the fiscal year 1927-28 (table 157), practically the whole amount went to the United States and only $6,869 to the United Kingdom. With the exception of the fiscal years 1926-27 and 1927-28 when the exports amounted to $40,704 and $36,902 respectively, the average amount of maple syrup exported was about $15,000 per annum of which about two-thirds went to the United States and practically the whole of the remainder to the United Kingdom.

Table 153.—Maple Sugar and Maple Syrup Industry: Principal Statistics 1917-27

Year	Establishments	Capital	Employees on Salaries			Employees on Wages		
			Male	Female	Salaries	Male	Female	Wages
	No.	$	No.	No.	$	No.	No.	$
1917	3	158,090	5	2	7,370	67	105	74,504
1918	4	403,550	13	4	21,282	48	53	50,008
1919	3	270,661	30	8	35,852	37	37	38,006
1920	5	306,349	30	7	36,421	32	26	40,625
1921	4	172,992	13	2	27,793	17	5	20,362
1922	5	248,919	17	4	38,425	19	4	22,304
1923	5	272,334	12	3	26,564	20	1	20,200
1924	6	294,982	15	3	39,151	18	1	19,603
1925	6	256,803	13	4	35,119	19	1	19,838
1926	6	267,481	15	4	37,030	27	2	18,186
1927	6	362,800	14	3	44,448	33	2	32,337

Year	Total number of employee	Salaries and wages paid	Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
	No.	$	$	H.P.	$	$	$
1917	179	81,874	3,243	35	349,694	604,622	254,928
1918	118	71,290	6,329	85	662,352	858,499	196,147
1919	112	73,858	3,731	35	654,647	988,817	334,170
1920	95	77,046	5,803	35	695,935	1,003,915	307,980
1921	37	48,155	2,269	27	201,366	327,546	126,180
1922	44	60,729	5,342	47	302,028	506,518	204,490
1923	36	46,854	4,793	22	356,323	518,532	162,209
1924	37	58,754	4,705	32	252,866	433,456	180,590
1925	37	54,957	4,944	39	274,066	439,355	165,289
1926	48	55,216	4,959	32	336,610	493,626	157,016
1927	52	76,785	7,591	92	877,249	1,294,662	417,413

*Estimated.

Table 154.—Maple Syrup and Maple Sugar Industry: Production, 1926-27

Products	1927		1926	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Maple syrup	2,073,628	391,358	1,217,466	298,364
Maple sugar	4,667,457	830,018	626,357	112,228
Maple butter	34,250	8,208	21,250	5,567
Sugar butter	50,500	8,780	93,903	16,284
Peanut butter	356,000	54,500	345,000	55,500
Salted peanuts	.....	.....	20,000	4,000
Confectionery	8,250	1,635	8,000	1,600
Miscellaneous products	.....	163	.....	83
Total	.....	**1,294,662**	.....	**493,626**

Table 155.—Production of Maple Sugar and Maple Syrup in Canada, 1918-27

Year	Maple sugar		Maple syrup		Total value of sugar and syrup
	Quantity	Value	Quantity	Value	
	lb.	$	gal.	$	$
1918	10,173,622	1,526,043	1,928,201	2,892,301	4,418,344
1919	12,353,667	3,088,417	1,470,275	3,675,687	6,396,435
1920	15,615,141	3,123,028	1,449,649	3,624,023	6,747,151
1921	12,285,514	1,842,827	1,375,635	2,476,143	4,318,970
1922	9,016,650	1,352,497	1,575,074	2,835,133	4,187,630
1923	8,215,975	1,232,396	1,250,650	2,251,170	3,483,566
1924	9,385,415	1,907,599	1,970,696	4,083,542	5,991,141
1925	10,496,262	1,847,672	1,672,093	3,440,226	5,287,898
1926	7,137,303	1,320,837	1,746,570	3,575,538	4,896,375
1927	9,831,697	1,365,045	2,154,705	3,569,766	4,934,811

Table 156.—Production of Maple Sugar and Maple Syrup in Canada, by Provinces, 1926-27

Provinces and years	Maple sugar		Maple syrup	
	Quantity	Value	Quantity	Value
	lb.	$	gal.	$
1927				
Nova Scotia	53,950	16,085	4,414	11,476
New Brunswick	47,000	15,040	5,744	14,647
Quebec	9,104,174	1,183,543	1,423,986	1,922,381
Ontario	626,573	150,377	720,561	1,621,262
Total	**9,831,697**	**1,365,045**	**2,154,705**	**3,569,766**
1926				
Nova Scotia	32,270	11,617	3,640	10,629
New Brunswick	23,180	7,418	3,946	10,852
Quebec	6,405,143	1,152,926	960,772	1,748,605
Ontario	676,710	148,876	778,212	1,805,452
Total	**7,137,303**	**1,320,837**	**1,746,570**	**3,575,538**

Table 157.—Exports of Maple Sugar for the Fiscal Years 1917-18 to 1927-28

—	Total all countries		United Kingdom		United States	
	Quantity	Value	Quantity	Value	Quantity	Value
	lb.	$	lb.	$	lb.	$
1917-18	3,551,789	525,736	91,857	15,520	3,377,246	491,849
1918-19	4,703,366	1,062,895	169,270	48,569	4,412,178	977,443
1919-20	4,005,124	1,121,959	33,379	7,565	3,971,435	1,114,304
1920-21	7,999,233	1,962,258	18,924	5,499	7,979,970	1,956,637
1921-22	2,092,715	164,389	28,511	4,409	2,052,774	158,799
1922-23	2,738,227	374,457	40,745	8,049	2,695,561	366,106
1923-24	2,784,070	545,415	15,551	3,612	2,763,697	540,528
1924-25	3,973,358	559,536	2,727,234	4,768	3,943,743	554,067
1925-26	4,589,517	637,471	56,569	10,065	4,525,645	625,816
1926-27	4,178,821	676,237	22,293	4,631	4,141,462	667,747
1927-28	6,551,296	1,141,783	38,229	6,869	6,508,519	1,133,942

SYRUP INDUSTRY

The principal statistics of the industry producing syrup as its principal product are given in table 158 for the years 1920 to 1927. Previous to 1920, this industry was included with the miscellaneous food industry. From this table it is seen that the industry did not fare so well during the period under review; the number of establishments dropped from 10 to 8, capital invested from $263,336 to $213,805, value of production from $824,171 to $355,167 and value added by manufacture from $187,327 to $105,858. Although production decreased, yet the number of persons employed rose from 47 to 63. It is also interesting to note the displacement of male by female wage-earners. Although there were no female wage-earners in 1920, yet in 1927 they comprised 47·5 p.c. of the wage-earners employed.

This industry is confined entirely to Ontario, Alberta and Quebec. The last-named province with 6 establishments comprises practically the whole of the industry.

Table 158.—Syrup Industry: Principal Statistics, 1920-27

Year	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Cost of materials	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1920....	10	263,336	13	4	25,950	30	.....	28,290	4,210	36	636,844	824,171	187,327
1921....	9	210,051	12	4	21,202	28	.....	30,642	4,275	34	262,648	434,353	171,705
1922....	12	214,679	33	3	36,710	29	1	30,368	2,855	81	323,705	532,693	208,988
1923....	11	228,079	19	2	27,999	30	1	32,276	2,933	46	440,215	613,383	173,168
1924....	10	275,862	13	3	20,796	43	1	47,100	4,057	77	437,571	609,080	171,509
1925....	9	188,094	12	7	25,165	39	10	35,681	3,961	77	380,937	499,306	118,369
1926....	8	177,648	7	5	18,715	25	14	29,333	4,135	48	257,764	367,960	110,196
1927....	8	213,805	17	6	28,264	21	19	28,395	3,416	36	249,309	355,167	105,858

Table 159.—Syrup Industry: Production, by Classes, 1926 and 1927

Products	Unit of measure	1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Syrups	Gal.	213,252	156,547	142,707	127,440
Maple and sugar butter	Lb.	462,011	47,951	449,668	54,706
Peanut butter	"	394,107	56,125	360,000	57,000
Jams, etc	"	43,500	5,655	355,000	41,599
Flavouring extracts and essences	Gal.	1,000	10,000	3,500	35,000
Confectionery	Lb.	8,000	4,000	38,000	10,930
Other miscellaneous products	.....	.....	74,889	.....	41,285
Total	.....	.....	355,167	.....	367,960

CHAPTER VII

BEVERAGES

THE BREWING INDUSTRY

From a study of the principal statistics of the brewing industry from 1917 to 1927 given in table 160, the following main features of its growth may be noted. With the exception of the number of establishments which dropped from 74 to 73, all the other factors indicative of the progress of the industry recorded marked increases; the capital invested increased from $29,580,433 in 1917 to $62,358,117 in 1927, number of employees from 2,949 to 4,662, value of production from $15,425,763 to $51,528,024 and value added by manufacture from $8,679,123 to $34,056,725.

The development of the industry since 1917 was marked by a steady and at times very rapid growth, free from serious business depressions. During the first five years under review the industry made steady progress, the general depression prevalent in 1921 not affecting it seriously. In 1922, however, a moderate depression was experienced. Compared with the previous year, the number of establishments operating decreased by 2, number of persons employed dropped from 3,027 to 2,857, production declined from $30,931,853 to $25,875,730 and the value added by manufacture from $21,217,367 to $17,750,366. The following year saw a complete recovery and since then the growth was most marked, new records for number of establishments, capital, employees, production and value added by manufacture being established each year, the only exception being the number of employees in 1926 which shows a slight decrease over that of 1925.

In 1927 there were 73 establishments engaged in the production of beer and ale, located throughout the Dominion as follows: Ontario 33, British Columbia 9, Quebec 9, Manitoba 8 Alberta 6, Saskatchewan 4, New Brunswick 2 and Nova Scotia 2. The centre of this industry at the present, the same as in 1917, is in Quebec where the largest plants are located. The 9 plants operating in Quebec while comprising but 12·3 p.c. of all the establishments, employed 33 p.c. of the capital, 35·1 p.c. of the employees and produced 39 p.c. of the total output.

The importance of the brewing industry may be seen on referring to table 5 which shows that in the vegetable products group of industries, it is first in the amount of capital invested, second in the value added by manufacture, seventh in the value of production and seventh in the number of persons employed.

Table 160.—Brewing Industry: Principal Statistics, 1917-27

Year and Province	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1917													
Canada	74	29,580,433	495	65	925,629	2,320	69	1,836,387	495,829	13,277	6,746,640	15,425,763	8,679,123
Quebec	13	10,172,460	156	25	322,785	857	32	616,731	150,764	2,409	2,661,117	6,462,604	3,801,487
Ontario	29	9,065,051	166	21	293,966	734	3	608,261	154,891	4,531	1,554,513	4,039,726	2,485,213
Manitoba	8	4,432,618	82	7	138,185	357	25	301,987	104,035	2,917	1,169,397	2,356,321	1,186,924
Alberta	5	3,350,229	37	6	77,063	181	2	160,861	37,354	2,055	788,631	1,399,841	611,210
British Columbia	13	1,124,936	22	3	39,952	85	1	87,382	19,480	802	279,488	604,790	325,302
Other provinces	6	1,435,139	32	3	53,678	106	6	61,165	29,305	563	293,494	562,481	268,987
1918													
Canada	63	32,433,507	447	63	896,898	2,157	84	1,908,076	525,539	9,705	6,543,058	16,370,946	9,827,888
Quebec	10	10,465,809	148	19	321,734	862	36	655,407	187,808	1,699	3,333,705	7,573,313	4,239,608
Ontario	24	8,999,929	145	25	266,567	636	1	628,127	175,051	3,725	1,412,638	4,339,781	2,927,143
Manitoba	7	5,019,899	75	10	141,790	321	37	283,916	82,530	1,396	525,670	1,488,379	962,709
Alberta	4	2,811,105	26	3	53,361	147	2	137,929	18,443	1,500	446,390	1,002,534	556,144
British Columbia	14	3,925,896	35	3	71,325	133	1	149,938	31,683	775	589,630	1,514,454	924,824
Other provinces	4	1,210,869	18	3	42,121	58	7	52,729	30,024	610	235,025	452,485	217,460
1919													
Canada	57	28,119,447	405	45	858,557	2,181	55	2,272,908	547,823	8,687	* 8,093,403	20,169,074	12,075,671
Quebec	10	11,038,855	145	12	303,424	960	42	988,749	220,913	2,727	4,143,009	10,096,400	5,953,391
Ontario	21	8,551,936	130	23	290,274	637	6	646,044	162,000	3,641	1,687,699	4,690,670	3,002,971
Manitoba	5	2,792,594	52	1	88,884	247	.....	231,541	63,672	977	477,676	1,369,929	892,253
Alberta	4	1,504,053	21	3	55,357	90	1	100,146	20,936	823	399,966	910,044	510,078
British Columbia	13	3,178,384	35	3	78,716	185	1	244,420	52,451	.....	1,191,871	2,613,675	1,421,804
Other provinces	4	1,053,625	22	3	41,902	62	5	62,008	27,851	519	193,182	488,356	295,174
1920													
Canada	57	37,494,396	490	68	1,089,664	2,777	33	3,289,996	755,400	10,492	12,525,107	31,679,501	** 19,154,394
Quebec	10	14,798,363	183	17	391,392	1,350	20	1,441,356	308,197	2,561	6,406,800	16,815,666	10,408,866
Ontario	20	8,875,458	151	34	343,793	695	4	852,059	227,489	3,658	2,220,829	5,876,008	3,655,179
Manitoba	5	2,924,676	52	4	99,077	231	.....	285,891	78,234	1,418	606,569	1,732,435	1,125,866
Alberta	5	4,834,367	35	8	92,109	189	2	249,147	33,318	1,475	880,914	1,971,625	1,090,711
British Columbia	13	4,911,683	46	3	111,533	243	.....	386,971	71,907	906	2,108,575	4,549,982	2,441,407
Other provinces	4	1,149,849	23	2	51,760	69	7	74,572	36,255	474	301,420	733,785	432,365
1921													
Canada	55	37,645,447	516	55	1,276,635	2,435	21	3,076,978	765,232	10,275	* 9,714,486	30,931,853	21,217,367
Quebec	10	15,414,144	171	13	436,901	1,198	13	1,429,340	318,265	3,056	4,940,113	15,457,328	10,517,215
Ontario	19	7,970,295	165	27	398,259	644	.....	802,196	265,037	3,133	1,885,874	6,086,180	4,200,306
Manitoba	5	2,988,204	56	3	106,515	180	.....	239,002	67,117	1,238	401,037	1,508,109	1,107,072
Alberta	5	4,896,874	52	6	131,551	166	4	243,015	31,422	1,399	923,765	4,015,947	3,092,182
British Columbia	12	5,259,797	48	2	144,325	190	1	292,960	51,710	1,129	1,349,229	3,272,100	1,922,871
Other provinces	4	1,116,133	24	4	59,084	57	3	70,465	28,681	320	214,468	592,189	377,721
1922													
Canada	53	34,788,432	472	68	1,328,356	2,284	33	2,574,881	582,070	12,031	8,125,364	25,875,730	17,750,366
Quebec	10	16,091,052	173	13	469,647	1,228	17	1,262,681	274,009	3,924	4,616,575	15,032,704	10,416,129
Ontario	19	9,514,645	166	44	514,874	590	7	739,718	177,282	3,516	1,711,059	5,624,164	3,913,105
Manitoba	4	1,294,250	33	.....	73,793	114	.....	134,815	39,301	904	384,495	1,459,058	1,074,563
Alberta	5	4,502,020	48	8	131,381	165	2	201,361	26,591	1,778	646,416	1,926,605	1,280,189
British Columbia	11	2,293,306	29	.....	75,859	122	1	164,147	36,634	1,276	497,892	1,073,170	575,278
Other provinces	4	1,093,159	23	3	62,802	65	6	72,162	28,253	633	268,927	760,029	491,102

Table 160.—Brewing Industry: Principal Statistics, 1917-27—Concluded

Year and Province	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1923													
Canada	52	38,384,708	479	58	1,336,677	2,530	33	2,971,873	550,200	12,765	9,846,130	29,260,243	19,414,113
Quebec	9	19,266,369	176	12	467,659	1,307	15	1,458,059	250,068	4,703	5,156,233	16,046,539	10,890,306
Ontario	19	10,035,688	156	33	489,977	709	12	881,263	156,864	3,731	2,275,747	6,950,829	4,675,082
Manitoba	4	1,263,881	40	1	89,499	124	.....	153,788	38,983	920	422,359	1,493,938	1,071,579
Alberta	5	4,337,408	52	7	136,338	175	2	221,538	26,862	1,782	875,954	2,328,963	1,453,009
British Columbia	10	2,361,309	30	1	79,594	139	1	179,311	43,822	992	826,972	1,525,322	698,350
Other provinces	5	1,120,053	25	4	73,610	76	3	77,914	33,601	637	288,865	914,652	625,787
1924													
Canada	57	45,375,529	544	62	1,486,096	3,176	38	3,861,467	576,983	14,964	15,368,618	33,532,783	18,164,165
Quebec	9	19,094,244	168	14	460,909	1,490	12	1,607,302	236,867	5,023	8,075,276	15,958,656	7,883,380
Ontario	21	11,786,952	163	30	455,638	804	15	1,048,766	150,012	4,147	3,011,444	6,572,985	3,561,541
Manitoba	6	3,516,228	71	2	177,462	347	6	485,364	77,673	1,755	1,125,783	3,586,921	2,461,138
Alberta	5	4,823,975	68	11	170,408	217	1	302,149	33,362	1,956	1,496,572	3,654,999	2,158,427
British Columbia	11	4,955,602	48	4	144,055	233	.....	319,623	51,766	1,442	1,322,284	2,800,394	1,478,110
Other provinces	5	1,198,528	26	1	77,624	85	4	98,263	33,303	641	337,259	958,828	621,569
1925													
Canada	62	51,222,456	596	67	1,606,085	3,371	39	4,027,850	614,811	17,203	14,692,473	38,897,995	24,205,522
Quebec	9	20,705,026	172	14	440,751	1,472	12	1,576,073	234,912	5,678	6,450,449	17,461,266	11,010,817
Ontario	24	13,224,398	177	35	541,289	889	12	1,110,052	152,120	4,830	3,407,733	7,668,442	4,260,709
Manitoba	7	3,654,812	81	3	180,050	404	6	525,440	88,676	2,201	1,095,916	4,397,859	3,301,943
Saskatchewan	3	926,033	15	1	35,924	57	.....	65,910	19,993	510	403,117	779,273	376,156
Alberta	6	6,430,855	93	10	188,371	253	6	372,490	45,401	1,997	1,515,834	4,578,295	3,062,461
British Columbia	10	5,457,799	43	4	169,009	237	.....	307,571	51,712	1,630	1,512,063	3,382,514	1,870,451
Nova Scotia and New Brunswick	3	823,533	15	.....	50,691	59	3	70,314	21,997	357	307,361	630,346	322,985
1926													
Canada	63	53,893,942	593	68	1,803,133	3,275	40	3,930,436	569,111	18,577	14,448,510	43,602,960	29,154,450
Quebec	8	20,787,678	173	13	461,193	1,314	13	1,391,122	179,522	6,123	5,487,294	18,953,387	13,466,093
Ontario	24	13,419,484	178	38	549,853	853	13	1,061,416	152,913	5,005	3,589,512	7,858,680	4,269,168
Manitoba	8	4,212,976	77	4	295,466	446	6	609,283	87,273	2,307	1,365,775	4,784,805	3,419,030
Saskatchewan	4	1,686,423	16	2	58,835	104	.....	133,188	35,779	809	780,286	2,031,411	1,251,125
Alberta	6	7,079,687	93	9	221,365	259	4	342,223	36,433	1,997	1,375,721	5,086,810	3,711,089
British Columbia	10	5,861,414	42	2	160,788	242	.....	328,218	55,547	1,976	1,540,542	4,262,495	2,721,953
Nova Scotia and New Brunswick	3	846,280	14	.....	55,633	57	4	64,986	21,644	360	309,380	625,372	315,992
1927													
Canada	73	62,358,117	755	100	1,996,084	3,763	44	4,440,636	605,761	19,977	17,471,299	51,528,024	34,056,725
Quebec	9	20,563,180	189	15	509,563	1,418	13	1,537,565	185,529	6,153	6,161,446	20,065,498	13,904,052
Ontario	33	20,350,795	303	65	719,242	1,286	12	1,401,623	206,121	6,547	6,168,025	15,627,375	9,459,350
Manitoba	8	4,676,736	103	9	344,989	421	8	585,441	69,363	2,375	1,420,913	4,812,903	3,391,987
Saskatchewan	4	1,888,538	17	2	58,355	101	.....	129,736	36,136	823	903,010	2,297,372	1,394,362
Alberta	6	8,210,434	92	7	175,044	255	6	354,614	40,632	1,950	1,209,211	4,417,990	3,208,779
British Columbia	9	5,642,564	34	2	120,983	211	.....	363,794	47,837	1,669	1,320,975	3,639,204	2,318,229
Nova Scotia and New Brunswick	4	1,025,870	17	.....	67,908	71	5	67,863	20,743	469	287,719	667,685	379,966

*Estimated. **This includes $1,983,642 of new construction and additions to plant.

Table 161.—Summary Statistics of the Brewing Industry.

—		1917	1920	1921	1926	1927
Number of establishments		74	57	55	63	73
Capital	$	29,580,433	37,494,396	37,645,447	53,893,942	62,358,117
Average per establishment	$	399,736	657,796	684,463	855,460	854,221
Average per employee	$	10,031	11,133	12,436	13,555	13,376
Salaries	$	925,629	1,089,664	1,276,635	1,803,133	1,996,084
Average per salaried employee	$	1,653	1,953	2,236	2,728	2,335
Wages	$	1,836,387	3,289,996	3,076,978	3,930,436	4,440,636
Average per wage-earner	$	769	1,171	1,253	1,186	1,166
Total number of employees		2,949	3,368	3,027	3,976	4,662
Average per establishment		39·9	59·1	55·0	63·1	63·9
Gross value of products	$	15,425,763	31,679,501	30,931,853	43,602,960	51,528,024
Average per establishment	$	208,456	555,781	562,397	692,110	705,863
Average per employee	$	5,231	9,406	10,219	10,967	11,053
Value added by manufacture	$	8,679,123	19,154,394	21,217,367	29,154,450	34,056,725
Average per establishment	$	117,285	336,042	385,770	462,769	466,530
Average per employee	$	2,943	5,687	7,009	7,333	7,305
Power employed	H.P.	13,277	10,492	10,275	18,577	19,977
Average per establishment	H.P.	179	184	187	295	274
Average per wage-earner	H.P.	5·6	3·7	4·2	5·6	5·2

Capital.—The capital invested in the brewing industry by classes from 1917 to 1927 is shown in table 162 and by classes and provinces for 1927 in table 163. The fixed capital which amounted to $18,687,814 in 1917 rose to $41,426,121 in 1927, an increase of 122 p.c. while working capital rose from $10,892,619 to $20,931,996, an increase of only 92 p.c. The ratio between fixed and working capital changed since 1917 as follows:

—	1917	1927
	p.c.	p.c.
Fixed capital	63·2	66·4
Working capital	36·8	33·6
	100·0	100·0

As mentioned before, the largest plants are located in Quebec, where $14,147,125 was invested in fixed capital in 1927 or an average of $1,571,903 per plant, the next highest being in Alberta with an average of $854,981 per plant.

Table 162.—Brewing Industry: Capital Invested, by Classes, 1917-27

Year	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Inventories, etc.	Cash, trading and operating accounts	
	$	$	$	$
1917	18,687,814	4,658,513	6,234,106	29,580,433
1918	19,821,157	4,762,098	7,850,252	32,433,507
1919	17,632,971	4,659,804	5,826,672	28,119,447
1920	22,133,853	6,324,478	9,036,065	37,494,396
1921	25,343,745	5,177,777	7,123,925	37,645,447
1922	24,181,417	4,755,054	5,851,961	34,788,432
1923	26,170,032	5,848,894	6,365,782	38,384,708
1924	30,959,833	6,682,419	7,733,277	45,375,529
1925	35,068,783	7,360,635	8,793,038	51,222,456
1926	35,875,003	7,810,203	10,208,736	53,893,942
1927	41,426,121	8,909,120	12,022,876	62,358,117

Table 163:—Brewing Industry: Capital Invested, by Provinces, 1927

Provinces	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Materials on hand, stocks in process, fuel and miscellaneous supplies	Cash, trading and operating accounts, and bills receivable	
	$	$	$	$
Canada	41,426,121	8,909,120	12,022,876	62,358,117
Maritime Provinces	667,898	107,599	250,373	1,025,870
Quebec	14,147,125	3,176,287	3,239,768	20,563,180
Ontario	13,235,741	3,529,115	3,585,939	20,350,795
Manitoba	2,751,478	731,061	1,194,197	4,676,736
Saskatchewan	1,265,087	281,060	342,391	1,888,538
Alberta	5,129,687	675,272	2,405,475	8,210,434
British Columbia	4,229,105	408,726	1,004,733	5,642,564

Production.—The quantity and value of full strength beer, ale, porter, etc., produced in Canada is shown comparatively in the summary table following for the calendar years 1917 to 1927. It will be noted that the volume of production of beer, etc., in barrels reached its maximum in 1921 with an output of 19,272,847 gallons, and also in value stated at $9,537,971. Bottled ale, beer, etc., reached the maximum both in quantity and value of production in 1927, the total gallonage rising from upwards of fifteen million gallons in 1917 to 38,744,841 gallons in 1927 and the value from $8,895,315 to $38,764,966.

Table 164.—Brewing Industry: Production, 1917-27

Year	Beer, ale, etc.—In barrels		Beer, ale, etc.—In bottles	
	Quantity	Value	Quantity	Value
	gal.	$	gal.	$
1917	11,162,445	4,594,956	15,740,107	8,895,315
1918	15,898,217	6,610,033	12,111,976	8,304,678
1919	18,267,628	7,046,684	16,622,905	12,076,153
1920	16,543,528	8,361,563	21,822,540	20,227,059
1921	19,272,847	9,337,971	22,028,580	20,275,495
1922	13,106,429	6,057,733	22,500,303	19,169,207
1923	12,483,585	6,280,820	21,224,317	18,392,491
1924	15,842,673	7,935,019	23,581,379	21,914,222
1925	14,338,793	8,246,285	30,153,075	27,115,207
1926	15,568,668	8,449,714	30,781,445	32,342,698
1927	15,231,340	10,899,630	38,744,841	38,764,966

The quantity and the selling value at the brewery of the principal products of the industry are shown for Canada and the provinces in Table 165. Full strength beer, ale, etc., in barrels decreased from the 1926 production by 337,328 gallons for all Canada, whilst bottled full strength beer, ale, etc., increased by 7,963,396 gallons. The value of beer, ale, etc., of full strength whether in barrels or bottles increased over 1926 by $8,872,184. In beer, ale, etc., under full strength (2·5 and 4·4) there was in all Canada a further decrease of 1,657,042 gallons and of $1,095,124 in value. The province of Ontario alone shows a decrease of 1,571,460 gallons and of $1,058,287 in value, whilst the other provinces also show a decrease in value.

The average selling price of the bottled full strength product in 1927 was $1.00 per gallon, and of the draft 71·5 cents per gallon, whilst that under full strength averaged at 97·3 cents per gallon in bottles and 78·3 cents for draft. Of the total quantity produced in 1927 the province of Quebec supplied 51·3 per cent, Ontario 25 per cent, Alberta 9 per cent, British Columbia 5·5 per cent, Manitoba 6 per cent, Saskatchewan 2·6 per cent and the Maritime provinces (New Brunswick and Nova Scotia) less than 1 per cent.

Table 165.—Brewing Industry: Production for Canada and the Provinces, 1927

Products	Unit	Canada		Maritime Provinces		Quebec		Ontario	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$		$
Beer, ale, etc., in barrels (full strength)	Gal.	15,231,340	10,899,630	58,235	53,662	6,205,033	2,749,052	4,153,435	4,411,665
Beer, ale, etc. in bottles (full strength)	"	38,744,841	38,764,966	372,948	587,864	21,973,294	17,107,910	8,652,167	10,051,698
Beer, ale, etc. in barrels (under full strength)	"	337,831	264,585	.....	.....	.....	.....	337,831	264,585
Beer, ale, etc., in bottles (under full strength)	"	598,016	581,910	18,447	21,001	.....	.....	543,187	523,592
Malt flour and malt extract (value only)	.....	.....	7,677	.....	.....	.....	.....	.....	7,677
Grains sold, wet or dry (value only)	.....	.....	306,365	.....	3,335	.....	208,536	.....	46,290
Aerated waters (value only)	.....	.....	609,591	.....	1,823	.....	.....	.....	302,434
All other products (value only)	.....	.....	93,300	.....	.....	.....	.....	.....	19,434
Total Value	.....	.....	51,528,024	.....	667,685	.....	20,065,498	.....	15,627,375

		Manitoba		Saskatchewan		Alberta		British Columbia	
Beer, ale, etc. in barrels (full strength)	Gal.	246,540	226,034	.....	.....	3,043,061	2,335,252	1,525,036	1,123,965
Beer, ale, etc., in bottles (full strength)	"	2,985,010	4,284,711	1,439,195	2,292,741	1,852,940	1,961,733	1,409,287	2,478,309
Beer, ale, etc. in barrels (under full strength)	"	.....	.....	.....	.....	.....	.....	.....	.....
Beer, ale, etc., in bottles (under full strength)	"	27,046	24,200	.....	.....	9,336	13,117	.....	.....
Malt flour and malt extract (value only)	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grains sold, wet or dry (value only)	.....	.....	15,654	.....	2,769	.....	13,223	.....	16,558
Aerated waters (value only)	.....	.....	209,710	.....	.....	.....	81,245	.....	14,379
All other products (value only)	.....	.....	52,591	.....	1,862	.....	13,420	.....	5,993
Total Value	.....	.....	4,812,900	.....	2,297,372	.....	4,417,990	.....	3,639,204

Table 166.—Consumption of Ale, Beer, Porter, etc., in Canada, 1922-27

Year	—	Production	Imports	Exports	Available for consumption	Per capita consumption
1922	Gal.	35,606,732	52,088	1,356,523	34,302,297	3·80
	$	25,226,940	116,288	2,593 765	22,749,463	2·54
1923	Gal.	33,707,902	96,39[illegible]	2,951,785	30,852,516	3·40
	$	24,673,311	214,675	5,000,815	19,887,171	2·19
1924	Gal.	39,424,052	88,156	3,194,080	36,318,128	3·90
	$	29,849,241	176,266	5,044,011	24,981,496	2·71
1925	Gal.	44,491,868	140,598	3,714,736	40 917,730	4·40
	$	38,361,492	288,871	5,088,414	30,561,949	3·26
1926	Gal.	46,350,113	148,398	4,239,085	42,259,426	4·50
	$	40,792,412	320,460	5,552,769	35,560,103	3·79
1927	Gal.	53,976,181	223,025	3,916,163	50,283,643	5·28
	$	49,664,596	410,150	5,481,707	44,593,039	4·69

Materials Used.—The quantity and the cost value delivered at the works of all materials used during 1927 including freight and duty is shown by provinces in Table 7. A comparison of the cost of various items of materials used in 1926 with the present year shows an increase in the cost of materials used in the Dominion during 1927 amounting to $3,022,789, chiefly due to an increase of ten in the number of plants reporting.

Table 167.—Brewing Industry: Cost of Materials Used in 1927

—	Unit	Canada		Maritime Provinces		Quebec		Ontario	
		Quantity	Cost value	Quantity	Cost value	Quantity	Cost value	Quantity	Cost value
			$		$		$		$
Barley for malting	Bush.	137,687	123,278	.....	.....	111,218	85,655	8,097	17,087
Malt purchased including duty:									
(a) Canadian malt	Pound	103,091,595	6,315,835	1,404,500	89,624	60,315,525	3,735,272	14,401,587	841,756
(b) Foreign malt	"	22,072,127	1,379,259	10,320	857	.....	.....	19,418,165	1,201,434
Hops	"	2,837,306	1,263,903	38,964	20,775	1,685,997	713,107	684,305	301,026
Water purchased	M. gal.	1,106,444	169,473	17,757	2,909	475 715	74,903	308,793	41,702
Anhydrous ammonia	Pound	76,366	15,600	1,880	366	24,581	4,092	25,214	4,495
Carbon dioxide (carbonic acid gas)	"	1,139,926	68,313	8,187	1,066	655,100	23,994	293,024	24,374
Calcium chloride	"	272,743	7,317	.....	.....	7,227	325	130,200	2,949
Common salt	"	478,515	4,021	500	10	132,282	1,310	316,180	2,285
Cooperage (barrels, all sizes)	.....	.....	515,126	.....	3,101	.....	54,419	.....	381,762
Cases	.....	.....	572,718	.....	7,087	.....	95,305	.....	229,206
Bottles purchased	.....	.....	4,721,218	.....	134,806	.....	941,688	.....	1,977,914
Labels	.....	.....	254,032	.....	3,006	.....	85,619	.....	65,128
Other supplies (crowns, corks, bungs, etc.)	.....	.....	2,061,206	.....	24,112	.....	345,757	.....	1,076,907
Total Cost	.....	.....	**17,471,299**	.....	**287,719**	.....	**6,161,446**	.....	**6,168,025**

Materials		Manitoba		Saskatchewan		Alberta		British Columbia	
Barley for malting	Bush.	.....	.....	.....	.....	.....	.....	18,372	20,536
Malt purchased including duty:									
(a) Canadian malt	Pound	7,656,146	441,098	3,504,234	211,037	10,021,303	587,045	5,788,300	410,003
(b) Foreign malt	"	924,898	59,108	49,980	3,548	162,050	9,978	1,506,714	104,334
Hops	"	113,198	64,976	57,022	28,145	133,811	79 891	124,009	55,983
Water purchased	M. gal.	118,369	21,067	68,246	8,805	40,006	8,437	77,556	11,650
Anhydrous ammonia	Pound	10,873	2,505	2,685	767	5,883	1,994	5,250	1,381
Carbon dioxide (carbonic acid gas)	"	155,585	15,583	13,450	1,770	450	79	8,230	1,447
Calcium chloride	"	56,149	2,000	29,360	1,110	730	25	49,077	908
Common salt	"	8,095	124	2,925	52	.....	.....	18,533	240
Cooperage (barrels, all sizes)	.....	.....	16,189	.....	423	.....	30,446	.....	28,786
Cases	.....	.....	100,921	.....	71,456	.....	58,357	.....	10,386
Bottles purchased	.....	.....	411,859	.....	445,143	.....	276,840	.....	532,968
Labels	.....	.....	27,340	.....	13,451	.....	46,036	.....	13,452
Other supplies (crowns, corks, bungs, etc.)	.....	.....	258,143	.....	117,303	.....	110,083	.....	128,901
Total Cost	.....	.....	**1,420,913**	.....	**803,010**	.....	**1,209,211**	.....	**1,320,975**

Employment and Salaries and Wages Paid.—The monthly employment of wage-earners by sex during 1926 and 1927 is given in table 168. From this it is seen that employment is fairly steady throughout the year, the variation between the maximum and minimum being about 23 p.c. Employment, also, is at a minimum in January and then increases each month until the maximum is reached in July or August after which it begins to drop off until a minimum is reached again in January. It should be noted that over 98 p.c. of the wage-earners in this industry are males.

Table 169 which gives the number of hours worked per day by wage-earners in the month of highest employment shows that in 1927, 21·2 p.c. of the wage-earners in Canada worked 8 hours or less per day, 33·1 p.c. worked 9 hours, 40·7 p.c. worked 10 hours and 5·0 p.c. worked over 10 hours, the average being 8·9 hours per day. This compares with an average of 9·2 hours the preceding year. Also in 1927, 10 hours per day was the average in Quebec, 9 hours in Ontario and Manitoba, 8·6 hours in Alberta, and 8 hours in British Columbia. Since 1917, the hours worked per day have changed very little, as table 170 shows.

The average number of hours worked per day and per week, the number of days that establishments operated on full time and the average salaries and wages paid since 1917 are given in table 170. Throughout the Dominion as a whole salaries increased from $1,653 in 1917 to $2,335 in 1927, an increase of 41 p.c. while wages increased from $769 to $1,166, or an increase of 52 p.c. The wages paid are the fourth highest of the whole vegetable products group being exceeded only by the wages paid in malt mills, sugar refineries and rubber tire factories. It is also interesting to note that higher wages prevail in the Western Provinces and that the lowest wages are paid in Quebec.

Table 168.—Brewing Industry: Employment of Wage-earners, by Months, 1926-27

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	3,126	41	3,167	2,985	35	3,020
February	3,144	41	3,185	3,027	34	3,06
March	3,197	37	3,234	3,055	34	3,089
April	3,201	37	3,238	3,139	35	3,174
May	3,389	37	3,426	3,325	38	3,363
June	3,803	43	3,846	3,402	41	3,443
July	4,240	47	4,287	3,675	43	3,718
August	4,263	50	4,313	3,621	45	3,666
September	4,148	46	4,194	3,433	42	3,475
October	3,774	41	3,815	3,219	42	3,261
November	3,715	41	3,757	3,225	44	3,269
December	3,705	44	3,749	3,180	42	3,222
Average	**3,763**	**44**	**3,807**	**3,275**	**40**	**3,315**

Table 169.—Brewing Industry: Hours Worked by Wage-earners in Month of Highest Employment, 1925-27

Year and Provinces		Number of wage-earners working per day				Percentage of wage-earners working per day			
		8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
Canada	1925	657	1,534	1,666	202	16·2	37·8	41·0	5·0
	1926	840	1,362	1,606	150	21·2	34·4	40·6	3·8
	1927	982	1,533	1,888	233	21·2	33·1	40·7	5·0
Quebec	1925	33	56	1,313	183	2·1	3·5	82·8	11·6
	1926	26	61	1,260	103	1·7	4·2	87·0	7·1
	1927	27	25	1,423	168	1·6	1·6	86·6	10·2
Ontario	1925	249	763	218	9	20·1	61·6	17·6	0·7
	1926	249	560	232	27	23·3	52·4	21·7	2·6
	1927	465	812	349	60	27·6	48·2	20·7	3·5
Manitoba	1925	71	311	68	1	15·7	69·0	15·1	0·2
	1926	90	344	74	1	17·7	67·6	14·5	0·2
	1927	45	343	81	.....	9·6	73·1	17·3	.....
Alberta	1925	117	215	3	6	34·3	63·0	0·9	1·8
	1926	165	258	2	.....	38·8	60·7	0·5	.....
	1927	152	231	.....	.....	39·7	60·3	.....	.....
British Columbia	1925	171	106	.....	.....	61·7	38·3	.....	.....
	1926	290	9	.....	.....	97·0	3·0	.....	.....
	1927	240	.....	.....	.....	100·0	.....	.....	.....

Table 170 —Brewing Industry: Hours Worked and Salaries and Wages Paid, 1917-27

Province and Year	Hours worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
1917				$	$
Canada	9·3	54·5	297	1,653	769
Quebec	9·9	58·9	299	1,783	693
Ontario	9·2	54·0	299	1,572	825
Manitoba	9·2	55·2	300	1,553	791
Alberta	8·0	46·5	297	1,792	879
British Columbia	9·0	53·0	282	1,598	1,016
1920					
Canada	9·0	52·1	294	1,953	1,171
Quebec	10·0	59·3	303	1,957	1,052
Ontario	9·2	52·8	295	1,858	1,219
Manitoba	8·6	49·4	296	1,769	1,238
Alberta	8·0	44·4	299	2,142	1,304
British Columbia	8·3	48·9	279	2,276	1,592
1921					
Canada	9·0	52·4	296	2,236	1,253
Quebec	10·0	58·6	303	2,374	1,180
Ontario	9·0	52·3	304	2,074	1,246
Manitoba	9·2	53·8	293	1,805	1,328
Alberta	8·4	47·2	297	2,268	1,430
British Columbia	8·2	48·2	274	2,886	1,534
1926					
Canada	9·2	52·6	283	2,728	1,186
Quebec	10·0	57·6	303	2,480	1,048
Ontario	9·0	53·4	267	2,546	1,226
Manitoba	9·0	52·5	294	3,646	1,104
Alberta	8·6	48·0	289	2,170	1,301
British Columbia	8·0	48·0	284	3,654	1,356
1927					
Canada	8·9	51·6	274	2,335	1,166
Quebec	10·0	57·4	284	2,498	1,074
Ontario	9·0	51·8	255	1,954	1,080
Manitoba	9·1	53·1	296	3,080	1,365
Alberta	8·6	47·0	269	1,768	1,359
British Columbia	8·0	48·0	298	3,361	1,724

Fuel Consumption.—The quantity and value of the various kinds of fuel used by the brewing industry from 1917 to 1927 are shown in table 171. The principal fuel used is bituminous coal which comprises about 80 p.c. of the whole fuel bill amounting to $605,761 in 1927. The increasing use of electrical power should be noted. During the 10-year period, the amount spent for fuel increased only 22 p.c. while that spent for electricity increased 196 p.c.

Table 171.—Brewing Industry: Fuel Consumption, 1917-27

Year	Bituminous coal		Anthracite coal		Lignite coal		Coke		Gasoline	
	Tons	Value	Tons	Value	Tons	Value	Tons	Value	Gallons	Value
		$		$		$		$		$
1917	51,902	368,611	16,634	96,577	.....	.....	.....	.....	4,121	1,331
1918	58,302	456,062	6,914	43,790	1,316	2,402	20	283	5,177	1,631
1919	57,410	405,508	16,090	100,628	1,710	4,325	565	3,560	28,851	10,105
1920	60,325	576,744	9,476	82,680	6,442	34,579	991	6,681	60,954	26,773
1921	69,427	666,560	6,899	54,999	3,272	12,678	2	28	37,683	14,788
1922	60,687	499,732	2,940	24,663	10,796	32,083	.....	.....	36,057	13,249
1923	57,624	428,868	10,845	82,371	3,288	21,226	.....	.....	37,453	10,690
1924	67,720	482,005	4,134	42,328	6,421	22,500	.....	.....	60,928	17,789
1925	86,388	507,780	5,367	36,738	6,262	24,757	.....	.....	86,016	23,975
1926	66,662	409,470	7,222	43,504	12,071	59,047	5	78	73,730	21,989
1927	79,224	493,180	1,140	9,027	12,111	49,103	754	7,617	28,127	7,699

Year	Oil		Wood		Gas, artificial and natural		Other fuel	Total	Cost of electricity
	Gallons	Value	Cords	Value	M cu. ft.	Value	Value	Value	Value
		$		$		$	$	$	$
1917	.....	80	304	9,350	136,235	19,487	393	495,829	66,904
1918	72,012	3,970	2,723	10,335	44,862	7,066	.....	525,539	66,953
1919	245,475	13,608	2,284	9,586	7,266	503	.....	547,823	66,440
1920	184,947	11,035	2,842	13,914	6,242	501	2,493	755,400	65,912
1921	164	22	3,491	15,531	1,252	626	.....	765,232	70,018
1922	.....	.....	1,645	8,121	3,035	664	3,558	582,070	[1]
1923	.....	.....	1,259	5,912	1,492	809	324	550,200	97,628
1924	1,104	105	2,811	10,079	17,547	1,816	361	576,983	146,120
1925	51,588	3,869	3,734	13,737	25,558	3,721	234	614,811	160,850
1926	64,923	4,869	3,782	14,976	75,820	15,178	.....	569,111	174,497
1927	58,018	4,351	1,809	8,693	109,478	20,493	5,598	605,761	198,350

[1] Not asked for on schedule.

Power Installation.—The power installed in the brewing industry by classes and horse-power capacity according to manufacturers' rating is shown in table 172 for 1917 to 1927.

Table 172.—Brewing Industry: Power Installation, According to Manufacturers' Rating, 1917-27

Year	Steam engines and turbines		Oil, gas and gasoline engines		Hydraulic turbines or water wheels		Electric motors operated by purchased power	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
1917	164	7,022	5	76	.....	.....	452	6,179
1918	109	5,149	3	116	.....	.....	383	4,440
1919	87	5,310	1	8	.....	.....	395	3,369
1920	107	5,505	2	36	.....	.....	400	4,891
1921	120	5,883	.....	.....	.....	.....	515	4,392
1922	119	6,177	1	35	.....	.....	584	5,819
1923	121	6,157	1	4	1	1	717	6,603
1924	115	6,205	2	29	.....	.....	894	8,730
1925	125	6,835	.....	.....	.....	.....	1,088	10,368
1926	132	7,395	.....	.....	.....	.....	1,213	11,182
1927	128	7,202	.....	.....	.....	.....	1,381	12,775

Year	Total power used for manufacturing		Electric motors operated by owned power		Total electric motors		Boilers installed	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
1917	621	13,277	181	1,227	633	7,406	.....	[1]
1918	495	9,705	270	1,713	653	6,153	73	7,468
1919	483	8,[illegible]87	198	1,694	593	5,063	103	10,076
1920	509	10,492	230	1,499	630	6,390	96	9,835
1921	635	10,275[2]	257	2,358	772	6,750	108	12,642
1922	704	12,031	179	1,247	763	7,066	104	12,048
1923	840	12,765	179	1,220	896	7,823	94	11,881
1924	1,011	14,964	171	1,515	1,065	10,245	96	11,308
1925	1,213	17,203	118	1,062	1,206	11,420	99	12,706
1926	1,345	18,577	101	976	1,314	12,158	97	12,524
1927	1,509	19,977	182	1,295	1,563	14,070	130	16,803

[1]Not reported in 1917.
[2]Estimated.

Imports and Exports.—The quantity and value of full strength beer, ale, porter, etc., imported into and exported from Canada is shown comparatively for the calendar years 1917 to 1927 in the table following. Imports of beer, ale and porter attained the maximum in quantity and value in 1927 when 213,025 gallons were imported, 69 per cent of which came from the United Kingdom, Japan being next with nearly 20 per cent. It is however in the exportation of Canadian products that increases are most marked, the quantity exported rising from 189,990 gallons in 1917 to 4,239,085 gallons in 1926, whilst the value correspondingly rose from $104,273 in 1917 to $5,552,769 in 1926. In 1927, however, there were small decreases both in quantity and value of export, the former amounting to 322,922 gallons and the latter to $71,062. Over 99 p.c. of the total exports in 1927 had their destination in the United States as table 175 shows.

Table 173.—Brewing Industry: Imports and Exports for the Calendar Years 1917-27

Year	Imports		Exports	
	Quantity	Value	Quantity	Value
	gal.	$	gal.	$
1917	107,635	88,726	189,990	104,273
1918	35,242	33,785	230,336	178,023
1919	29,354	42,428	241,994	157,150
1920	65,364	120,453	756,381	859,364
1921	52,785	124,038	398,090	654,034
1922	52,088	116,288	1,356,523	2,593,765
1923	96,399	214,675	2,951,785	5,000,815
1924	88,156	176,266	3,194,080	5,034,011
1925	140,495	288,724	3,714,736	5,088,414
1926	148,398	320,460	4,239,085	5,552,769
1927	213,025	410,150	3,916,163	5,481,707

Table 174.—Imports of Beer, Ale, Porter, etc., 1926 and 1927

Articles imported by countries	Unit	1927		1926	
		Quantity	Value	Quantity	Value
Ale, beer and porter—Total	Gal.	223,025	410,150	148,398	320,460
From United Kingdom	"	146,774	295,636	113,472	237,666
" Japan	"	44,408	103,566	26,208	62,657
" other countries	"	31,843	10,948	8,718	20,137

Table 175.—Exports of Beer, Ale, Porter, etc., 1926 and 1927

Articles exported by countries	Unit	1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Ale, beer, porter, etc.—					
United States	Gal.	3,888,815	5,455,841	4,210,465	5,521,902
Bermuda	"	5,736	3,118	3,726	1,731
British Honduras	"	2,750	2,776	.....	.....
Barbados	"	540	280	549	275
Jamaica	"	810	1,064	989	1,091
Trinidad	"	.....	.....	135	195
Other Br. West Indies	"	1,657	1,995	3,645	4,692
China	"	5,100	5,550	1,323	1,460
Hong Kong	"	6,550	7,278	9,580	10,704
Newfoundland	"	3,450	2,981	3,609	4,263
Other countries	"	755	824	5,064	6,456
Total value of exports	.....	**3,916,163**	**5,481,707**	**4,239,085**	**5,552,769**

DISTILLED LIQUOR INDUSTRY

There were in 1927, 17 establishments engaged in the production of distilled liquors, located throughout Canada as follows: Quebec 7, Ontario 5, British Columbia 3 and Manitoba 2. These establishments had a capital investment of $37,528,954, they gave employment to 1,401 persons and produced goods that had a selling value at the factory of $25,660,985. The centre of the industry is in Ontario, the five establishments there located employed in 1927 about 65 p.c. of the capital, 60 p.c. of the employees and produced 54·0 p.c. of the output of the entire industry.

During the first three years of the decade under review the industry was on the downward grade. By 1919, the number of establishments had decreased from 7 to 4, capital invested from $12,005,809 to $8,147,637, number of employees from 761 to 260, production from $8,025,089 to $1,281,536 and value added by manufacture from $4,965,718 to $557,810. An improvement, however, took place in 1920 and 1921. Notwithstanding the general depression prevailing throughout the country, the distilled liquor industry enjoyed in 1921 a very good year, capital invested, value of production and value added by manufacture almost equalling the previous high levels of 1917. The following year, despite an increase in the number of establishments and capital, the number of employees, value of production and value added by manufacture declined again. From 1923 on, however, the industry made very rapid progress and before long, new high levels were recorded. For the eleven-year period as a whole, the following main features of the progress made are of interest. The number of establishments increased from 7 to 17, capital invested from $12,005,809 to $37,528,954, number of employees from 761 to 1,401, production from $8,025,089 to $25,660,985, value added by manufacture from $4,965,718 to $19,309,296 and exports from $3,809,298 to $21,398,452.

The principal statistics and the capital invested by classes from 1917-27 are shown in tables 176 and 177.

Table 176 —Distilled Liquor Industry: Principal Statistics, 1917-27

Year and Province	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1917													
Canada	7	12,005,809	120	32	326,831	528	81	441,799	151,079	2,777	3,059,371	8,025,089	4,965,718
Quebec	3	3,378,359	15	.....	25,942	113	11	72,365	.....	681	1,006,918	3,377,052	2,370,134
Ontario	4	8,627,450	105	32	300,889	415	70	369,434	151,079	2,096	2,052,453	4,648,037	2,595,584
1918													
Canada	6	10,018,168	117	18	342,377	403	41	268,229	134,172	2,391	2,271,178	2,844,698	573,520
1919													
Canada	4	8,147,637	39	11	69,165	209	1	107,700	52,626	427	723,753	1,281,563	557,810
1920													
Canada	4	11,773,046	46	18	84,345	243	33	292,363	144,484	936	1,210,633	2,815,359	1,604,726
1921													
Canada	5	11,557,051	111	15	362,196	304	27	396,922	192,373	2,631	2,161,525	7,460,845	5,299,320
1922													
Canada	6	15,253,827	69	2	189,307	234	8	277,280	240,929	1,639	1,546,376	3,296,545	1,750,169
Quebec	3	1,646,456	16	1	27,492	56	1	64,043	34,627	899	569,242	1,028,906	459,664
Ontario	3	13,607,371	53	1	161,815	178	7	213,237	206,302	740	977,134	2,267,639	1,290,505
1923													
Canada	9	16,135,724	78	4	233,626	307	20	322,832	198,996	3,680	1,714,716	4,226,465	2,511,749
Ontario	3	13,735,755	59	1	198,884	216	13	235,285	159,242	2,803	1,286,715	2,849,599	1,562,884
Other provinces	6	2,399,969	19	3	34,742	91	7	87,547	39,754	877	428,001	1,376,866	948,865
1924													
Canada	13	22,556,007	74	11	204,511	637	84	819,011	272,101	5,652	3,322,878	10,711,801	7,388,923
Quebec	6	2,570,678	23	4	62,316	76	15	88,235	45,237	965	460,888	1,146,326	685,438
Ontario	4	18,411,583	40	3	123,374	520	64	682,410	211,674	4,416	2,712,350	9,273,653	6,561,303
Other provinces	3	1,573,746	11	4	18,821	41	5	48,366	15,190	271	149,640	291,822	142,182
1925													
Canada	16	24,506,712	105	25	274,233	605	99	775,752	268,476	7,206	3,212,010	9,897,863	6,685,853
Quebec	7	3,616,846	25	3	57,332	108	7	142,587	72,013	1,432	746,777	2,502,261	1,755,484
Ontario	4	18,691,029	60	18	177,397	418	81	560,079	163,943	5,235	2,120,914	6,633,376	4,512,462
Other provinces	5	2,198,837	20	4	39,504	79	11	73,086	32,520	539	344,319	762,226	417,907
1926													
Canada	15	26,422,006	110	26	312,087	700	179	975,035	368,780	7,093	3,676,197	12,216,906	8,540,709
Quebec	6	4,970,606	24	4	74,651	154	39	199,665	101,001	1,408	846,377	2,545,087	1,698,710
Ontario	4	18,440,846	63	19	162,755	456	114	634,936	215,275	5,004	2,251,133	8,137,167	5,886,034
Other provinces	5	3,010,554	23	3	74,681	90	26	140,434	52,504	681	578,687	1,534,652	955,965
1927													
Canada	17	37,528,954	209	49	513,873	916	227	1,381,211	423,024	6,862	6,351,689	25,660,985	19,309,296
Quebec	7	8,824,874	52	7	128,207	273	69	371,922	113,087	1,546	1,861,525	8,386,316	6,524,791
Ontario	5	24,156,892	133	39	324,243	540	122	857,814	254,148	4,680	3,559,492	13,811,490	10,251,998
Other provinces	5	4,547,188	24	3	61,423	103	36	151,475	55,789	636	930,672	3,463,179	2,532,507

*Estimated.

Table 177.—Distilled Liquor Industry: Capital Invested, by Classes, 1917-27 and by Provinces, 1927

Year and Provinces	Fixed capital	Working capital		Total capital
	Land, buildings, fixtures, machinery and tools	Materials on hand, stocks in process, etc.	Cash trading and operating accounts, etc.	
	$	$	$	$
1917	4,347,121	6,064,470	1,594,218	12,005,809
1918	2,864,806	4,047,855	3,105,507	10,018,168
1919	5,462,887	976,018	1,708,732	8,147,637
1920	5,695,186	2,962,157	3,115,703	11,773,046
1921	6,217,957	3,528,231	1,810,863	11,557,051
1922	5,982,211	4,375,603	4,896,013	15,2 3,827
1923	6,001,580	4,763,880	5,370,264	16,135,724
1924	10,001,553	7,376,422	5,178,032	22,556,007
1925	8,693,134	9,739,876	6,073,702	24,506,712
1926	8,856,650	12,320,404	5,244,952	26,422,006
1927	.....	.....	.....	.....
Canada	12,774,461	19,403,307	5,351,186	37,528,954
Ontario	7,791,415	12,140,440	4,225,037	24,156,892
Quebec	3,177,060	4,924,336	723,478	8,824,874
Other provinces[1]	1,805,986	2,338,531	402,671	4,547,188

[1]Includes Manitoba and British Columbia.

Production.—Table 178 gives the production statistics of the distilled liquor industry in Canada by provinces for the calendar years 1926 and 1927 respectively. In order to avoid giving individual information it has been found necessary to combine the statistics of Manitoba and British Columbia in all tables of the report. The total production of spirits for the calendar year 1926 amounted to 7,318,320 proof gallons, while in the calendar year 1927 it had risen to 11,483,360 proof gallons an increase of 4,165,040 gallons or 56·91 per cent. Potable spirits increased from 4,179,242 proof gallons in 1926 to 9,025,180 proof gallons in 1927 or 116 per cent whilst the production of industrial and commercial alcohols fell from 3,139,278 gallons in 1926 to 2,458,180 gallons in 1927 or a percentage decrease of 21·7.

The province of Ontario produced 58·90 per cent of the total output of spirits in 1926 and 60·2 per cent in 1927. The value of production in the liquor distillation industry in Canada amounted to $12,216,906 in the calendar year 1926 and to $25,660,985 in 1927.

Table 178.—Distilled Liquor Industry: Production, by Provinces, 1926-27

Principal products	Canada		Ontario		Quebec		Other provinces[1]	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1927		$		$		$		$
Whiskies and other potable spirits.....Proof gal.	9,025,180	23,963,227	5,380,291	12,950,359	2,427,414	7,765,653	1,217,475	3,238,215
Non-potable alcohol..... "	2,458,180	1,179,688	1,529,902	699,018	795,412	402,769	132,866	77,901
Distiller's grains, etc.	.....	293,689	.....	148,145	.....	91,995	.....	53,549
Denatured alcohol..... gallon	238,921	188,516	.....	.....	136,367	112,137	102,554	76,379
Fusel oil..... "	5,516	5,516	4,968	4,968	.....	.....	548	548
All other products	.....	30,349	.....	.....	.....	13,762	.....	16,587
Total	.....	**25,660,985**	.....	**13,811,490**	.....	**8,386,316**	.....	**3,463,179**

Principal products	Canada		Ontario		Quebec		Other provinces[1]	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$
1926								
Whiskies and other potable spirits.....Proof gal.	4,179,442	10,160,396	2,473,039	7,162,698	1,159,081	1,877,282	547,322	1,120,416
Non-potable alcohol..... "	3,139,278	1,692,081	1,837,562	906,537	864,320	471,330	437,396	314,214
Distiller's grains, etc.	.....	160,366	.....	61,888	.....	64,515	.....	33,963
Denatured alcohol..... gal.	272,420	174,602	.....	.....	205,042	129,501	67,378	45,101
Fusel oil..... "	6,044	6,044	6,044	6,044	.....	.....	.....	.....
All other products	.....	23,417	.....	.....	.....	2,459	.....	20,958
Total	.....	**12,216,906**	.....	**8,137,167**	.....	**2,545,087**	.....	**1,534,652**

[1]Includes—Manitoba 2 est., British Columbia 3 est.

Consumption.—Statistics of consumption of distilled liquors for beverage purposes by the usual methods of making such calculations (production plus imports less exports) is not practicable as the production in any year does not become immediately available for consumption, it being sent to bonded warehouses where it remains for a period of at least two years before it can be released for consumption. The quantities thus available for consumption comprises the following items which for the fiscal years ended March 31st, 1926, 1927 and 1928 were:—

—		1925-26	1926-27
Released for consumption	gal.	1,082,785	1,404,111
Imports for consumption	"	1,449,361	1,633,254
Totals for consumption		**2,532,146**	**3,037,365**
Per capita consumption	"	**0·270**	**0·323**

—		1927-28
Released for consumption	gal.	1,896,357
Imports for consumption	"	2,209,625
Totals for consumption	"	**4,105,982**
Per capita consumption	"	**0·431**

Materials Used.—The quantity and value of the principal materials used by the distilled liquor industry during 1926 and 1927 are shown in table 179. The cost value of all materials in 1926 amounted to $3,676,197 and in 1927 to $6,351,689, an increase due to the greater production of spirits in the latter year. It is also interesting to note the relatively high cost of barrels, bottles, cases, etc. which in 1927 amounted to 22 p.c. of the total cost of materials used.

Table 179.—Distilled Liquor Industry: Materials Used, 1926-27

Kinds of material	Unit of measure	1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Corn	Pound	80,993,093	1,566,030	52,004,553	1,024,990
Rye	"	40,040,448	829,358	11,788,363	228,757
Barley	"	6,843,850	155,178	412,886	5,835
Other grains	"	2,075,793	32,744	415,300	8,419
Malt	"	16,856,948	897,604	7,424,275	435,902
Sugar	"	.....	.....	517,784	20,712
Molasses	"	51,797,190	436,337	65,071,342	586,640
Water, purchased	.....	.....	18,452	.....	16,317
Hops	Pound	12,904	16,874	4,161	1,485
Yeast	"	29,396	2,123	.....	1,372
Barrels, bottles, cases, labels, corks, etc.	.....	.....	1,382,121	.....	1,345,768
All other materials	.....	.....	1,014,868		
Total	.....	.....	**6,351,689**	.....	**3,676,197**

Employment and Salaries and Wages Paid.—The employment of wage-earners each month during 1926 and 1927 is shown in table 180 from which it is found that there are moderately marked seasonal fluctuations of employment. In 1927, the average for the year was 1,143 while for November, December and January the months of highest employment, the average was 1,221 and for August, September and October the months of lowest employment, the average was 1,004.

From table 181 which gives the number of hours worked per day and per week, the average number of days that establishments operated on full time each year and the average salaries and wages paid, it may be seen that in 1927, Quebec had the longest working day, viz., an average of 9·7 hours compared with 8·8 hours for Ontario, the second highest, and 9·0 hours for Canada as a whole. Although in Quebec, the number of hours worked per day and per week are longer than in the other provinces, yet the wages paid are almost the lowest, amounting to $1,087 in 1927, compared with $1,296 in Ontario, $871 in Manitoba and $1,138 in British Columbia. On the other hand, the salaries paid in Quebec are rather high, being exceeded only by that of British Columbia. For the Dominion as a whole, since 1917 wages increased from $725 to $1,208 or 67 p.c. while salaries dropped from $2,150 to $1,992, a decrease of 7·3 p.c.

Table 180.—Distilled Liquor Industry: Employment of Wage-earners by Months, 1926-27

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	989	285	1,274	709	137	846
February	915	196	1,111	729	132	861
March	951	199	1,150	695	116	811
April	928	185	1,113	683	127	810
May	918	240	1,158	699	146	845
June	929	251	1,180	691	141	832
July	906	246	1,152	617	122	739
August	823	197	1,020	603	129	732
September	781	198	979	627	137	764
October	820	193	1,013	695	118	813
November	902	221	1,123	734	215	949
December	992	275	1,267	792	223	1,015
Average	**916**	**227**	**1,143**	**700**	**179**	**879**

Table 181 —Distilled Liquor Industry: Hours Worked and Salaries and Wages Paid, 1917-27

Provinces and Year	Hours worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
1917				$	$
Canada	9·7	58·1	283	2,150	725
Quebec	10·3	62·7	284	1,730	583
Ontario	9·2	54·6	283	2,196	762
1920					
Canada	9·3	55·0	116	1,318	1,059
Quebec	11·0	66·0	139	2,040	1,356
Ontario	9·0	53·0	138	1,242	1,030
British Columbia	8·0	48·0	49	1,460	1,300
1921					
Canada	9·0	54·2	212	2,875	1,199
Quebec	10·0	63·0	160	2,060	1,357
Ontario	9·0	53·3	255	2,952	1,193
British Columbia	8·0	48·0	138	1,640	1,196
1925					
Canada	8·8	52·8	251	2,110	1,102
Quebec	9·7	58·7	269	2,048	1,240
Ontario	8·6	47·0	291	2,274	1,122
Manitoba	8·7	48·0	188	1,302	900
British Columbia	8·6	50·0	199	2,040	775
1926					
Canada	8·7	52·2	259	2,295	1,109
Quebec	9·5	57·0	266	2,666	1,035
Ontario	8·5	50·3	259	1,985	1,114
Manitoba	8·3	48·0	232	2,990	1,169
British Columbia	8·3	48·0	268	2,736	1,221
1927					
Canada	9·0	52·2	263	1,992	1,208
Quebec	9·7	57·6	261	2,173	1,087
Ontario	8·8	50·6	279	1,885	1,296
Manitoba	8·5	48·0	198	1,698	871
British Columbia	8·0	45·3	288	2,736	1,138

Fuel Consumption.—The consumption of fuel by the distilled liquor industry during 1926 and 1927 is shown in table 182. Bituminous coal is the principal fuel used and represents 86 p.c. of the total cost of all fuel.

Table 182.—Distilled Liquor Industry: Fuel Consumption, 1926-27

Kinds of fuel	Unit of measure	1927		1926	
		Quantity	Cost value	Quantity	Cost value
			$		$
Bituminous coal	Ton	65,056	364,680	58,440	346,736
Anthracite coal	"	6,473	45,149	2,513	16,639
Oil (fuel)	Gallon	56,840	3,645	40,460	2,353
Other fuel	.....	.....	9,550	.....	3,052
Total	.....	.....	**423,024**	.....	**368,780**
Cost of electricity	.....	.....	51,079	.....	43,503

Power Installation.—The power equipment of the distilled liquor industry in 1926 and 1927 is shown in table 183, which gives the number and horse power capacity of the different units installed.

Table 183.—Distilled Liquor Industry: Power Installation, 1926-27

Classes of power	1927		1926	
	Number of units	Horse power capacity	Number of units	Horse power capacity
Steam engines and turbines	48	3,912	93	4,105
Oil, gas and gasoline engines	1	227	1	225
Electric motors operated by purchased power	510	2,723	255	2,763
Total power installation	**559**	**6,862**	**349**	**7,093**
Electric motors operated by power generated by the establishment not included above	81	1,429	71	1,149

Imports and Exports.—The quantities and values of distilled liquors imported into and exported from Canada during the calendar years 1919 to 1927 are shown in tables 184 and 185 while the imports and exports by countries for 1926 and 1927 are shown in tables 186 and 187.

Imports which were valued at $3,840,388 in 1919 rose to $38,859,738 in 1927 while exports rose from $3,809,298 to $21,398,452 during the same period. Whiskey is of major importance in both the imports and exports, comprising in 1927, 70 p.c. of the former and 98 p.c. of the latter. Of the whiskey imported 99 p.c. came from the United Kingdom, while from France came 99 p.c. of the brandy and about 51 p.c. of the vermouth. The other principal countries from which distilled liquors were imported were the Netherlands for gin, Italy for vermouth and Jamaica for rum. Of the total distilled liquors exported, 85 p.c. went to the United States and the remainder chiefly to the West Indies.

Table 184.—Imports of Distilled Liquors for the Calendar Years 1919-27

Year	Absinthe and all spirituous alcoholic liquors, n.o.p.		Brandy, all kinds		Cordials and liquors, all kinds, n.o.p.		Gin, all kinds		Rum	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Gal.	$	Gal.	$	Gal.	$	Gal.	$	Gal.	$
1919	.....	.....	103,740	595,576	3,888	18,663	67,957	257,032	136,963	160,198
1920	213	4,992	313,653	2,690,033	44,679	256,351	661,965	2,487,262	338,791	735,449
1921	311	4,894	211,711	2,743,714	22,687	273,953	433,138	4,147,378	173,015	876,885
1922	104	1,503	60,817	668,057	16,677	119,283	162,211	2,068,780	106,249	852,267
1923	91	1,209	130,428	974,169	12,692	80,305	172,340	2,383,067	150,232	1,240,262
1924	33	334	176,151	1,059,485	21,437	127,303	202,365	2,793,811	145,409	1,487,364
1925	3,189	16,442	183,140	1,210,225	22,878	148,658	216,195	3,216,067	145,753	1,853,759
1926	6,476	34,187	218,119	1,266,227	28,841	190,864	231,969	3,748,761	167,243	2,436,453
1927	7,363	40,036	273,493	1,920,965	56,028	489,664	320,921	5,307,734	239,254	3,862,224

Year	Vermouth		Whisky		All other spirituous liquors, n.o.p.		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	gal.	$	gal.	$	gal.	$	gal.	$
1919	7,590	23,405	439,947	2,781,300	3,974	4,214	764,059	3,840,388
1920	45,096	158,440	1,710,993	12,712,065	73,249	182,379	3,188,639	19,226,971
1921	29,596	78,572	1,367,986	27,532,034	23,313	101,204	2,261,757	35,758,631
1922	17,211	40,540	853,449	16,491,541	5,878	27,530	1,222,596	20,269,501
1923	25,429	44,531	754,743	14,726,280	1,549	6,191	1,247,504	19,456,025
1924	33,688	51,677	681,689	13,304,431	669	2,746	1,261,421	18,827,149
1925	36,480	59,500	759,272	15,504,085	.....	.....	1,366,907	22,008,736
1926	45,542	68,478	902,942	18,706,707	.....	.....	1,601,132	26,451,677
1927	73,924	144,815	1,290,155	27,094,300	.....	.....	2,261,138	38,859,738

Table 185.—Exports of Distilled Liquors for the Calendar Years 1919-27

Year	Gin		Whisky		Other potable spirits, n.o.p.		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	gal.	$	gal.	$	gal.	$	gal.	$
1919	3,926	14,411	405,108	1,221,361	1,046,673	2,573,526	1,455,707	3,809,298
1920	1,542	10,337	431,019	1,954,220	899,804	1,077,750	1,332,365	3,042,307
1921	295	1,407	187,576	795,142	4,617	9,916	192,488	806,465
1922	3,211	48,160	310,611	2,679,546	616	4,802	314,438	2,732,508
1923	2,407	28,417	1,120,140	8,344,123	8,132	18,944	1,130,679	8,391,484
1924	7,686	110,444	1,180,711	9,888,536	22,061	65,506	1,210,458	10,064,486
1925	3,810	57,186	1,110,031	13,334,492	18,055	127,304	1,131,896	13,519,482
1926	15,628	213,500	1,550,902	18,433,796	43,681	222,932	1,610,211	18,870,228
1927	16,966	202,333	1,788,266	21,052,901	11,950	143,218	1,817,182	21,398,452

Table 186.—Imports of Distilled Liquors for the Calendar Years 1926-27

Articles imported by countries		1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Absinthe and all spirituous alcoholic liquors, n.o.p.—					
United Kingdom	gal.	492	6,768	206	3,400
United States	"	5	25	5	7
Hong Kong	"	2,961	12,347	4,936	21,693
Other countries	"	3,905	20,896	1,329	9,087
Totals		7,363	40,036	6,476	34,187
Brandy, all kinds—					
United Kingdom	gal.	453	6,242	2,487	21,490
France	"	270,998	1,901,635	213,332	1,230,743
Other countries	"	2,042	13,088	2,300	13,994
Totals		273,493	1,920,965	218,119	1,266,227
Cordials and liquors, all kinds, n.o.p.—					
United Kingdom	gal.	11,413	203,217	4,028	64,098
United States	"	50	410	11	139
France	"	34,670	215,178	16,622	82,075
Spain	"	.....	.....	993	7,420
Hong Kong	"	.....	.....	3,054	12,038
Other countries	"	9,895	70,859	4,133	25,094
Totals		56,028	489,664	28,841	190,864
Gin, all kinds—					
United Kingdom	gal.	233,045	4,616,349	166,107	3,287,126
Netherlands	"	78,515	667,496	55,162	447,574
Other countries	"	9,361	23,889	10,700	14,061
Totals		320,921	5,307,734	231,969	3,748,761
Rum—					
United Kingdom	gal.	180,256	3,573,435	111,550	2,213,683
United States	"	2,087	6,415	2,171	7,891
British Guiana	"	11,498	34,855	8,362	22,261
Jamaica	"	33,483	152,573	38,104	144,567
France	"	.....	.....	3,164	14,801
Other countries	"	11,930	94,946	3,892	33,250
Totals		239,254	3,862,224	167,243	2,436,453
Vermouth—					
United Kingdom	gal.	1,323	5,327	564	1,593
France	"	33,962	74,170	21,192	33,042
Italy	"	38,576	64,999	23,263	31,916
Other countries	"	63	319	523	1,927
Totals		73,924	144,815	45,542	68,478
Whiskey—					
United Kingdom	gal.	1,277,984	26,973,258	892,529	18,612,539
United States	"	1	10	.....	.....
France	"	.....	.....	678	3,715
Other countries	"	12,170	121,032	9,735	90,453
Totals		1,290,155	27,094,300	902,942	18,706,707
Grand Totals, Distilled Liquors		**2,261,138**	**38,859,738**	**1,601,132**	**26,451,677**

Table 187.—Exports of Distilled Liquors by Quantity and Value, 1926 and 1927

Articles exported by countries		1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Gin—					
United Kingdom	gal.	8	40	8	40
United States	"	12,365	182,027	12,820	200,797
Other countries	"	4,593	20,266	2,800	12,663
Totals		16,966	202,333	15,628	213,500
Whiskey—					
United Kingdom	gal.	40,333	99,655	32,756	152,898
United States	"	1,103,239	17,884,043	983,152	15,475,270
China	"	17,905	67,313	7,739	35,392
Other British West Indies	"	381,164	1,803,557	373,244	2,042,760
Cuba	"	23,338	112,518	65,886	318,465
Honduras	"	8,918	37,788	8,983	44,352
Salvador	"	3,719	15,191	26,518	142,830
St. Pierre-Miquelon	"	133,127	723,496	15,222	52,893
Other countries	"	76,523	309,340	37,402	168,936
Totals		1,788,266	21,052,901	1,550,902	18,433,796
Other potable spirits, n.o.p.—					
United Kingdom	gal.	.....	.....	18,342	45,869
United States	"	11,670	141,971	11,780	142,912
Other countries	"	280	1,247	13,559	34,151
Totals		11,950	143,218	43,681	222,932
Grand Total of Exports, Distilled Liquors		**1,817,182**	**21,398,452**	**1,610,211**	**18,870,228**

THE WINE INDUSTRY

The wine industry in Canada is confined to a few localities such as the Niagara Peninsula in Ontario and the Okanagan Valley in British Columbia where climatic conditions for the cultivation of grapes are favourable. At the present time, however, the industry is confined chiefly to the Niagara Peninsula. From the principal statistics shown in table 188, it is apparent that the industry is only of minor importance in the vegetable products group. Its growth since 1917 has been favourable and has kept pace with that of other industries. The number of establishments increased from 13 to 30, capital invested from $1,144,963 to $4,405,027, number of employees from 95 to 246, production from $560,294 to $2,531,227 and value added by manufacture from $292,894 to $1,005,209. 1927 was the record year when the number of establishments, capital, employment and value of production were at their highest level.

The 30 establishments engaged in the production of wines in 1927 were distributed by provinces as follows: Ontario 26, British Columbia 2 and Manitoba 2. To prevent disclosure of information relating to individual establishments, statistics for British Columbia and Manitoba and Quebec have been combined and shown under the heading of "Other Provinces." Until 1920 the industry was practically confined to Ontario and Quebec and from that time on the industry spread to Manitoba and British Columbia while it entirely disappeared from Quebec.

Table 188.—The Wine Industry: Principal Statistics, 1917-27

Year and province	Establishments	Capital	Employees on Salaries			Employees on Sages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1917													
Canada	13	1,144,963	29	9	57,027	51	6	41,972	6,298	94	267,400	560,294	292,894
Ontario	9	1,114,938	26	9	54,052	40	5	38,778	5,915	49	248,829	526,236	277,407
Other provinces	4	30,025	3	.....	2,975	5	1	3,194	383	45	18,571	34,058	15,487
1918													
Canada	11	932,887	11	11	28,591	57	9	64,130	9,150	124	231,312	511,217	279,905
1919													
Canada	16	1,481,934	30	11	66,799	93	12	100,663	8,989	143	685,525	1,527,787	842,262
Ontario	12	1,410,017	30	11	66,799	80	11	91,409	8,115	143	656,559	1,460,573	804,014
Other provinces	4	71,917	.....	.....	.....	13	1	9,254	874	.....	28,966	67,214	38,248
1920													
Canada	13	1,301,465	20	8	59,318	64	6	76,888	10,142	125	653,623	1,040,978	387,355
Ontario	10	1,224,174	18	8	55,318	57	6	71,764	9,209	125	628,929	991,015	362,086
Other provinces	3	77,291	2	.....	4,000	7	.....	5,124	933	.....	24,694	49,963	25,269
1921													
Canada	13	1,966,659	48	13	80,064	62	5	76,345	10,205	107	350,098	706,289	356,191
1922													
Canada	12	1,939,831	56	11	116,467	68	10	72,742	10,239	127	500,568	1,136,075	635,507
1923													
Canada	16	2,257,413	46	13	112,530	88	12	84,858	9,673	219	675,090	1,624,382	949,292
Ontario	13	2,177,828	41	13	103,732	81	12	76,464	9,134	219	664,328	1,582,679	918,351
Other provinces	3	79,585	5	.....	8,798	7	.....	8,394	539	.....	10,762	41,703	30,941
1924													
Canada	22	2,636,728	44	12	131,871	84	15	100,004	9,678	249	612,521	1,325,333	712,812
Ontario	19	2,602,983	43	12	130,134	82	14	97,383	9,561	244	601,457	1,296,905	695,448
Other provinces	3	33,745	1	.....	1,737	2	1	2,621	117	5	11,064	28,428	17,364
1925													
Canada	24	2,944,943	47	13	124,685	101	10	122,061	9,780	325	781,307	1,624,742	843,435
Ontario	21	2,860,091	45	13	121,610	89	10	110,899	8,924	278	737,438	1,516,982	779,544
Other provinces	3	84,852	2	.....	3,075	12	.....	11,162	856	47	43,869	107,760	63,891
1926													
Canada	27	3,678,458	53	9	152,624	123	19	142,196	13,862	359	1,349,787	2,485,136	1,135,349
Ontario	22	3,367,203	46	9	141,604	106	17	127,631	13,114	298	1,209,720	2,206,221	996,501
Other provinces	5	311,255	7	.....	11,020	17	2	14,565	748	61	140,067	278,915	138,848
1927													
Canada	30	4,405,027	57	10	160,064	162	17	163,057	14,324	431	1,526,018	2,531,227	1,005,209
Ontario	26	4,001,876	54	10	153,044	147	16	144,905	13,394	386	1,443,977	2,336,114	892,137
Other provinces	4	403,151	3	.....	7,020	15	1	18,152	930	65	82,041	195,113	113,072

It should be remembered that the statistics published in the present report refer to only the production of wines in factories and therefore do not include all the wines produced since a large quantity is produced at home and thereby not reported to the Census of Industry.

Table 189.—Wine Industry: Capital Invested, by Classes and Provinces, 1925-27

Provinces	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Materials and finished products on hand, stocks in process, etc.	Cash trading and operating accounts, etc.	
	$	$	$	$
1925				
Canada	923,960	1,186,029	834,945	2,944,943
Ontario	912,490	1,124,312	823,289	2,860,091
Manitoba and British Columbia	11,479	61,717	11,656	84,852
1926				
Canada	1,129,468	1,815,262	733,728	3,678,458
Ontario	1,098,678	1,557,483	711,042	3,367,203
Manitoba and British Columbia	30,790	257,779	22,686	311,255
1927				
Canada	1,506,220	2,184,601	714,206	4,405,027
Ontario	1,431,123	1,907,884	662,869	4,001,876
Manitoba and British Columbia	75,097	276,717	51,337	403,151

Production.—The quantity and selling value of the principal products of the wine industry, by provinces, are given in Table 190 for the calendar years 1926 and 1927. The total value of products in 1927 increased by $46,091 when compared with the previous year whilst the quantity of fermented and unfermented wines manufactured during the year was greater by 2,632 gallons. Grape juice shows increased production in quantity amounting to 21,394 gallons and an increase in value of $22,533. The average price of fermented wines which in 1926 was nearly ·86c. per gallon rose to ·88c. per gallon in 1927.

The province of Ontario produced 92 per cent of the total value and nearly 93·8 per cent of the total quantity of wines during 1927. The particular section of Ontario engaged in the industry was that centred around the Niagara Peninsula where on account of favourable climatic conditions the growing of grapes is a well established and successful industry.

Table 190.—Wine Industry: Production, by Provinces, 1926 and 1927

Classes of products		Canada		Ontario		Other provinces	
		Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$
1926							
Fermented wine	gal.	2,725,745	2,340,085	2,523,264	2,087,910	202,481	252,175
Unfermented wine	"	5,021	12,333	840	1,190	4,181	11,143
Grape juice	"	48,570	98,501	48,570	98,501	.....	.....
Syrups and fruit juices	"	3,446	6,870	2,181	3,620	1,265	3,250
All other products		.....	27,347	.....	15,000	.....	12,347
Total value of products		.....	**2,485,136**	.....	**2,206,221**	.....	**278,915**

Classes of products		Canada		Ontario		Other provinces	
		Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$
1927							
Fermented wine	gal.	2,731,748	2,404,243	2,563,308	2,213,330	168,440	190,913
Unfermented wine	"	1,650	3,900	1,050	2,100	600	1,800
Grape juice	"	69,964	121,034	69,764	120,534	200	500
Syrups and fruit juices	"	175	550	75	150	100	400
All other products	"	900	1,500	.....	.....	900	1,500
Total value of products		.....	**2,531,227**	.....	**2,336,114**	.....	**195,113**

Materials Used.—The cost value of all materials used by the wine industry in 1927 amounted to $1,526,018 as compared with $1,349,787 in 1926, an increase of some 13 p.c. The various materials used are shown by quantity and cost value delivered at the works in table 191.

Table 191.—Wine Industry: Materials Used, 1926-27

Classes of materials	Unit of measure	1927		1926	
		Quantity	Cost value at works	Quantity	Cost value at works
			$		$
Grapes, domestic	Lb.	16,314,850	690,334	18,507,440	601,155
Grapes, imported	"	530,200	30,368	103,280	7,022
Loganberries	"	643,034	49,313	911,532	71,481
Raisins	"	99,306	8,582	112,851	11,456
Sugar	"	6,986,481	426,049	7,856,457	403,070
Acids, salicylic, tartaric and citric	"	5,813	3,127	3,654	1,574
Alcohol	gal.	450	932	850	4,136
Extracts and essential oils	"	150	2,072	468	4,723
Colouring	"	661	2,949	524	2,063
Boxes and other containers (value only)	.....	.....	224,098	.....	159,760
Labels, crowns and corks (value only)	.....	.....	40,999	.....	36,814
All other minerals	.....	.....	47,195	.....	46,533
Total Cost of Materials	.....	.....	**1,526,018**	.....	**1,349,787**

Employment and Salaries and Wages Paid.—Although operations are carried on throughout the year, employment in the wine industry is however, seasonal. The fall of the year is the period of major activity and October is the month of highest employment. The average employment in 1927 was 179 compared with 231 during October, November and December and 148 during the rest of the year. The number of wage-earners employed each month during 1926 and 1927 is shown in table 192.

Hours worked per day and per week, average number of days that establishments operated on full time and average salaries and wages paid are given in table 193. Although the number of days that plants operated on full time decreased since 1917, yet the average wage rose from $736 in 1917 to $911 in 1927, an increase of 24 p.c. while the average salary rose from $1,501 to $2,389, an increase of 59 p.c.

Table 192.—Wine Industry: Employment of Wage-earners, by Months, 1926-27

Month	1927			1926		
	Male	Female	Total	Male	Female	Total
January	125	16	141	105	15	120
February	122	15	137	91	17	108
March	115	15	130	87	21	108
April	124	14	138	100	19	119
May	115	15	130	87	16	103
June	121	17	138	93	19	112
July	148	22	170	107	16	123
August	149	18	167	123	18	141
September	170	17	187	124	33	157
October	264	18	282	209	16	225
November	214	16	230	153	16	169
December	165	16	181	132	17	149
Average	162	17	179	123	19	142

Table 193.—Wine Industry: Hours Worked and Salaries and Wages Paid, 1917-27

Year	Hours Worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
				$	$
1917	7·4	42·5	287	1,501	736
1918	9·2	51·6	276	1,300	972
1919	8·3	47·9	258	1,629	959
1920	8·9	50·7	278	2,118	1,098
1921	9·1	52·2	253	1,312	1,139
1922	9·1	52·0	277	1,738	933
1923	8·7	49·9	246	1,907	849
1924	8·8	48·4	241	2,355	1,010
1925	9·0	51·6	239	2,078	1,100
1926	9·0	51·5	250	2,462	1,001
1927	9·0	50·4	260	2,389	911

Table 194.—Wine Industry: Fuel Consumption, 1926-27

Kind of fuel used		1927		1926	
		Quantity	Cost value at works	Quantity	Cost value at works
			$		$
Bituminous coal	ton	1,424	10,029	1,239	8,574
Anthracite coal	"	104	1,335	179	2,064
Coke	"	25	482	15	182
Gasoline	gal.	5,122	1,368	8,278	2,556
Oil (fuel)	gal.	.....	.....	640	182
Gas	M. c. ft.	1,040	884	405	304
All other fuel		.....	226	.....	.....
Total cost of fuel		.....	**14,324**	.....	**13,862**

Table 195.—Wine Industry: Power Installation, 1926-27

Classes of power	1927		1926	
	No. of units	Horse-power according to manufacturers' rating	No. of units	Horse-power according to manufacturers' rating
Steam engines and turbines	1	50	3	70
Oil, gas and gasoline engines	5	29	3	19
Electric motors operated by purchased power	101	352	71	270
Total power for manufacturing purposes	107	431	77	359
Boilers installed for all purposes	11	356	8	160

Imports and Exports.—Imports of wines for consumption in Canada during 1926 and 1927 are shown by two principal classes, sparkling and non-sparkling, in table 196. The total value of all wines imported during 1927 was given as $3,036,594, of which 30,666 gallons valued at $1,562,688 were entered as sparkling wines and 820,856 gallons worth $1,473,906 as non-sparkling wines. France, Spain and Portugal in the order named were the leading countries from which non-sparkling wines were imported in 1927 while of the sparkling wines, nearly 94 p.c came from France.

The quantity and value of wines, the produce of Canada, exported to various countries during the calendar years 1926 and 1927 are shown in table 197. The quantity of fermented wines exported during 1927 was 32,732 gallons, compared with 32,724 gallons in 1926, whilst their value decreased from $115,564 in 1926 to $112,313 in 1927. The United States was Canada's best customer, taking over 98 p.c. of the total value of wines exported.

Table 196.—Imports of Wines during the Calendar Years 1926-27

Countries from which imported	Non-sparkling wines		Sparkling wines		Total value of wines
	Quantity	Value	Quantity	Value	
	gal.	$	gal.	$	$
1927					
United Kingdom	16,616	95,541	273	20,664	116,205
United States	157	309	.....	.....	309
France	263,427	421,895	26,140	1,464,731	1,886,626
Spain	279,538	399,484	.....	.....	399,484
Portugal	169,071	398,305	.....	.....	398,305
Italy	19,038	30,242	.....	.....	30,242
China	7,663	22,355	.....	.....	22,355
Other countries	65,346	105,775	4,253	77,293	183,068
Total	**820,856**	**1,473,906**	**30,666**	**1,562,688**	**3,036,594**

Countries from which imported	Non-sparkling wines		Sparkling wines		Total value of wines
	Quantity	Value	Quantity	Value	
	gal.	$	gal.	$	$
1926					
United Kingdom	11,140	59,434	109	6,255	65,689
United States	1,905	1,833	.....	.....	1,833
France	236,864	252,794	14,302	598,020	850,814
Spain	247,424	305,479	.....	.....	305,479
Portugal	130,279	250,127	.....	.....	250,127
Italy	20,379	26,257	.....	.....	26,257
China	8,390	25,484	.....	.....	25,484
Japan	28	70	.....	.....	70
Hong Kong	8,196	15,705	.....	.....	15,705
Other countries	11,613	18,996	185	6,521	25,517
Total	**676,218**	**956,179**	**14,596**	**610,796**	**1,566,975**

Table 197.—Exports of Fermented Wines during the Calendar Years 1926-27

Countries to which exported	1927		1926	
	Quantity	Value	Quantity	Value
	gal.	$	gal.	$
United Kingdom	178	336	128	224
United States	31,239	108,947	31,767	113,429
Newfoundland	.....	.....	66	171
Other countries	1,315	3,030	763	1,740
Total	**32,732**	**112,313**	**32,724**	**115,564**

CHAPTER VIII

THE RUBBER INDUSTRY

The expansion of the rubber industry since 1917 has been phenomenal. Imports of raw rubber which amounted to 6,200 tons in 1917 increased to about 30,000 tons in 1927 while the value of production of rubber goods almost doubled during the same period. The development of the industry is, however, more strikingly illustrated by the export figures, which show that the value of rubber and rubber goods exported increased from $2,911,505 in 1919 to $28,000,932 in 1927, an increase of about 960 p.c. By a study of table 198 which gives the principal statistics of the combined rubber industries, the following significant facts of the progress made since 1917 are of interest. Although the number of establishments increased only from 28 in 1917 to 44 in 1927, the capital invested rose from $28,395,983 to $66,266,064, value of production from $43,639,188 to $91,413,730 and value added by manufacture from $23,879,599 to $46,689,228 while the number of employees increased from 10,259 to 15,065 and the salaries and wages paid from $7,269,933 to $16,621,543. The expansion of the industry which was very rapid during the first four years, was, however, interrupted by the general depression of 1921, when the number of employees and value of production declined sharply. The recovery made during the next few years was rather slow, but steady and was almost complete by 1925.

Rubber Tires and Other Rubber Goods Section.—The expansion of this section of the industry was not as marked as that of the rubber footwear section. In 1918 there was a depression when the number of establishments, capital invested, employees, value of production and value added by manufacture reported marked decreases, at a time when the rubber footwear section was enjoying a year of great expansion. During 1919 and 1920, however, the industry recovered and shared in the general progress which was again interrupted by the depression of 1921. From 1922 on, however, steady progress was made. The following summary indicates the extent of the growth since 1917. The number of establishments increased from 22 to 34, capital invested rose from $21,793,016 to $51,205,543, number of employees from 6,261 to 8,325, value of production from $33,956,395 to $65,016,087 and value added by manufacture from $17,420,816 to $29,495,271.

The 34 establishments in 1927 whose principal product was rubber tires were located throughout Canada as follows:—Ontario 23, Quebec 9 and British Columbia 2. The centre of this industry is in Ontario which employs 96 p.c. of the capital, 94 p.c. of the employees and produces 96 p.c. of the output.

Rubber Footwear Section.—This section of the rubber industry enjoyed a period of unprecedented development, as is disclosed by table 200 which gives the principal statistics since 1917. The number of establishments increased from 6 to 10, while the capital invested rose from $6,602,967 to $15,060,521, number of employees from 3,998 to 6,740, production from $9,682,793 to $26,397,643, and value added by manufacture from $6,458.783 to $17,193,957. The peak of the expansion was attained in 1920 when capital invested, number of employees, and salaries and wages paid were at the highest level. The general depression of 1921 hit this industry in common with the rest, although not to so great an extent as the rubber tires and other rubber goods section.

The establishments producing rubber footwear as their principal product are confined to Ontario and Quebec, 6 establishments being situated in the former province and 4 in the latter. The 4 establishments in Quebec, however, employed about 65 p.c. of the capital, 63 p.c. of the persons engaged in the industry and produced 61 p.c. of the entire output.

Table 198.—Rubber Industry of Canada: Principal Statistics, 1917-27

Year	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1917	28	28,395,983	1,040	330	1,442,019	6,101	2,788	5,827,914	548,649	21,296	19,759,589	43,639,188	23,879,599
1918	30	31,675,737	1,047	440	1,757,621	6,566	2,788	6,743,905	691,050	21,672	21,507,920	46,280,544	24,772,624
1919	32	42,787,594	1,336	453	2,218,612	7,997	2,890	9,328,755	559,302	20,508[1]	27,534,414	56,003,434	28,469,020
1920	35	58,370,039	1,526	477	3,159,080	9,860	3,375	13,040,850	984,491	33,768	41,838,200	80,717,308	38,879,108
1921	35	54,237,618	1,267	380	2,811,420	5,907	2,244	6,947,946	770,742	32,578[1]	16,857,124	39,409,786	22,612,662
1922	34	50,154,503	1,340	341	2,758,584	6,333	2,108	7,568,334	767,680	41,364	19,196,945	45,933,068	26,736,123
1923	40	56,061,625	1,370	379	2,938,743	7,464	2,433	9,390,374	770,212	44,903	26,335,306	56,512,947	30,177,641
1924	38	56,160,930	1,383	392	2,831,943	6,643	2,360	8,581,689	632,358	45,586	24,519,236	57,411,446	32,892,210
1925	40	65,562,734	1,264	393	2,724,749	8,363	2,943	11,418,416	598,834	47,723	38,389,352	78,229,574	39,840,222
1926	39	62,661,702	1,362	424	3,096,334	8,738	3,063	11,611,689	641,551	48,089	49,902,189	86,508,137	36,605,948
1927	44	66,266,064	1,457	443	3,243,988	9,851	3,314	13,377,555	649,892	51,037	44,724,502	91,413,730	46,689,228

[1] Estimated.

Table 199.—Rubber Tires and Other Rubber Goods Industry: Principal Statistics, 1917-27

Year and Provinces	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1917													
Canada	22	21,793,016	790	243	1,173,261	4,022	1,206	3,911,605	371,559	14,289	16,535,579	33,956,395	17,420,816
Ontario	17	19,943,179	711	227	1,051,979	3,693	908	3,580,445	363,527	13,012	15,617,638	31,770,947	16,153,309
Other provinces	5	1,849,837	79	16	121,282	329	298	331,160	8,032	1,277	917,941	2,185,448	1,267,507
1918													
Canada	20	19,575,680	641	277	1,147,040	3,335	656	3,525,460	353,976	11,396	15,722,893	29,092,469	13,369,576
Ontario	15	18,985,704	612	266	1,101,975	3,143	589	3,347,961	344,176	10,932	14,949,359	27,666,667	12,717,308
Other provinces	5	589,976	29	11	45,065	192	67	177,499	9,800	464	773,534	1,425,802	652,268
1919													
Canada	22	28,584,715	905	301	1,510,118	4,918	710	5,493,910	363,099	10,990[1]	19,671,453	36,651,640	16,980,187
Ontario	18	27,706,575	873	293	1,452,393	4,736	640	5,276,680	352,302	10,711	18,977,630	35,238,795	16,261,165
Other provinces	4	878,140	32	8	57,725	182	70	217,230	10,797	279	693,823	1,412,845	719,022
1920													
Canada	24	42,249,456	1,022	316	2,201,032	6,172	954	7,924,464	662,926	21,791	30,645,207	55,122,857	24,477,650
Ontario	18	40,664,674	946	303	2,020,180	5,724	682	7,263,687	531,965	19,494	28,547,511	51,536,882	22,989,371
Quebec	6	1,584,782	76	13	180,852	448	272	660,777	130,961	2,297	2,097,696	3,585,975	1,488,279
1921													
Canada	23	38,420,786	729	223	1,805,205	3,225	566	4,006,292	512,903	21,388[1]	12,219,987	25,618,042	13,398,055
Ontario	18	36,843,978	676	206	1,667,889	3,085	489	3,820,236	466,003	19,601	11,708,957	24,395,179	12,686,222
Other provinces	5	1,576,808	53	17	137,314	140	77	186,056	46,900	1,787	511,030	1,222,863	711,833
1922[2]													
Canada	24	35,679,805	902	207	1,882,657	3,815	573	4,655,696	541,026	28,720	14,268,120	31,223,238	16,955,118
1923													
Canada	30	41,090,512	909	217	2,034,060	4,571	685	5,967,073	562,496	32,510	19,765,513	38,087,311	18,321,798
Ontario	25	39,683,217	856	210	1,937,053	4,389	620	5,660,470	518,324	29,741	19,209,056	36,755,481	17,546,425
Other provinces	5	1,407,295	53	7	97,007	182	65	246,603	44,172	2,769	556,457	1,331,830	775,373
1924													
Canada	28	41,723,100	897	236	1,933,583	3,767	667	5,173,364	452,337	32,200	18,236,303	38,193,516	19,957,213
Ontario	23	40,321,279	842	226	1,819,149	3,606	605	4,959,420	408,712	29,567	17,690,790	37,015,607	19,324,817
Other provinces	5	1,401,821	55	10	114,434	161	62	213,944	43,625	2,633	545,513	1,177,909	632,396
1925													
Canada	30	50,043,668	768	225	1,770,716	5,069	958	7,177,652	430,146	34,393	29,659,353	54,234,963	24,575,610
Ontario	23	48,377,988	708	213	1,659,914	4,866	886	6,939,736	394,244	31,388	28,994,616	52,766,810	23,772,194
Other provinces	7	1,665,680	60	12	110,802	203	72	237,916	35,902	3,005	664,737	1,468,153	803,416
1926													
Canada	30	48,178,763	843	250	2,064,444	5,343	997	7,201,415	482,376	35,492	39,689,013	63,578,393	23,889,380
Ontario	23	46,466,376	794	237	1,976,421	5,107	911	6,965,013	450,389	32,317	38,877,443	61,917,977	23,040,534
Other provinces	7	1,712,387	49	13	88,023	236	86	236,402	31,987	3,175	811,570	1,660,416	848,846
1927													
Canada	34	51,205,543	892	239	2,129,263	6,146	1,048	8,485,736	498,483	37,052	35,520,816	65,016,087	29,495,271
Ontario	23	49,357,649	834	221	1,996,639	5,853	924	8,155,955	450,738	33,558	34,458,392	62,601,197	28,142,805
Other provinces	11	1,847,894	58	18	132,624	293	124	329,781	47,745	3,494	1,062,424	2,414,890	1,352,466

[1]Estimated. [2]Provincial figures not available.

Table 200.—Rubber Footwear Industry: Principal Statistics, 1917-27

Year and Provinces	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1917													
Canada	6	6,602,967	250	87	268,758	2,079	1,582	1,916,309	177,090	7,007	3,224,010	9,682,793	6,458,783
1918													
Canada	10	12,100,057	406	163	610,581	3,231	2,132	3,218,445	337,074	10,276	5,785,027	17,188,075	11,403,048
Quebec	5	8,764,395	288	99	398,726	2,106	1,368	2,002,133	254,772	7,019	2,993,702	9,273,652	6,279,950
Ontario	5	3,335,662	118	64	211,855	1,125	764	1,216,312	82,302	3,257	2,791,325	7,914,423	5,123,098
1919													
Canada	10	14,202,879	431	152	708,494	3,079	2,180	3,834,845	196,203	9,518[1]	7,862,961	19,351,794	11,488,833
Quebec	5	8,903,566	314	108	482,879	2,005	1,430	2,320,563	140,958	6,661	4,721,581	10,901,614	6,180,033
Ontario	5	5,299,313	117	44	225,615	1,074	750	1,514,282	55,245	2,857	3,141,380	8,450,180	5,308,800
1920													
Canada	11	16,120,583	504	161	958,048	3,688	2,421	5,116,386	321,565	11,977	11,192,993	25,594,451	14,401,458
Quebec	5	10,200,929	380	118	678,472	2,350	1,569	2,982,740	218,672	8,612	6,894,281	15,179,491	8,285,210
Ontario	6	5,919,654	124	43	279,576	1,338	852	2,133,646	102,893	3,365	4,298,712	10,414,960	6,116,248
1921													
Canada	12	15,816,832	538	157	1,006,215	2,682	1,678	2,941,654	257,839	11,190[1]	4,637,137	13,851,744	9,214,607
Quebec	6	9,902,570	396	108	701,618	1,648	999	1,617,884	170,279	7,885	2,716,570	7,957,848	5,241,278
Ontario	6	5,914,262	142	49	304,597	1,034	679	1,323,770	87,560	3,305	1,920,567	5,893,896	3,973,329
1922													
Canada	10	14,474,698	438	134	875,927	2,518	1,535	2,912,638	226,654	12,594	4,928,825	14,709,830	9,781,005
Quebec	6	9,998,886	343	92	621,324	1,634	1,069	1,828,142	169,321	9,895	3,056,102	9,188,058	6,131,956
Ontario	4	4,475,812	95	42	254,603	884	466	1,084,496	57,333	2,699	1,872,723	5,521,772	3,649,049
1923													
Canada	10	14,971,113	461	162	904,683	2,893	1,748	3,483,301	207,716	12,393	6,569,793	18,425,636	11,855,843
Quebec	6	10,200,993	360	109	630,136	1,856	1,252	2,176,982	154,782	9,758	4,179,050	11,794,417	7,615,367
Ontario	4	4,770,120	101	53	274,547	1,037	496	1,306,319	52,934	2,635	2,390,743	6,631,219	4,240,476
1924													
Canada	10	14,437,836	486	156	898,360	2,876	1,693	3,408,325	180,021	13,386	6,232,433	19,217,930	12,985,497
Quebec	5	8,576,682	356	101	596,006	1,723	1,100	1,944,540	126,788	9,744	3,835,295	11,811,158	7,975,863
Ontario	5	5,861,148	130	55	302,354	1,153	593	1,463,785	53,233	3,642	2,397,138	7,406,772	5,009,634
1925													
Canada	10	15,519,066	496	168	954,033	3,294	1,985	4,240,764	168,688	13,330	8,729,999	23,994,613	15,264,612
Quebec	5	9,543,085	369	104	628,751	1,868	1,285	2,369,266	109,891	9,495	5,126,923	14,401,020	9,274,099
Ontario	5	5,975,981	127	64	325,282	1,426	700	1,871,498	58,797	3,835	3,603,078	9,593,591	5,990,513
1926													
Canada	9	14,482,939	519	174	1,031,890	3,395	2,066	4,410,274	159,175	12,597	10,213,176	22,929,744	12,716,568
Quebec	4	9,087,700	385	108	682,766	1,917	1,374	2,567,444	97,250	8,414	6,171,725	14,291,969	8,120,244
Ontario	5	5,395,239	134	66	349,124	1,478	692	1,842,830	61,925	4,183	4,041,451	8,637,775	4,596,324
1927													
Canada	10	15,060,521	565	204	1,114,725	3,765	2,266	4,891,819	151,409	13,985	9,203,686	26,397,643	17,193,957
Quebec	4	9,790,218	421	120	735,872	2,147	1,569	2,885,921	93,676	9,271	5,475,875	16,102,020	10,629,145
Ontario	6	5,270,303	144	84	378,853	1,558	697	2,005,898	57,733	4,714	3,727,811	10,295,623	6,567,812

[1]Estimated.

Table 201.—Summary Statistics of the Rubber Industry

		1917	1920	1921	1927
Rubber Tires and Other Rubber Goods Section					
Number of establishments		22	24	23	34
Capital	$	21,793,016	42,249,456	38,420,786	51,205,543
Average per establishment	$	945,137	1,760,394	1,670,469	1,506,045
Average per employee	$	3,481	4,992	8,101	6,151
Salaries	$	1,173,261	2,201,032	1,805,205	2,129,263
Average per salaried employee	$	1,136	1,645	1,896	1,883
Wages	$	3,911,605	7,924,464	4,006,292	8,485,736
Average per wage-earner	$	748	1,112	1,057	1,180
Total number of employees		6,261	8,464	4,743	8,325
Average per establishment		285	353	206	245
Gross value of products	$	33,956,395	55,122,857	25,618,042	65,016,087
Average per establishment	$	1,543,468	2,296,784	1,113,828	1,912,238
Average per employee	$	5,423	6,513	5,401	7,810
Value added by manufacture	$	17,420,816	24,477,650	13,398,055	29,495,271
Average per establishment	$	791,855	1,019,902	582,524	867,508
Average per employee	$	2,782	2,892	2,825	3,543
Power employed	H.P.	14,289	21,791	21,388	37,052
Average per establishment	H.P.	650	908	930	1,090
Average per wage-earner	H.P.	2·7	3·1	5·6	5·1
Rubber Footwear Section					
Number of establishments		6	11	12	10
Capital	$	6,602,967	16,120,583	15,816,832	15,060,521
Average per establishment	$	1,100,494	1,465,508	1,318,070	1,506,052
Average per employee	$	1,651	2,380	3,129	2,234
Salaries	$	268,758	958,048	1,006,215	1,114,725
Average per salaried employee	$	798	1,441	1,448	1,450
Wages	$	1,916,309	5,116,386	2,941,654	4,891,819
Average per wage-earner	$	523	837	675	819
Total number of employees		3,998	6,774	5,055	6,740
Average per establishment		666	616	421	674
Gross value of products	$	9,682,793	25,594,451	13,854,744	26,397,643
Average per establishment	$	1,613,799	2,326,768	1,154,312	2,639,764
Average per employee	$	2,422	3,778	2,742	3,917
Value added by manufacture	$	6,458,783	14,401,458	9,214,607	17,193,957
Average per establishment	$	1,076,464	1,309,223	767,884	1,719,395
Average per employee	$	1,615	2,126	1,823	2,551
Power employed	H.P.	7,007	11,977	11,190	13,985
Average per establishment	H.P.	1,168	1,089	933	1,398
Average per wage-earner	H.P.	1·9	2·0	2·6	2·3

Capital Invested.—The amount of capital invested in each section of the rubber industry from 1917 to 1927 is shown in table 202 under two heads—fixed capital which includes land, buildings, machinery and tools and working capital including materials and supplies on hand, stocks in process of manufacture, finished products on hand and cash, trading and operating accounts. The total capital invested increased since 1917 by $37,870,081 of which amount $23,071,899 appears in the item of fixed capital and $14,798,182 in that of working capital. In 1927, the rubber tires and other rubber goods section accounted for $51,205,543 or 77·3 p.c. of the investment and the rubber footwear section for $15,060,521 or 22·7 p.c. Apportioned by provinces, Ontario furnished 82·4 p.c. of the total investment, Quebec 16·8 p.c. and British Columbia 8 p.c. Fixed capital represented 56·6 p.c. and working capital 43·4 p.c. of the total capital invested in the industry.

Table 202.—Rubber Industry: Capital Invested by Classes, 1917-27

Year	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Inventories, stocks in process, etc.	Cash, trading and operating accounts	
	$	$	$	$
1917				
Rubber tires and other rubber goods	9,690,496	9,541,541	2,560,979	21,793,016
Rubber footwear	4,751,367	1,680,032	171,568	6,602,967
Total	14,441,863	11,221,573	2,732,547	28,395,983
1918				
Rubber tires and other rubber goods	9,053,525	9,186,333	1,335,822	19,575,680
Rubber footwear	6,443,410	4,614,504	1,042,143	12,100,057
Total	15,496,935	13,800,837	2,377,965	31,675,737
1919				
Rubber tires and other rubber goods	11,953,334	10,274,384	6,356,997	28,584,715
Rubber footwear	7,510,939	4,886,653	1,805,287	14,202,879
Total	19,464,273	15,161,037	8,162,284	42,787,594
1920				
Rubber tires and other rubber goods	18,848,137	15,886,813	7,514,506	42,249,456
Rubber footwear	8,460,542	6,077,472	1,582,569	16,120,583
Total	27,308,679	21,964,285	9,097,075	58,370,039
1921				
Rubber tires and other rubber goods	21,916,291	10,265,762	6,238,733	38,420,786
Rubber footwear	9,633,232	4,175,746	2,007,854	15,816,832
Total	31,549,523	14,441,508	8,246,587	54,237,618
1922				
Rubber tires and other rubber goods	23,426,731	7,732,011	4,521,063	35,679,805
Rubber footwear	9,362,747	3,180,313	1,931,638	14,474,698
Total	32,789,478	10,912,324	6,452,701	50,154,503
1923				
Rubber tires and other rubber goods	27,255,472	9,655,913	4,179,127	41,090,512
Rubber footwear	9,514,869	3,313,483	2,142,761	14,971,113
Total	36,770,341	12,969,396	6,321,888	56,061,625
1924				
Rubber tires and other rubber goods	26,870,344	8,144,021	6,708,735	41,723,100
Rubber footwear	9,127,592	2,860,828	2,449,410	14,437,830
Total	35,997,936	11,004,849	9,158,145	56,160,930
1925				
Rubber tires and other rubber goods	27,358,810	14,936,211	7,750,647	50,043,668
Rubber footwear	9,352,479	3,910,523	2,256,064	15,519,066
Total	36,709,289	18,846,734	10,006,711	65,562,734
1926				
Rubber tires and other rubber goods—				
Ontario	26,856,689	11,916,832	7,692,855	46,466,376
Other provinces	1,073,907	398,737	239,743	1,712,387
Rubber footwear—				
Quebec	5,797,097	1,933,805	1,356,798	9,087,700
Ontario	3,203,057	1,312,584	879,598	5,395,239
Total	36,930,750	15,561,958	10,168,994	62,661,702
1927				
Rubber tires and other rubber goods—				
Ontario	27,319,917	11,820,715	10,217,017	49,357,649
Other provinces	984,650	513,058	350,186	1,847,894
Rubber footwear—				
Quebec	6,152,230	1,855,723	1,782,265	9,790,218
Ontario	3,056,965	1,326,463	886,875	5,270,303
Total	37,513,762	15,515,959	13,236,343	66,266,064

Production.—The selling value at the factory of the products manufactured by the rubber industry is shown in the following series of tables:—

Table 203—Automobile tire and tube production, 1917-27.

Table 204.—Bicycle and motorcycle tire and tube production, 1917-27.

Table 205—Summary of production of rubber industry by classes, 1923-27.

Table 206—Production of tires by classes and sizes, 1927.

Table 207—Production of rubber footwear by classes and sizes, 1927.

Table 208—Miscellaneous products, 1927.

The production of the entire rubber industry in 1927 amounted to $91,413,730, of which amount $50,586,942 was represented by rubber tires, $27,628,612 by rubber footwear and the remainder of $13,198,176 by miscellaneous products. Compared with 1923, the increase in production in 1927 amounted to $34,900,783. To this increase, rubber tires contributed $22,022,504, rubber footwear $9,163,476 and miscellaneous products $3,714,803 (table 205).

Table 203.—Automobile Tire and Tube Production, Compared, 1917-1927

Year	Pneumatic tires				Solid tires	
	Casings	Value	Inner tubes	Value	Number	Value
	No.	$	No.	$		$
1917	[1]	[1]	[1]	[1]	111,211	225,460[2]
1918	[1]	[1]	[1]	[1]	60,783	126,859[2]
1919	1,293,010	23,298,673	1,117,913	2,872,487	14,170	451,196
1920	1,561,974	35,175,801	1,427,546	4,271,461	21,444	729,857
1921	657,816	15,520,810	989,689	2,037,180	9,472	343,171
1922	1,482,796	19,519,208	1,504,837	2,618,584	15,572	476,735
1923	2,150,768	23,504,489	2,256,604	3,655,109	22,546	658,090
1924	2,139,234	22,855,905	2,454,292	4,319,022	20,995	531,189
1925	2,969,632	33,586,958	3,462,380	6,922,413	20,918	721,039
1926	2,966,088	38,159,495	3,511,897	7,934,096	18,061	798,049
1927	3,856,315	40,707,749	4,275,753	8,302,944	21,471	859,552

[1]Separate figures for casings and inner tubes are not available for 1917 and 1918 being combined in a single total. In 1917 the number of tires was stated at 2,394,737 and the value at $15,186,995 and in 1918 at 2,242,046 tires valued at $14,449,957.
[2]Solid tires included carriage tires in 1917 and 1918.

Table 204.—Bicycle and Motorcycle Tires and Tubes, Compared, 1917-1927

Year	Bicycle				Motorcycles			
	Tires	Value	Tubes	Value	Tires	Value	Tubes	Value
	No.	$	No.	$	No.	$	No.	$
1917	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
1918	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
1919	185,613	244,521	234,679	277,656	8,586	74,131	8,717	12,396
1920	241,890	428,979	322,925	237,267	15,172	154,556	12,674	18,849
1921	91,496	161,151	95,851	83,953	4,540	41,919	5,757	7,795
1922	171,441	220,051	182,861	115,008	22,682	151,470	15,887	15,032
1923	211,493	249,869	217,082	128,885	39,888	187,074	35,334	30,946
1924	182,593	249,255	183,982	107,133	48,181	329,831	37,513	42,532
1925	197,699	243,963	208,210	95,918	53,477	335,268	48,231	65,620
1926	175,980	229,610	213,696	131,775	91,359	530,352	64,287	85,102
1927	160,705	175,572	150,149	84,408	37,658	261,491	20,164	31,155

[1]Separate information for 1917 and 1918 not available.

Table 205.—Rubber Industry: Summary of Production, 1923-27

Products	Unit of measure	1927		1926		1925		1924		1923	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		No.	$	No.	$	No.	$	No.	$	No.	$
Tires—											
Pneumatic tires—casings	No.	1,890,284	21,571,466	1,714,831	22,547,020	2,096,473	22,857,585	2,139,234	22,855,905	2,150,768	23,504,489
Pneumatic tires—inner tubes	"	2,398,759	4,655,571	2,130,179	4,598,711	2,666,383	5,157,214	2,454,292	4,319,022	2,256,604	3,655,109
Balloon tires—casings	"	1,966,031	19,136,283	1,251,257	15,612,475	873,159	10,729,373	.....	.....	.....	.....
Balloon tires—inner tubes	"	1,876,994	3,647,373	1,381,718	3,335,385	795,997	1,765,199	.....	.....	.....	.....
Solid tires	"	21,471	859,552	18,061	798,049	20,918	721,039	20,995	531,189	22,546	658,090
Carriage rubber tires, solid	Lb.	375,205	147,936	357,236	149,049	488,791	115,606	388,496	126,092	485,285	146,516
Other rubber tires, solid	"	57,113	16,135	81,661	64,430	109,024	18,454	190	692	1,392	3,469
Motorcycle tires—casings	No.	37,658	261,491	91,359	530,352	53,477	335,268	48,181	329,831	39,888	187,074
Motorcycle tires—inner tubes	"	20,164	31,155	64,287	85,102	48,231	65,620	37,513	42,532	35,334	30,946
Bicycle tires—casings	"	160,705	175,572	175,980	229,610	197,699	243,963	182,593	249,255	211,493	249,869
Bicycle tires—inner tubes	"	150,149	84,408	213,696	131,775	208,210	95,918	183,982	107,133	217,082	128,885
Total tires	.....	.....	50,586,942	.....	48,081,958	.....	42,105,239	.....	28,561,651	.....	28,564,438
Footwear—											
Rubber boots, knee and hip	Pairs	1,365,891	3,873,355	1,715,651	4,247,102	1,388,237	3,787,330	779,005	2,430,995	654,175	2,280,312
Lumbermen's rubber boots	"	1,792,046	4,229,231	1,821,516	4,016,856	1,762,777	4,046,393	1,439,221	3,525,698	1,425,908	3,332,989
Overshoes, not including Jersey storms	"	2,774,356	6,605,868	1,878,453	4,347,714	2,169,794	5,462,119	1,204,449	3,593,448	1,061,812	2,879,754
Light rubbers including Jersey storms	"	5,486,812	4,562,580	6,392,082	5,107,908	5,910,481	5,132,397	5,666,085	5,376,683	6,679,696	5,663,494
Canvas rubber-soled footwear, Balmorals	"	1,167,877	1,425,498	1,475,909	1,652,008	1,522,185	1,887,425	1,257,825	1,778,428	1,618,796	1,861,188
Canvas rubber-soled footwear, Oxfords	"	7,207,910	6,932,080	6,225,852	5,169,736	4,620,124	4,541,841	3,343,001	3,244,956	2,640,662	2,447,399
Total footwear	.....	19,794,892	27,628,612	19,509,463	24,541,324	17,403,598	24,857,505	13,687,586	19,950,208	14,081,049	18,465,136
Other rubber products—											
Rubber belting	Lb.	4,885,422	2,322,421	4,499,593	2,959,811	3,424,966	2,260,474	4,171,996[1]	2,301,774	4,991,417[1]	2,660,362
Rubber hose	"	4,214,920	1,801,616	4,349,863	2,220,084	3,542,030	1,806,435	6,548,368[1]	1,407,218	8,282,651[1]	1,827,738
Rubber and composition soles and heels	Pairs	21,032,423	2,201,695	17,866,181	1,648,689	15,970,544	1,576,250	10,893,883	1,018,185	10,695,369	981,264
Tire repair gums and fabrics	Lb.	1,712,870	841,990	1,263,601	928,486	.....	563,171	545,491	307,244	264,039	150,439
Rubber clothing	.....	.....	426,334	.....	368,431	.....	215,158	.....	271,435	.....	193,423
Miscellaneous products	.....	.....	5,604,210	.....	5,759,354	.....	4,845,342	.....	3,593,731	.....	3,670,147
Total	.....	.....	13,198,176	.....	13,884,855	.....	11,266,830	.....	8,899,587	.....	9,483,373
Total Production of Rubber Industry	.....	.....	**91,413,730**	.....	**86,508,137**	.....	**78,229,574**	.....	**57,411,446**	.....	**56,512,947**

[1] feet.

Table 206.—Production of (a) Pneumatic, (b) Balloon and (c) Solid Tires, by Sizes, 1927

Casings and Inner Tubes by Sizes	(a) Pneumatic Tires			
	Casings		Inner Tubes	
	Number	Value	Number	Value
		$		$
Sizes—				
30 x 3½	1,064,260	7,249,454	1,355,024	1,910,957
30 x 5	183,995	3,286,451	244,798	619,178
31 x 4	62,884	661,036	219,023	407,370
32 x 3½	3,460	31,641	2,954	4,826
32 x 4	90,110	1,056,737	99,457	202,909
32 x 4½	43,497	741,328	62,408	149,758
32 x 6	61,395	1,986,956	66,867	324,986
33 x 4	44,206	554,203	38,864	87,543
33 x 4½	35,523	584,075	41,673	101,458
33 x 5	31,106	708,624	47,963	147,298
34 x 4	8,563	118,338	8,904	20,722
34 x 4½	18,837	346,968	28,489	71,776
34 x 5	7,888	208,479	9,898	31,523
34 x 7	13,334	669,412	15,928	116,984
35 x 4½	525	10,123	2,451	4,871
35 x 5	10,161	262,256	14,690	49,697
36 x 4½	267	6,409	231	829
36 x 6	28,021	1,044,166	22,558	109,953
36 x 7	.....	.....	5	38
37 x 5	268	7,995	377	1,942
38 x 7	8,540	427,096	12,888	86,557
40 x 8	2,484	173,833	2,875	24,540
Miscellaneous inch sizes	79,321	505,636	53,714	88,308
Miscellaneous millimetre sizes	91,639	930,250	46,720	91,548
Total pneumatic tires	**1,890,284**	**21,571,466**	**2,398,759**	**4,655,571**
	(b) Balloon Tires			
Sizes—				
29 x 4·40	774,960	5,744,024	836,709	1,369,397
31 x 4·40	72,713	778,829	34,821	85,680
30 x 4·75	23,384	227,644	28,307	54,207
29 x 4·95	9,844	109,713	23,793	48,855
30 x 4·95	12,199	142,746	38,153	77,104
31 x 4·95	9,756	123,168	16,922	36,574
32 x 4·95	13,799	191,875	2,170	6,527
33 x 4·95	19,739	292,832	2,931	9,528
34 x 4·95	3,929	61,597	377	1,322
30 x 5·25	75,447	1,021,128	78,703	195,702
31 x 5·25	134,156	1,541,180	141,220	314,111
30 x 5·77	17,012	296,966	24,480	71,458
32 x 5·77	8,040	133,031	8,078	23,837
33 x 5·77	5,564	111,600	480	2,039
34 x 5·77	3,855	84,285	876	3,861
35 x 5·77	934	18,541	59	268
33 x 6·00	70,201	1,085,519	66,027	177,991
32 x 6·20	13,366	254,146	17,854	55,894
33 x 6·20	6,855	120,109	7,843	27,089
33 x 6·75	10,098	204,729	11,491	42,240
35 x 6·75	43	1,017	96	338
34 x 7·30	2,716	59,956	4,615	19,687
Miscellaneous sizes	677,421	6,531,648	530,989	1,023,664
Total balloon tires	**1,966,631**	**19,136,283**	**1,876,914**	**3,647,373**

Table 206.—Production of (a) Pneumatic, (b) Balloon and (c) Solid Tires, by Sizes, 1927—Continued

Casings and Inner Tubes by Sizes	(c) Solid Tires	
	Number	Value
		$
Sizes—		
32 x 3½	3,057	50,470
34 x 3½	89	1,487
36 x 3½	74	1,279
32 x 4	3,236	65,942
34 x 4	590	13,159
36 x 4	2,129	51,135
38 x 4	60	1,968
32 x 5	360	9,395
34 x 5	740	21,795
36 x 5	1,909	83,502
40 x 5	245	10,223
34 x 6	346	13,383
36 x 6	1,198	48,974
40 x 6	87	4,529
34 x 7	285	12,898
36 x 7	417	21,515
34 x 8	227	13,979
36 x 8	831	52,032
36 x 10	1,008	80,280
40 x 10	212	19,505
36 x 12	605	57,334
40 x 12	595	60,982
36 x 14	90	11,077
40 x 14	659	80,276
Miscellaneous sizes	2,422	72,433
Total solid tires	**21,471**	**859,552**

OTHER TIRES AND TUBES, SOLID OR PNEUMATIC

Kind	Unit of measure	Quantity	Selling value at the works
			$
Carriage, rubber tires, solid	Lb.	375,205	147,936
All other rubber tires, solid	"	57,113	16,135
Motorcycle tires, casings	No.	37,658	261,491
Motorcycle tires, inner tubes	"	20,164	31,155
Bicycle tires, casings	"	160,705	175,572
Bicycle tires, inner tubes	"	150,149	84,408
Total value			**716,697**

Table 206a—Summary of Tire Production, 1927

Kind	Unit of measure	Quantity	Selling value at the works
			$
Pneumatic tires—casings	No.	1,890,284	21,571,466
Pneumatic tires—inner tubes	"	2,398,759	4,655,571
Balloon tires—casings	"	1,966,031	19,136,283
Balloon tires—inner tubes	"	1,876,994	3,647,373
Solid tires	"	21,471	859,552
Carriage rubber tires, solid	Lb.	375,205	147,936
Other rubber tires, solid	"	57,113	16,135
Motorcycle tires—casings	No.	37,658	261,491
Motorcycle tires—inner tubes	"	20,164	31,155
Bicycle tires—casings	"	160,705	175,572
Bicycle tires—inner tubes	"	150,149	84,408
Total selling value			**50,586,942**

Table 207. Rubber Footwear Produced, by Classes and Sizes, 1927

Rubber footwear, kind and size	Rubber boots, knee and hip		Lumbermen's rubber boots		Overshoes not including Jersey storms	
	Quantity	Value	Quantity	Value	Quantity	Value
	pairs	$	pairs	$	pairs	$
Men's 6-12	556,491	2,204,938	1,109,230	3,081,350	801,393	1,814,145
Boys' 1-5	49,506	146,309	354,569	682,305	101,509	185,661
Youths' 11-13	11,357	24,952	172,410	247,107	21,652	33,366
Women's 2½-8	440,688	984,295	30,623	56,644	1,412,402	3,806,172
Misses' 11-2	158,969	290,224	31,393	45,872	250,467	466,924
Children's 4-10½	148,880	222,637	93,821	115,953	186,933	299,600
Totals	**1,365,891**	**3,873,355**	**1,792,046**	**4,229,231**	**2,774,356**	**6,605,868**

Rubber footwear, kind and size	Rubbers, light, including Jersey storms		Canvas rubber soled footwear, Balmorals		Canvas rubber soled footwear, Oxfords	
	Pairs	Value	Pairs	Value	Pairs	Value
	No.	$	No.	$	No.	$
Men's 6-12	2,011,769	2,102,529	437,924	615,439	1,273,197	1,498,863
Boys' 1-5	642,815	544,452	472,140	560,833	1,170,596	1,218,274
Youths' 11-13	199,894	142,091	153,419	152,630	586,114	526,934
Women's 2½-8	1,700,366	1,227,329	18,574	21,714	2,437,360	2,374,232
Misses' 11-2	488,291	306,648	22,045	22,258	837,624	669,551
Children's 4-10½	443,677	239,531	63,775	52,623	903,019	644,226
Totals	**5,486,812**	**4,562,580**	**1,167,877**	**1,425,498**	**7,207,910**	**6,932,080**

Table 207a.—Comparative Summary of Rubber Footwear, by Classes, 1926 and 1927

Classes of footwear	1927		1926	
	Quantity	Value	Quantity	Value
	pairs	$	pairs	$
Rubber boots, knee and hip	1,365,891	3,873,355	1,715,651	4,247,102
Lumbermen's rubber boots	1,792,046	4,229,231	1,821,516	4,016,856
Over shoes, not including Jersey storms	2,774,356	6,605,868	1,878,453	4,347,714
Light rubbers including Jersey storms	5,486,812	4,562,580	6,392,082	5,107,908
Canvas rubber-soled footwear, Balmorals	1,167,877	1,425,498	1,475,909	1,652,008
Canvas rubber-soled footwear, Oxfords	7,207,910	6,932,080	6,225,852	5,169,736
Totals	**19,794,892**	**27,628,612**	**19,509,463**	**24,541,324**

Table 208.—Manufactures of Other Rubber Goods, 1926 and 1927

Articles manufactured	1926		1927	
	Quantity	Selling value	Quantity	Selling value
		$		$
Rubber clothing, coats ... No.	50,695	200,115	64,952	297,236
Rubber clothing, headwear ... "	8,122	7,699	16,333	14,376
Rubber clothing, all other (value only) ... $	...	160,617	...	114,722
Rubber and composition soles ... Pairs	578,840	184,655	1,738,066	486,030
Rubber composition half soles ... "	358,832	82,683	773,247	218,147
Rubber and composition heels ... "	16,928,509	1,381,351	18,521,110	1,497,428
Tire repair gums and fabrics ... Lb.	1,263,601	928,486	1,712,870	841,990
Friction tape and splicing compound ... "	487,316	184,856	637,630	219,685
Rubber cement ... Gal.	131,691	173,905	182,754	220,830
Rubber mats and matting ... Lb.	2,046,008	368,078	2,032,350	371,946
Rubber tiling and sheet flooring ... "	668,816	255,599	584,068	170,862
Sheet packing ... "	307,173	95,011	322,162	87,753
Battery jars ... No.	...	151,736	16,706	16,494
Rubber belting ... Lb.	4,499,593	2,959,811	4,885,422	2,322,421
Rubber hose ... "	4,349,863	2,220,084	4,214,920	1,801,616
Hospital sheeting ... Yd.	149,480	99,250	186,777	93,464
Wringer rolls ... Lb.	17,976	7,292	18,391	6,689
Roll covering, all other than wringer ... "	263,445	269,798	260,048	220,882
Fruit jar ring rubbers ... "	466,045	192,626	415,040	124,903
Drug sundries (value only)	...	617,091	...	596,538
Hard rubber	...	489,783	...	257,800
All other rubber goods specified (value only) ... $	...	2,112,705	...	3,131,837
All other rubber goods not specified (value only) ... $	...	741,624	...	84,527
Totals	...	**13,884,855**	...	**13,198,176**

Materials Used.—The quantity and the cost value at the factory of the materials used in each section of the industry is presented in Table 209. Compared with 1926 there was a large decrease in the cost of materials used in the whole industry, the total for that year being $49,902,-189, whereas in 1927 such cost had fallen to a total of $44,724,502, representing a decrease of 11·6 p.c. Raw rubber was the principal item, being nearly 53 p.c. of the total cost of materials in 1927 as compared with almost 60 p.c. in 1926, the decreased percentage being due to a marked decline in the price of the commodity from 68·3 cents per lb. in 1926 to 41 cents in 1927. The quantity of reclaimed rubber used in the industry in 1927 was 20,646,795 pounds valued at $1,716,157 or an average cost of 8·3 cents per lb. as compared with a total of 16,370,089 pounds worth $1,622,574 or an average price of 9·9 cents per lb. in 1926. The second largest item of materials was tire duck of which 14,811,834 lbs. valued at $7,004,605 were consumed in 1927 as against 11,323,617 pounds worth $6,599,709 in 1926. The average price of all ducks and stockinettes was lower in 1927 than in 1926, as the following table indicates.

—		Average price 1926	Average price 1927
		cents	cents
Tire duck	lb.	0·583	0·473
Hose and belting duck	"	0·447	0·350
Shoe duck	yd.	0·590	0·475
Stockinette sheeting	lb.	0·691	0·727

The remaining items of materials show an increase in total cost value over 1926, amounting to $325,471.

Table 209.—Materials Used, by Quantity and Cost Value, 1927

Classes of materials		In rubber tires and other rubber goods section		In rubber footwear section	
		Quantity	Cost value	Quantity	Cost value
			$		$
Rubber, raw	lb.	49,776,571	20,081,040	7,790,704	3,545,071
Rubber, reclaimed	"	16,130,098	1,368,908	4,516,697	347,663
Tire duck	"	14,811,834	7,004,605	.....	.....
Hose and belting duck	"	2,679,816	908,122	580,765	234,954
Shoe duck	yd.	330,225	111,824	727,925	390,326
Shoe duck	lb.	.....	.....	384,778	212,168
Stockinette sheeting	"	212,264	193,842	629,547	418,185
Miscellaneous cotton (value only)		.....	698,761	.....	1,257,662
Cocks, valves, etc. (value only)		.....	647,394	.....	46,644
Chemicals and mineral compounds (value only)		.....	2,071,571	.....	797,452
All other materials (value only)		.....	2,434,749	.....	1,953,561
Total cost		.....	**35,520,816**	.....	**9,203,686**

WHOLESALE PRICES OF RUBBER AND ITS PRODUCTS

RAW RUBBER, CEYLON, PLANTATION, RIBBED SMOKED SHEETS

Price per pound, f.o.b. New York—Monthly quotations from New York Journal of Commerce

Averages		Averages	
1917	$ 0·7200	1923	$ 0·2957
1918	0·5700	1924	0·2630
1919	0·4868	1925	0·7270
1920	0·3468	1926	0·4880
1921	0·1683	1927	0·3769
1922	0·1752		

RAW RUBBER, UPRIVER, FINE PARA

Price per pound, f.o.b. New York—Monthly quotations from New York Journal of Commerce

Averages		Averages	
1917	$ 0·7100	1923	$ 0·2797
1918	0·6200	1924	0·2489
1919	0·5526	1925	0·6410
1920	0·3458	1926	0·4340
1921	0·1870	1927	0·3155
1922	0·1985		

WHOLESALE PRICES OF RUBBER AND ITS PRODUCTS—*Concluded*

RUBBERS, MEN'S REGULAR No. 1, STANDARD GRADE

Price per pair—Monthly quotations from manufacturers, Montreal

Averages		Averages	
1917	$ 0·9800	1923	$ 1·0800
1918	1·0900	1924	1·1433
1919	1.0660	1925	0·9866
1920	1·2366	1926	1·0300
1921	1·1130	1927	1·0000
1922	0·9800		

Employment and Salaries and Wages Paid.—From the monthly employment figures given in Table 210, it would appear that in the rubber tires and other rubber goods section of the rubber industry there is no marked seasonal tendency. Employment throughout the year is quite steady, the variation between the months of maximum and minimum employment in 1927 being 1,156 or about 16 p.c. of the average monthly employment. On the other hand employment in the rubber footwear section is somewhat seasonal. The maximum employment occurs in the fall of the year when the average for October, November and December 1927 was 6,647 compared with 5,746 for the first nine months of the year. It should be noted that in the rubber tire section 15 p.c. of the wage-earners are females compared with 38 p.c. in the rubber footwear section.

The number of hours worked per day by wage-earners in the month of highest employment is shown in Table 211 for 1925, 1926 and 1927. In the rubber tires and other rubber goods section, the majority of wage-earners in Quebec worked 10 hours per day in 1927 while in Ontario and British Columbia the great majority only worked between 8 and 9 hours, the average being 8·5 hours per day in Ontario and 9·4 in Quebec. In the rubber footwear section, the hours worked per day are somewhat longer. In Quebec, 87·6 p.c. of the wage-earners worked 9 hours while in Ontario, 56·1 p.c. worked 9 hours and 39·9 p.c. worked 10 hours or over. In Ontario, the average number of hours worked per day in 1927 was 9·4 compared with 9·0 p.c. in Quebec. This is rather unusual, in view of the general lower hours of work prevailing throughout all industries in Ontario as compared with Quebec.

In the rubber tires and other rubber goods section, salaries increased from an average of $1,136 in 1917 to $1,883 in 1927, an increase of 67 p.c., while in the rubber footwear section the increase was from $798 to $1,450 or 82 p.c. Even in spite of this big increase the salaries paid by the rubber footwear industry are the third lowest of the entire vegetable products group. On the other hand, the wages paid in 1927 amounting to $890 in Ontario and $777 in Quebec, were fairly high in view of the large number of female wage-earners employed. In the Dominion as a whole, wages in the rubber tires and other rubber goods section increased from $748 in 1917 to $1,180 in 1927, an increase of 58 p.c. and in the rubber footwear section from $523 to $819 or 57 p.c. The salaries and wages paid by the rubber goods section are much higher than that paid by the rubber footwear section. Also the wages and salaries paid in Ontario are higher than that of Quebec.

The number of hours worked per day and per week, the number of days that establishments operated on full time, and the average salaries and wages paid in both sections of the rubber industry from 1917 to 1927 are shown in Table 212.

Table 210.—Rubber Industry: Employment of Wage-earners, by Months, 1926 and 1927

Month	1927						1926					
	Rubber tires and other rubber goods section			Rubber footwear section			Rubber tires and other rubber goods section			Rubber footwear section		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
January	5,439	970	6,409	3,488	2,141	5,629	5,639	979	6,618	3,430	2,116	5,546
February	5,737	963	6,700	3,420	2,096	5,516	5,610	1,005	6,615	3,459	2,101	5,560
March	5,989	995	6,984	3,378	2,072	5,450	5,520	972	6,492	3,425	2,081	5,506
April	6,409	1,055	7,464	3,381	2,041	5,422	5,444	980	6,424	3,310	2,055	5,365
May	6,471	1,094	7,565	3,468	2,055	5,523	5,298	931	6,229	3,341	2,009	5,350
June	6,492	1,059	7,551	3,556	2,177	5,733	5,254	921	6,175	3,333	1,996	5,329
July	6,390	1,051	7,441	3,695	2,252	5,947	5,065	905	5,970	3,121	1,707	4,828
August	6,272	1,044	7,316	3,799	2,312	6,111	5,080	941	6,021	3,401	2,099	5,500
September	6,069	1,038	7,107	3,915	2,472	6,387	5,054	956	6,010	3,419	2,107	5,526
October	5,929	1,068	6,997	4,121	2,537	6,658	5,299	1,078	6,377	3,437	2,089	5,526
November	5,859	1,050	6,909	4,146	2,517	6,663	5,184	1,083	6,267	3,508	2,193	5,701
December	5,787	1,054	6,841	4,097	2,522	6,619	5,301	1,080	6,381	3,555	2,236	5,791
Average	**6,146**	**1,048**	**7,194**	**3,705**	**2,266**	**5,971**	**5,343**	**997**	**6,340**	**3,395**	**2,066**	**5,461**

Table 211.—Rubber Industry: Hours Worked by Wage-earners in Month of Highest Employment, 1925-27

—		Wage-earners working per day				Percentage of wage-earners working per day			
		8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
Rubber Tires and Other Rubber Goods Section									
Canada	1925	2,805	2,347	1,147	794	39·5	33·1	16·2	1·2
	1926	2,901	2,152	1,966	170	40·4	29·9	27·3	2·4
	1927	3,098	2,402	2,287	346	38·1	29·5	28·1	4·3
Quebec	1925	16	93	175	.....	5·7	32·7	61·6	.....
	1926	.....	158	205	.....	.....	43·5	56·5	.....
	1927	36	175	238	3	8·0	38·7	52·6	0·7
Ontario and British Columbia	1925	2,789	2,254	972	794	41·0	33·1	15·0	10·9
	1926	2,901	1,994	1,761	170	42·5	29·2	25·8	2·5
	1927	3,062	2,227	2,049	343	39·9	29·0	26·7	4·4
Rubber Footwear Section									
Canada	1925	1,222	4,815	365	238	18·4	72·5	5·5	3·6
	1926	260	4,589	1,021	102	4·4	76·8	17·1	1·7
	1927	340	5,203	1,202	161	4·9	75·4	17·4	2·3
Quebec	1925	.....	3,682	138	108	.....	93·7	3·5	2·8
	1926	230	3,130	142	60	6·4	87·9	4·0	1·7
	1927	323	3,693	128	70	7·7	87·6	3·0	1·7
Ontario	1925	1,222	1,133	227	130	45·1	41·4	8·4	5·1
	1926	30	1,459	879	42	1·2	60·5	36·5	1·8
	1927	17	1,510	1,074	91	0·6	56·1	39·9	3·4

Table 212.—Rubber Industry: Hours Worked and Salaries and Wages Paid, 1917-27

—	Hours worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
				$	$
Rubber Tires and Other Rubber Goods Section					
1917					
Canada	9·5	54·4	279	1,136	748
Ontario	9·6	54·6	275	1,121	778
Quebec	9·2	53·5	291	1,278	520
1920					
Canada	8·8	49·8	278	1,645	1,112
Ontario	8·8	49·3	272	1,617	1,134
Quebec	9·0	51·3	295	2,032	918
1921					
Canada	9·0	49·3	256	1,896	1,057
Ontario	8·9	49·1	256	1,891	1,069
Quebec	9·5	51·2	259	1,786	796
1925					
Canada	9·0	50·0	267	1,783	1,191
Ontario	9·0	50·1	278	1,802	1,205
Quebec	9·6	51·6	223	1,696	784
1926					
Canada	8·9	49·8	256	1,889	1,136
Ontario	8·9	49·2	275	1,917	1,157
Quebec	9·6	53·0	202	1,674	745
1927					
Canada	9·0	48·3	261	1,883	1,180
Ontario	8·5	48·2	257	1,893	1,204
Quebec	9·4	49·7	286	1,980	752
Rubber Footwear Section					
1917					
Canada	9·7	56·5	293	798	523
Ontario	9·0	54·0	293	789	783
Quebec	10·0	60·0	290	798	504
1920					
Canada	9·0	50·3	266	1,441	837
Ontario	9·0	50·6	247	1,674	974
Quebec	9·0	50·0	272	1,362	701
1921					
Canada	9·1	49·7	196	1,448	675
Ontario	9·0	49·4	183	1,595	773
Quebec	9·1	49·8	209	1,392	611
1925					
Canada	9·0	54·1	246	1,437	801
Ontario	8·7	55·0	272	1,703	880
Quebec	9·1	53·2	221	1,329	751
1926					
Canada	9·2	53·4	271	1,489	808
Ontario	9·4	55·4	273	1,746	849
Quebec	9·0	51·0	268	1,385	780
1927					
Canada	9·2	52·0	276	1,450	819
Ontario	9·4	52·7	276	1,662	890
Quebec	9·0	51·0	276	1,360	777

Fuel Consumption and Power Installation.—The amount spent for fuel by the rubber industry in 1927 came to $649,892 to which amount the rubber tires and other rubber goods section contributed $498,483, and the rubber footwear section $151,409. Bituminous coal is the most important fuel used and represents about 90 p.c. of the total fuel bill. The increasing use of electricity as a source of motive power should be noted. While the amount spent for fuel increased from $548,649 in 1917 to $649,892 in 1927, an increase of 19 p.c., the outlay for electricity rose from $146,691 to $579,419 an increase of 295 p.c. The greater application of electricity as motive power is also shown by Table 214 which gives the power installation of the rubber industry from 1917 to 1927. As may be seen, the number of horse power used for manufacturing purposes increased during the period from 21,296 h.p. to 53,637 h.p.

Table 213.—Rubber Industry: Fuel Consumption, 1917-27

—	Bituminous coal		Anthracite coal		Gasoline		Fuel oils		Gas		All other fuel	Total fuel	Cost of electricity
	tons	$	tons	$	gals.	$	gals.	$	M cu. ft.	$	$	$	$
1917													
Rubber tires and other rubber goods	55,755	370,197	35	336	700	162	.....	.....	.....	.....	864	371,559	98,896
Rubber footwear	46,504	173,971	.....	.....	.....	.....	1,138	241	.....	.....	2,878	177,090	47,795
Total	102,259	544,168	35	336	700	162	1,138	241	.....	.....	3,742	548,649	146,691
1918													
Rubber tires and other rubber goods	39,388	274,691	13,056	78,712	700	287	.....	.....	63	70	216	353,976	88,551
Rubber footwear	34,894	261,143	.....	.....	175,779	70,190	.....	.....	.....	.....	5,741	337,074	61,624
Total	74,282	535,834	13,056	78,712	176,479	70,477	.....	.....	63	70	5,957	691,050	150,175
1919													
Rubber tires and other rubber goods	61,599	360,286	207	1,347	.....	.....	.....	.....	1,413	1,466	.....	363,099	250,195
Rubber footwear	28,823	190,712	.....	.....	.....	.....	2,000	300	.....	.....	5,191	196,203	90,528
Total	90,422	550,998	207	1,347	.....	.....	2,000	300	1,413	1,466	5,191	559,302	340,723
1920													
Rubber tires and other rubber goods	76,552	649,342	1,332	12,608	.....	.....	.....	.....	880	936	40	662,926	317,931
Rubber footwear	32,007	321,565	.....	.....	.....	.....	.....	.....	.....	.....	.....	321,565	75,724
Total	108,559	970,907	1,332	12,608	.....	.....	.....	.....	880	936	40	984,491	393,655
1921													
Rubber tires and other rubber goods	56,624	503,234	666	3,555	704	259	63,684	5,352	334	448	55	512,903	217,502
Rubber footwear	23,672	242,047	.....	.....	4,419	2,029	.....	.....	.....	.....	13,763	257,839	86,231
Total	80,296	745,281	666	3,555	5,123	2,288	63,684	5,352	334	448	13,818	770,742	303,733
1922													
Rubber tires and other rubber goods	69,324	519,715	841	12,615	7,666	2,099	88,868	6,204	291	354	39	541,026	*
Rubber footwear	24,831	222,716	.....	.....	9,651	3,619	.....	.....	.....	.....	319	226,654	.....
Total	94,155	742,431	841	12,615	17,317	5,718	88,868	6,204	291	354	358	767,680	.....

1923													
Rubber tires and other rubber goods	74,864	508,789	841	4,418	11,179	2,947	82,460	6,130	769	811	39,401	562,496	320,546
Rubber footwear	27,127	207,591	.....	.....	.....	.....	426	125	.....	.....	.....	207,716	90,686
Total	101,991	716,380	841	4,418	11,179	2,947	82,886	6,255	769	811	39,401	770,212	411,232
1924													
Rubber tires and other rubber goods	68,038	382,416	978	4,725	57,020	14,198	80,742	5,382	3,536	3,705	41,911	452,337	320,367
Rubber footwear	26,730	180,021	.....	.....	.....	.....	.....	.....	.....	.....	.....	180,021	130,935
Total	94,768	562,437	978	4,725	57,020	14,198	80,742	5,382	3,536	3,705	41,911	632,358	451,302
1925													
Rubber tires and other rubber goods	60,850	353,917	1,474	6,495	53,763	13,618	65,470	4,817	1,231	1,205	50,094	430,146	333,050
Rubber footwear	24,435	160,617	.....	.....	27,061	8,071	.....	.....	.....	.....	.....	168,688	144,735
Total	85,285	514,534	1,474	6,495	80,824	21,689	65,470	4,817	1,231	1,205	50,094	598,834	477,785
1926													
Rubber tires and other rubber goods	69,254	402,398	1,821	9,046	44,122	11,656	51,725	2,283	5,901	5,471	51,522	482,376	406,669
Rubber footwear	24,307	159,175	.....	.....	.....	.....	.....	.....	.....	.....	.....	159,175	149,786
Total	93,561	561,573	1,821	9,046	44,122	11,656	51,725	2,283	5,901	5,471	51,522	641,551	556,455
1927													
Rubber tires and other rubber goods	70,031	413,172	1,129	5,557	63,477	15,513	74,659	4,361	7,173	6,724	53,156	498,483	447,215
Rubber footwear	23,254	150,691	.....	.....	.....	.....	6,522	718	.....	.....	.....	151,409	132,204
Total	93,287	563,863	1,129	5,557	63,477	15,513	81,181	5,079	7,173	6,724	53,156	649,892	579,419

*Figures not available.

Table 214.—Rubber Industry: Power Installation According to Manufacturers' Rating, 1917-27

Year	Steam engines and turbines		Oil, gas and gasoline engines		Hydraulic turbines or water wheels		Electric motors operated by purchased power		Total power used for manufacturing		Electric motors operated by power generated by the establishment		Total motors		Boilers installed	
	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.	Units	H.P.
1917																
Rubber tires and other rubber goods	9	1,925	.....	.....	53	900	354	11,464	416	14,289	4	39	358	11,503	.....	[illegible]
Rubber footwear	26	1,273	.....	.....	5	1,450	149	4,284	180	7,007	24	384	173	4,668	.....	.....
Total	35	3,198	.....	.....	58	2,350	503	15,748	596	21,296	28	423	531	16,171	.....	.....
1918																
Rubber tires and other rubber goods	2	90	.....	.....	.....	.....	410	11,306	412	11,396	180	4,773	598	16,079	32	5,313
Rubber footwear	9	1,604	.....	.....	8	2,735	245	5,937	262	10,276	40	1,318	285	7,255	29	4,260
Total	11	1,694	.....	.....	8	2,735	655	17,243	674	21,672	220	6,091	883	23,334	61	9,573
1919																
Rubber tires and other rubber goods	4	225	.....	.....	.....	.....	298	10,765	302	10,990	149	5,382	447	16,147	62	7,840
Rubber footwear	13	1,618	.....	.....	11	2,975	210	4,925	234	9,518	104	2,462	314	7,387	23	5,060
Total	17	1,843	.....	.....	11	2,975	508	15,690	536	20,508[1]	253	7,844	761	23,534	94	12,900
1920																
Rubber tires and other rubber goods	4	550	.....	.....	.....	.....	863	21,241	867	21,791	.....	.....	863	21,241	52	11,128
Rubber footwear	9	1,706	.....	.....	13	3,075	292	7,196	314	11,977	51	1,423	343	8,619	29	4,950
Total	13	2,256	.....	.....	13	3,075	1,155	28,437	1,181	33,768	51	1,423	1,206	29,860	81	16,078
1921																
Rubber tires and other rubber goods	9	1,880	.....	.....	.....	.....	589	19,508	598	21,388	294	9,754	883	29,262	50	9,463
Rubber footwear	11	1,778	.....	.....	7	2,525	258	6,887	276	11,190	114	3,444	372	10,331	33	5,365
Total	20	3,658	.....	.....	7	2,525	847	26,395	874	32,578[1]	408	13,198	1,255	39,593	83	14,828

1922																
Rubber tires and other rubber goods	15	2,225	.....	.....	8	502	1,047	26,043	1,070	28,770	25	559	1,072	26,602	44	9,186
Rubber footwear	8	1,824	.....	.....	5	1,925	316	8,845	329	12,594	88	1,804	404	10,649	11	1,200
Total	23	4,049	.....	.....	13	2,427	1,363	34,888	1,399	41,364	113	2,363	1,476	37,251	55	10,386
1923																
Rubber tires and other rubber goods	29	2,575	.....	.....	.....	.....	1,038	29,935	1,067	32,510	15	434	1,053	30,369	51	9,626
Rubber footwear	6	1,450	2	800	3	1,200	336	8,943	347	12,393	112	2,351	448	11,294	13	2,750
Total	35	4,025	2	800	3	1,200	1,374	38,878	1,414	44,903	127	2,785	1,501	41,663	64	12,376
1924																
Rubber tires and other rubber goods	36	2,448	.....	.....	.....	.....	1,123	29,752	1,159	32,200	11	286	1,134	30,038	53	9,833
Rubber footwear	7	1,455	1	35	10	3,745	330	8,151	348	13,386	122	2,654	452	10,805	27	4,290
Total	43	3,903	1	35	10	3,745	1,453	37,903	1,507	45,586	133	2,940	1,586	40,843	80	14,123
1925																
Rubber tires and other rubber goods	21	2,130	.....	.....	.....	.....	1,217	32,263	1,238	34,393	6	261	1,223	32,524	51	9,389
Rubber footwear	6	1,435	.....	.....	7	2,660	337	9,235	350	13,330	135	2,749	472	11,984	25	4,060
Total	27	3,565	.....	.....	7	2,660	1,554	41,498	1,588	47,723	141	3,010	1,695	44,508	76	13,449
1926																
Rubber tires and other rubber goods	23	2,230	1	1	.....	.....	1,406	33,261	1,430	35,492	3	110	1,409	33,371	38	7,587
Rubber footwear	4	785	.....	.....	6	2,160	357	9,652	367	12,597	124	2,477	481	12,129	22	3,570
Total	27	3,015	1	1	6	2,160	1,863	42,913	1,797	48,089	127	2,587	1,890	45,500	60	11,157
1927																
Rubber tires and other rubber goods	23	2,390	1	1	.....	.....	1,448	34,661	1,472	37,052	2	60	1,450	34,721	48	9,142
Rubber footwear	3	435	.....	.....	7	2,165	410	13,985	420	16,585	91	1,047	501	15,032	27	4,270
Total	26	2,825	1	1	7	2,165	1,858	48,646	1,892	53,637	93	1,107	1,951	49,753	75	13,412

[1]Estimated. [2]Figures not available.

Table 215.—Summary of Imports for Consumption of Rubber and Manufactures of Rubber, for the Calendar Years 1922-27

Articles imported	Unit of measure	1927		1926		1925		1924		1923		1922	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		No.	$	No.	$	No.	$	No.	$	No.	$	No.	$
Raw and partly manufactured—													
Balata, crude	Lb.	6,176	2,933	6,647	4,527	61,534	25,377	4,675	3,577	8,914	7,826	.....	.....
Rubber and gutta percha, crude	"	59,145,951	22,623,511	45,333,362	24,936,964	44,407,421	25,810,949	32,299,840	8,199,734	29,695,626	8,713,209	20,980,390	3,535,331
Rubber, hard, in sheets	"	204,781	89,870	145,649	93,030	256,574	170,196	204,891	105,878	116,457	69,176	37,257	19,510
Rubber, hard, in tubes	.....	.....	12,620	.....	10,585	.....	2,308	.....	12,984	.....	20,338	.....	23,970
Rubber, powdered	Lb.	8,229,350	517,573	7,270,720	435,977	5,424,626	294,833	3,901,451	143,902	4,026,210	145,391	2,319,538	85,608
Rubber, recovered	"	9,747,971	974,229	7,940,569	968,721	6,980,698	852,523	2,751,005	262,053	2,732,060	262,602	1,547,792	142,698
Rubber substitute	"	1,040,994	150,222	819,918	107,019	756,153	127,215	759,222	205,034	850,463	132,158	.....	.....
Rubber thread, not covered	"	220,584	287,118	154,770	235,879	153,047	163,298	91,253	98,403	87,460	100,767	.....	.....
Total	.....	.....	24,658,076	.....	26,792,702	.....	27,446,699	.....	9,031,565	.....	9,451,467	.....	3,807,117
Rubber, manufactured—													
Belting, rubber	.....	.....	130,989	.....	258,269	.....	212,538	.....	164,423	.....	157,786	.....	136,015
Cement, rubber	.....	.....	88,853	.....	90,788	.....	52,957	.....	52,315	.....	50,123	.....	.....
Clothing of rubber	.....	.....	482,461	.....	237,846	.....	186,971	.....	173,976	.....	192,209	.....	152,797
Elastic, round or flat	.....	.....	188,779	.....	204,676	.....	217,653	.....	251,855	.....	312,788	.....	402,455
Gloves, rubber	.....	.....	18,236	.....	19,650	.....	17,029	.....	15,854	.....	17,372	.....	.....
Hose, rubber	.....	.....	172,732	.....	169,178	.....	166,716	.....	111,992	.....	123,313	.....	119,266
Hot water bottles	.....	.....	27,104	.....	19,114	.....	19,432	.....	15,706	.....	32,425	.....	.....
Mats and matting, rubber	.....	.....	31,291	.....	41,515	.....	23,450	.....	16,782	.....	16,324	.....	.....
Boots and shoes, rubber	Pairs	110,488	202,801	67,063	112,984	75,273	109,269	163,223	171,310	116,986	180,184	.....	95,507
Tires for vehicles, pneumatic casings	No.	46,042	292,354	43,737	320,498	30,665	443,119	58,334	646,699	73,344	943,271*	.....	1,040,244
Tires for vehicles, inner tubes	"	44,144	88,711	19,781	47,060	19,490	52,398	43,571	74,986	22,101	80,368*	.....	125,215
Tires for vehicles, solid rubber	.....	.....	27,873	.....	40,249	.....	42,718	.....	92,384	.....	118,243*	.....	160,264
Golf balls	Doz.	47,547	192,660	48,103	197,106	26,205	109,464	.....	.....	.....	.....	.....	.....
Heels, rubber	Pairs	900,432	52,849	263,080	20,487	119,063	8,757	.....	.....	.....	.....	.....	.....
Packing, rubber	.....	.....	52,901	.....	54,547	.....	46,998	.....	43,547	.....	52,597	.....	.....
All other manufactures of rubber	.....	.....	1,278,420	.....	1,363,842	.....	1,538,343	.....	1,526,365	.....	1,487,901	.....	1,294,906
Total	.....	.....	3,329,014	.....	3,197,809	.....	3,247,812	.....	3,358,194	.....	3,764,904	.....	3,526,669
Grand total	.....	.....	**27,987,090**	.....	**29,990,511**	.....	**30,694,511**	.....	**12,389,759**	.....	**13,216,371**	.....	**7,333,786**
Total imports by countries—													
United Kingdom	.....	.....	734,396	.....	769,309	.....	2,663,977	.....	1,996,731	.....	2,073,695	.....	.....
United States	.....	.....	24,739,183	.....	26,351,434	.....	24,543,237	.....	9,795,173	.....	9,273,041	.....	.....
Japan	.....	.....	.....	.....	1,440	.....	1,360	.....	.....	.....	.....	.....	.....
France	.....	.....	12,750	.....	38,538	.....	33,069	.....	20,441	.....	.....	.....	.....
Germany	.....	.....	117,377	.....	43,853	.....	38,024	.....	19,123	.....	.....	.....	.....
Straits Settlements	.....	.....	1,806,674	.....	2,132,308	.....	2,664,239	.....	500,838	.....	.....	.....	.....
Dutch East Indies	.....	.....	470,699	.....	576,480	.....	636,888	.....	19,855	.....	.....	.....	.....
Other countries	.....	.....	106,011	.....	77,059	.....	113,717	.....	37,598	.....	1,869,635	.....	.....
Total	.....	.....	**27,987,090**	.....	**29,990,511**	.....	**30,694,511**	.....	**12,389,759**	.....	**13,216,371**	.....	**7,333,786**

*For nine months of calendar year. Statistics for January, February and March not available.

Imports and Exports.—The imports for consumption in Canada of raw rubber and manufactures of rubber are shown by classes in Table 215 for the calendar years 1922 to 1927 and by classes and countries for 1927 in Table 216. The importation of raw and partly manufactured rubber increased from $3,807,117 in 1922 to $24,658,076 in 1927 while that of manufactured rubber products decreased from $3,526,669 to $3,329,014 during the same period. Of the total value of imports in 1927 goods to the value of $24,739,183 entered Canada from the United States $734,396 from the United Kingdom and $2,513,511 from other countries.

Exports of rubber and rubber goods by classes of product are shown in Table 217 for the calendar years 1922 to 1927 and by classes and countries for 1927 in Table 218. The value of the rubber goods exported increased from $5,541,725 in 1922 to $28,000,932 in 1927. To this increase of $22,459,207 inner tubes and tires of all kinds contributed $16,036,630. In 1927 the principal articles exported were (a) pneumatic tires, casings, $16,913,065 (b) canvas shoes with rubber soles, $3,835,443, (c) pneumatic tires, inner tubes, $3,143,901 and (d) boots and shoes of rubber, $1,865,672. The destination of Canadian exports by countries shows that of the total, goods to the value of $6,740,895 went to the United Kingdom, $3,305,655 to New Zealand, $2,374,868 to the Argentine Republic, $1,938,620 to British South Africa and $1,587,198 to British India.

Table 216.—Rubber and Manufactures of Rubber Imported for Consumption, 1927 (Calendar Year)

Articles imported by principal countries	Quantity	Value
		$
Raw and partly manufactured		
Balata, crude—		
United Kingdom ..... Lb.	4,596	2,120
United States	1,580	813
Total	6,176	2,933
Rubber and gutta percha, crude—		
United Kingdom ..... Lb.	216,203	84,747
United States	52,590,949	20,199,037
Straits Settlements	4,803,079	1,806,674
Dutch East Indies	1,341,454	470,699
Other countries	194,266	62,354
Total	59,145,951	22,623,511
Rubber, hard, in sheets—		
United Kingdom ..... Lb.	7,700	1,285
United States	192,531	86,918
Other countries	4,547	1,667
Total	204,781	89,870
Rubber, hard, in tubes—		
United States	.....	12,620
Total	.....	12,620
Rubber, powdered—		
United Kingdom ..... Lb.	10,024	2,175
United States	8,219,276	515,395
Other countries	50	3
Total	8,229,350	517,573
Rubber, recovered—		
United States ..... Lb.	9,746,971	974,109
Other countries	1,000	120
Total	9,747,971	974,229
Rubber substitute—		
United Kingdom ..... Lb.	127,391	12,926
United States	908,540	135,477
Other countries	5,063	1,819
Total	1,040,994	150,222
Rubber thread, not covered—		
United Kingdom ..... Lb.	7,821	10,131
United States	212,741	276,971
Other countries	22	16
Total	220,584	287,118

Articles imported	Value only
	$
Rubber, Manufactured	
Belting rubber—	
United Kingdom	5,539
United States	125,325
Other countries	125
Total	130,989
Cement, rubber—	
United Kingdom	1,520
United States	87,234
Other countries	99
Total	88,853
Clothing of rubber—	
United Kingdom	124,967
United States	309,153
Germany	44,710
Other countries	3,631
Total	482,461
Elastic, round or flat—	
United Kingdom	53,619
United States	133,861
Other countries	1,299
Total	188,779
Gloves, rubber—	
United Kingdom	817
United States	16,275
Other countries	1,144
Total	18,236
Hose, rubber—	
United Kingdom	3,713
United States	168,698
Other countries	321
Total	172,732

Table 216.—Rubber and Manufactures of Rubber Imported for Consumption, 1927 (Calendar Year)—Concluded

Articles imported by principal countries	Quantity	Value
		$
Rubber, Manufactured		
Boots and shoes, rubber—		
United Kingdom.....Pair.	1,902	1,292
United States.....	108,260	201,358
Other countries.....	326	151
Total.....	110,488	202,801
Tires for bicycles—		
Pneumatic casings and inner tubes—		
United Kingdom.....No.	2,860	2,460
United States.....	1,307	1,853
Other countries.....	18,544	7,586
Total.....	22,711	11,899
Tires, pneumatic rubber tire casings, n.o.p.-		
United Kingdom.....No.	225	2,062
United States.....	23,052	277,820
Other countries.....	54	573
Total.....	23,331	280,455
Tires, inner tubes, n.o.p.—		
United Kingdom.....No.	72	153
United States.....	44,066	88,539
Other countries.....	6	19
Total.....	44,144	88,711
Tires, solid rubber for automobiles and motor trucks—		
United States.....	491	15,826
Total.....	491	15,826
Tires, solid rubber, n.o.p.—		
United Kingdom.....	.....	3,784
United States.....	.....	8,263
Total.....	.....	12,047
Golf balls—		
United Kingdom.....Doz..	45,262	190,062
United States.....	2,285	2,598
Total.....	47,547	192,660
Heels, rubber—		
United Kingdom.....Pairs..	21,063	2,200
United States.....	879,369	50,649
Total.....	900,432	52,849

Articles imported	Value only
	$
Rubber, Manufactured	
Hot water bottles—	
United Kingdom.....	4,169
United States.....	22,680
Other countries.....	255
Total.....	27,104
Mats and matting, rubber—	
United Kingdom.....	2,030
United States.....	27,764
Other countries.....	1,497
Total.....	31,291
Packing, rubber—	
United Kingdom.....	3,192
United States.....	48,524
Other countries.....	1,185
Total.....	52,901
Manufactures of India rubber and gutta-percha, n.o.p.—	
United Kingdom.....	219,433
United States.....	951 423
France.....	12,750
Germany.....	72,667
Other countries.....	22,147
Total.....	1,278,420
Total imports whether raw or partly manufactured—	24,658,076
Wholly manufactured.....	3,329,014
Grand total.....	27,987,090
Total imports by countries and value—	
United Kingdom.....	734,396
United States.....	24,739,183
France.....	12,750
Germany.....	117,377
Straits Settlements.....	1,806,674
Dutch East Indies.....	470,699
Other countries.....	106,011
Total.....	27,987,090

Table 217.—Summary of Exports of Rubber and Rubber Goods for the Calendar Years 1922-27

Articles exported		1927		1926		1925		1924		1923		1922	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		No.	$	No.	$	No.	$	No.	$	No.	$	No.	$
Waste rubber	Cwt.	127,216	273,639	130,683	349,711	125,583	341,395	24,581	104,676	24,233	83,889	25,140	66,989
Belting of rubber	Lb.	1,226,609	500,935	1,149,222	621,210	1,213,284	615,518	702,198	383,864	450,062	249,699	320,642	152,105
Canvas shoes with rubber soles	Pairs	5,491,164	3,835,443	4,985,933	3,829,291	3,235,263	2,286,836	2,482,683	1,824,448	1,669,062	1,171,486	.....	.....
Boots and shoes of rubber, n.o.p.	"	1,178,884	1,865,672	1,644,130	2,740,594	1,195,827	1,848,474	573,489	854,516	455,686	602,855	.....	436,564
Clothing, rubber, including waterproofed	.....	.....	24,164	.....	28,284	.....	47,186	.....	23,069	.....	17,059	.....	10,005
Pneumatic tires, casings	No.	1,679,126	16,913,065	1,152,070	14,645,309	912,265	9,731,121	578,918	5,416,377	395,916	5,605,644	*.....	4,330,556**
Pneumatic tires, inner tubes	"	1,796,619	3,143,901	1,135,948	2,567,105	1,011,865	1,695,795	587,948	849,182	316,639	606,069	*.....	.....
Tires for vehicles, solid rubber	"	14,473	438,926	9,711	312,526	10,210	248,929	10,957	224,280	6,085	118,873	*.....	128,706
Hose of rubber	.....	.....	256,696	.....	272,966	.....	216,675	.....	157,208	.....	124,334	.....	120,316
All other manufactures of rubber	.....	.....	748,491	.....	602,241	.....	445,358	.....	336,262	.....	249,908	.....	296,484
Total Exports	.....	.....	**28,000,232**	.....	**25,969,237**	.....	**17,477,287**	.....	**10,173,882**	.....	**8,829,816**	.....	**5,541,725**
Exports by countries—													
United Kingdom	.....	.....	6,740,895	.....	5,858,722	.....	3,865,059	.....	2,429,419	.....	1,910,675	.....	.....
United States	.....	.....	379,877	.....	555,707	.....	487,377	.....	213,659	.....	186,534	.....	.....
Argentine Republic	.....	.....	2,374,868	.....	2,548,597	.....	1,587,446	.....	1,245,948	.....	.....	.....	.....
Australia	.....	.....	944,913	.....	1,600,316	.....	719,722	.....	756,765	.....	.....	.....	.....
British South Africa	.....	.....	1,938,620	.....	1,286,338	.....	1,133,718	.....	899,744	.....	.....	.....	.....
British India	.....	.....	1,587,198	.....	1,037,267	.....	673,628	.....	279,510	.....	.....	.....	.....
New Zealand	.....	.....	3,305,655	.....	2,493,219	.....	3,133,570	.....	1,310,266	.....	.....	.....	.....
Other countries	.....	.....	10,728,906	.....	10,589,071	.....	5,876,767	.....	3,038,571	.....	6,732,607	.....	.....
Total Exports	.....	.....	**28,000,232**	.....	**25,969,237**	.....	**17,477,287**	.....	**10,173,882**	.....	**8,829,816**	.....	**5,541,725**

*Figures for 9 months of calendar year. Statistics for January, February and March not available.
**Includes inner tubes.

Table 218.—Exports of Rubber and Rubber Goods by Classes and Countries, for the Calendar Year 1927

Countries to which exported	Waste rubber		Belting of rubber		Canvas shoes with rubber soles		Boots or shoes of rubber, n.o.p.		Clothing, rubber incl. water-proofed
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Value only
	Cwt.	$	lb.	$	pairs	$	pairs	$	$
United Kingdom	...	...	105,825	36,776	967,632	688,437	662,864	1,013,943	2,378
United States	126,235	264,909	70	45	1,695	1,648	95	286	22,266
Argentine Republic	...	...	245,680	86,875	1,547,398	929,439	...	...	...
Australia	...	...	31,287	15,086	143,488	129,076	48,722	57,668	6,590
Belgium	...	...	...	...	...	...	...	...	...
Brazil	...	...	82,959	30,188	...	...	...	...	...
British South Africa	...	...	206,802	92,394	226,909	146,950	6,151	15,903	...
British Guiana	...	...	...	...	91,971	70,913	...	...	...
France	...	...	...	...	...	...	...	...	...
British India	...	...	57,436	19,623	293,501	218,420	...	...	...
Japan	...	...	...	...	...	...	...	...	...
Jamaica	...	...	...	...	162,088	137,512	...	...	...
Ceylon	...	...	...	...	...	...	...	...	...
Trinidad and Tobago	...	...	...	...	168,149	127,160	...	...	...
Mexico	...	...	...	...	110,347	71,535	...	...	...
Dutch East Indies	...	...	...	...	46,782	41,486	...	...	...
Newfoundland	...	...	...	...	...	...	236,449	254,307	...
New Zealand	...	...	107,344	59,106	522,329	374,375	105,200	225,166	...
Uruguay	...	...	...	...	148,795	98,137	...	...	...
Straits Settlements	...	...	...	...	10,302	8,460	...	...	...
Other countries	981	8,730	389,206	160,842	1,049,828	791,895	119,403	208,399	12,930
Total by classes	**127,216**	**273,639**	**1,226,609**	**500,935**	**5,491,164**	**3,835,143**	**1,178,884**	**1,865,672**	**24,164**

Countries to which exported	Pneumatic tires, casings		Pneumatic tires, inner tubes		Tires for vehicles, solid rubber		Hose of rubber	All other mfrs. of rubber	Total value of exports by countries
	Quantity	Value	Quantity	Value	Quantity	Value	Value only	Value only	
	No.	$	No.	$	No.	$	$	$	$
United Kingdom	401,281	4,035,468	255,362	465,947	1,626	42,462	26,644	338,840	6,740,895
United States	558	7,899	2,418	5,101	77	861	74,871	21,991	379,877
Argentine Republic	112,386	981,263	185,779	278,219	861	31,539	...	67,533	2,374,868
Australia	55,191	599,761	72,933	136,732	...	...	...	...	944,913
Belgium	20,071	208,264	18,277	34,708	...	...	...	...	242,972
Brazil	99,325	897,498	175,706	265,562	...	...	...	26,820	1,220,068
British South Africa	127,617	1,400,346	125,731	235,489	...	...	47,538	...	1,938,620
British Guiana	2,143	21,912	...	...	...	...	...	...	92,825
France	13,971	160,503	7,158	14,140	...	...	...	...	174,613
British India	117,681	1,090,734	151,745	234,181	...	...	...	24,240	1,587,198
Japan	19,985	197,242	24,757	45,064	2,918	65,718	...	...	308,024
Jnmaica	17,924	205,950	...	...	...	...	...	...	343,462
Ceylon	14,958	166,947	...	...	...	...	...	...	166,947
Trinidad and Tobago	5,534	79,578	...	...	...	...	...	...	206,738
Mexico	...	...	...	...	...	...	...	...	71,535
Dutch East Indies	79,279	622,328	87,392	133,048	...	...	...	...	796,862
Newfoundland	...	...	...	...	...	...	...	...	254,307
New Zealand	180,015	2,231,430	115,892	239,332	1,392	85,741	37,641	52,864	3,305,655
Uruguay	16,804	149,856	28,753	46,392	...	...	...	...	294,385
Straits Settlements	80,592	595,929	63,844	94,580	1,774	37,884	...	...	736,853
Other countries	313,811	3,260,157	480,872	915,406	5,825	174,721	70,002	216,203	5,819,285
Total by classes	**1,679,126**	**16,913,065**	**1,786,619**	**3,143,901**	**14,473**	**438,926**	**256,696**	**748,491**	**28,000,932**

Table 219.—World Production, Plantation and Wild Rubber, 1905-1927

Years	Total plantation	Total wild, tropical America and Africa	World production		
			Total	Plantation	Wild
	tons	tons	tons	per cent	per cent
1905	174	59,320	59,494	0·3	99·7
1906	577	62,004	62,581	0·9	99·1
1907	1,157	66,013	67,170	1·7	98·3
1908	1,796	64,770	66,566	22·7	97·3
1909	3,386	70,370	73,756	4·6	95·4
1910	7,269	73,477	80,746	9·0	91·0
1911	14,383	68,446	82,829	17·4	82·6
1912	30,113	73,834	103,949	29·0	71·0
1913	51,721	63,280	115,001	45·0	55·0
1914	73,153	48,052	121,205	60·4	39·6
1915	114,277	54,740	169,017	67·6	32·4
1916	158,993	51,086	210,079	75·7	24·3
1917	221,187	56,751	277,938	79·6	20·4
1918	180,800	36,711	217,511	83·1	16·9
1919	348,574	50,424	398,998	87·4	12·6
1920	304,671	36,464	341,135	89·3	10·7
1921	276,746	23,903	300,649	92·0	8·0
1922	378,232	27,878	406,110	93·1	6·9
1923	379,738	26,685	406,423	93·4	6·6
1924	386,703	28,000	414,703	93·2	6·8
1925	478,900	38,000	516,900	92·6	7·4
1926	585,100	33,000	618,100	94·6	5·4
1927	567,300	38,000	605,300	93·7	6·2

From the above table, the growing importance of plantation rubber over wild rubber will be noted. The peak of wild rubber production was reached in 1912 when approximately 74,000 tons were exported or 71 per cent of the total world production for that year. In 1914 plantation rubber for the first time exceeded that of wild, constituting 60 per cent of the total net exports which in that year aggregated 121,205 tons. From between 1909 and 1910 up till 1926 the figures of percentage of wild and plantation rubber have been practically reversed.

The potential output of plantation rubber from present areas is estimated to reach 584,000 tons in 1926, 602,000 tons in 1927, 613,000 tons in 1928, 617,000 tons in 1929 and 621,000 tons in 1930 with restrictions removed and an ample supply of labour available. Wild rubber production is estimated at 20,000 tons per year.

In view of the rapid increase in the world consumption of rubber, an estimate of future requirements was undertaken by the Rubber Association of America which issued the following table:—

FUTURE AND POTENTIAL WORLD PRODUCTION AND CONSUMPTION AS ESTIMATED BY THE RUBBER ASSOCIATION OF AMERICA

Years	Crude rubber, plantation and wild	
	Estimated world production	Estimated world consumption
	tons	tons
1926	606,000	575,000
1927	623,000	608,000
1928	633,000	641,000
1929	637,000	672,000
1930	641,000	703,000

CHAPTER IX

THE TOBACCO INDUSTRY

The tobacco industry in Canada during the years 1917-27 enjoyed a period of marked prosperity and progress. Although the number of establishments and persons engaged in the industry declined from 176 and 10,235 in 1917 to 115 and 8,165 respectively in 1927, yet the capital invested increased from $27,277,858 to $44,143,397 while the value of production rose from $46,786,233 to $71,124,505 and the value added by manufacture from $27,693,388 to $47,084,385.

It is interesting to note that in spite of a decrease in the number of employees of 2,070 or 20·2 p.c., the value of production increased $24,338,272 or 52 p.c. This result was achieved through consolidation and the substitution of machinery for hand labour as is evidenced by the decrease in the number of establishments in the cigar and cigarette section of the industry from 146 in 1917 to 79 in 1927 and the increase in capital from $18,239,662 to $34,371,252. On referring to Table 223 it will be seen that in this section the average number of employees per establishment rose from 54 to 79 while the average capital increased from $124,929 to $435,079. In the smoking and chewing tobacco section, however, the tendency was in the opposite direction. The number of establishments increased from 30 in 1917 to 36 in 1927 while the capital invested after rising from $9,038,196 in 1917 to $14,080,329 in 1924 declined again to $9,772,145 in 1927. The average number of employees per establishment declined from 79 to 53 while the average capital dropped from $301,273 to $271,448 during the same period.

Cigars and Cigarettes.—In this section of the industry there were 79 establishments in 1927, distributed by provinces as follows: Quebec, 41, Ontario 27, British Columbia 8, New Brunswick 1, Saskatchewan 1 and Nova Scotia 1. These establishments had a capital investment of $34,371,252· they gave employment to 6,247 persons and produced goods that had a selling value of $55,801,338. The industry is practically confined to Ontario and Quebec. The real centre, however, is in Quebec, where the 41 establishments employ 86 p.c. of the capital, 83 p.c. of the persons engaged in the industry and produce 87 p.c. of the total output.

On referring to Table 221, which gives the principal statistics from 1917 to 1927 the following important facts of the progress made are disclosed. Although the number of establishments declined from 146 to 79 and the number employed from 7,852 to 6,247, the capital invested increased from $18,239,662 to $34,371,252, value of production from $32,145,194 to $55,801,338 and value added by manufacture from $16,843,404 to $38,450,995. The first peak of production was reached in 1920 when the output was valued at $55,125,617, an increase of $8,992,314 over that of the preceding year; this, in spite of a decrease of 16 establishments and 917 employees. This increase, however, was not accompanied by a corresponding increase in the physical volume of production as is shown by Table 225, but was wholly due to a rise in the price of manufactured tobacco and its products. The general depression of 1921 did not affect this industry to any great extent, but the following year a severe depression set in with the result that the capital invested declined $4,444,837, number of employees 833, value of production $5,983,547 and value added by manufacture $2,841,059. During the next three years little change took place but in 1926 and 1927 there was a considerable increase in capital, value of production and value added by manufacture.

Smoking and Chewing Tobacco.—In contrast with the cigar and cigarette section, this branch of the tobacco industry made hardly any progress during the period 1917-27. There was, however, a moderate development during the first four years under review, but this was checked by the general depression of 1921 which affected this section to a greater degree than the cigar and cigarette section. The improvement which took place the following year was maintained until 1926 when another depression was experienced. As compared with 1925, the capital invested dropped $3,364,636, number of employees 256, production $2,995,864 and value added by manufacture $476,098.

In 1927 there were 36 establishments whose principal products were smoking and chewing tobacco, distributed by provinces as follows: Quebec 29, Ontario 4, Prince Edward Island 2 and Manitoba 1. These establishments employed a capital of $9,772,145, they paid out $1,727,328 in salaries and wages to 1,918 persons and produced goods that had a selling value at the factory of $15,323,167. This industry is also practically confined to Ontario and Quebec, the latter employing 95 p.c. of the capital, 91 p.c. of the employees and 91 p.c. of the output.

The principal statistics for the combined tobacco industry are given in table 220, for the cigar and cigarette section in table 221 and for the smoking and chewing tobacco section in table 222.

Table 220.—Tobacco Industry: Principal Statistics, 1917-27

Year	Establishments	Capital	Employees on Salaries			Employees on Wages		
			Male	Female	Salaries	Male	Female	Wages
	No.	$	No.	No.	$	No.	No.	$
1917	176	27,277,858	1,089	207	1,773,794	3,979	4,960	4,218,041
1918	153	32,948,356	839	200	1,563,801	3,693	5,411	4,935,829
1919	144	37,639,965	1,098	227	2,367,599	3,894	5,464	5,372,536
1920	125	47,322,591	1,194	244	2,777,766	3,362	4,475	5,841,303
1921	119	47,750,075	1,362	309	2,867,543	3,448	4,687	4,731,646
1922	142	43,859,914	1,124	288	2,909,751	2,800	4,339	4,505,835
1923	148	44,348,333	1,106	264	2,956,689	2,812	4,507	4,608,846
1924	130	44,046,232	1,114	247	2,884,862	2,621	4,397	4,453,196
1925	128	42,982,277	1,152	237	3,128,930	2,554	4,280	4,276,106
1926	122	42,449,256	1,147	285	3,193,612	2,618	4,405	4,429,178
1927	115	44,143,397	1,178	282	3,171,629	2,503	4,202	4,432,567

Year	Total number of employees	Salaries and wages paid	Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
		$	$	h.p.	$	$	$
1917	10,235	5,991,835	156,486	2,177	19,092,845	46,786,233	27,693,388
1918	10,143	6,499,630	147,592	2,135	19,039,791	55,411,487	36,371,696
1919	10,683	7,740,135	130,930	1,948*	27,651,755	64,272,208	36,620,453
1920	9,275	8,619,069	153,695	2,467	28,387,747	74,652,188	46,264,441
1921	9,805	7,599,189	153,373	2,445*	23,439,332	66,960,250	43,520,918
1922	8,551	7,415,585	138,219	2,128	20,148,938	62,626,960	42,478,022
1923	8,689	7,565,535	135,001	3,151	17,951,478	59,840,010	41,888,532
1924	8,379	7,338,058	116,040	2,979	17,872,926	59,953,502	42,080,576
1925	8,223	7,405,036	108,180	3,257	23,441,824	60,153,779	36,711,955
1926	8,455	7,622,790	116,399	3,172	22,587,151	65,183,761	42,596,610
1927	8,165	7,604,196	110,675	3,178	24,040,120	71,124,505	47,084,385

*Estimated.

Table 221.—Cigars and Cigarettes: Principal Statistics, 1917-27

Year and province	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1917													
Canada	140	18,239,662	810	172	1,297,773	3,133	3,737	3,267,236	110,589	1,157	15,301,790	32,145,194	16,843,404
Quebec	51	15,686,508	676	152	1,093,285	1,805	2,854	1,927,911	68,325	1,107	13,861,672	27,439,882	13,578,210
Ontario	61	2,273,388	102	17	167,671	1,124	775	1,142,620	40,984	50	1,209,507	3,927,525	2,718,018
British Columbia	20	147,214	12	1	18,923	159	31	154,054	932	.....	137,248	535,107	397,859
Other provinces	14	132,552	20	2	17,894	45	77	42,651	348	.....	93,363	242,680	149,317
1918													
Canada	124	23,284,799	751	167	1,413,070	2,798	4,181	3,925,277	88,099	1,292	14,220,803	37,883,974	23,663,171
Quebec	44	20,037,158	625	145	1,200,265	1,894	3,400	2,704,249	76,935	1,192	12,317,697	32,704,363	20,386,666
Ontario	54	3,023,656	107	20	187,065	767	713	1,006,623	10,319	93	1,716,745	4,576,198	2,859,453
British Columbia	17	127,544	12	1	16,870	117	17	121,152	690	6	132,748	463,529	330,781
Other provinces	9	96,441	7	1	8,870	20	51	93,253	155	1	53,613	139,884	86,271
1919													
Canada	114	24,749,250	801	178	1,614,987	2,896	4,228	4,177,175	80,706	1,113	[1] 19,073,280	46,133,303	27,060,023
Quebec	44	21,828,632	690	155	1,416,240	2,159	3,604	3,202,268	73,258	1,051	17,178,238	41,819,110	24,640,872
Ontario	46	2,684,314	89	20	160,829	597	557	791,892	6,330	26	1,651,237	3,597,796	1,946,559
British Columbia	14	128,310	12	1	24,978	107	18	131,041	843	36	169,334	478,747	309,413
Other provinces	10	107,994	10	2	12,940	33	49	51,974	275	.....	74,471	237,650	163,179
1920													
Canada	98	33,966,154	898	186	1,943,767	2,577	3,525	4,659,816	95,278	1,453	17,826,151	55,125,617	37,299,466
Quebec	41	31,222,489	810	172	1,766,063	1,952	3,059	3,729,640	86,750	1,405	16,387,954	51,135,014	34,747,060
Ontario	38	2,462,281	68	12	135,483	478	437	738,511	7,128	28	1,223,504	3,334,879	2,111,375
British Columbia	13	191,016	11	1	32,060	115	1	146,417	926	18	154,030	498,864	344,834
Other provinces	6	90,368	9	1	10,161	32	28	45,248	474	2	60,663	156,860	96,197
1921													
Canada	94	35,757,047	1,091	260	2,198,259	2,436	3,431	3,647,144	101,466	1,490	[1] 15,374,386	52,050,244	36,675,858
Quebec	43	33,383,705	905	216	1,986,085	2,009	3,096	3,121,618	95,537	1,462	14,372,084	49,020,350	34,648,266
Ontario	33	2,127,827	157	43	161,389	350	254	429,843	5,212	16	883,469	2,416,353	1,532,884
British Columbia	13	172,093	15	1	37,077	50	49	69,173	442	12	85,503	303,144	217,641
Other provinces	5	73,422	14	.....	13,708	27	32	26,510	275	.....	33,330	310,397	277,067

1922													
Canada	108	31,482,001	906	230	2,050,291	2,020	3,229	3,375,579	90,577	1,065	12,232,348	46,066,697	33,834,349
Quebec	52	29,314,665	816	215	1,877,116	1,726	2,768	2,824,249	86,219	984	11,158,279	43,303,794	32,145,515
Ontario	39	1,983,169	70	14	147,713	243	402	467,388	4,058	71	947,363	2,407,570	1,460,207
British Columbia	13	145,576	13	.....	18,249	36	46	63,190	300	10	94,610	274,036	179,426
Other provinces	4	38,591	7	1	7,213	15	13	20,752	.....	.....	32,096	81,297	49,201
1923													
Canada	111	31,312,210	899	207	2,089,304	2,004	3,298	3,391,864	84,477	2,014	10,424,241	42,176,997	31,752,756
Quebec	55	29,272,297	809	192	1,913,060	1,726	2,842	2,854,698	79,802	1,938	9,399,700	39,466,678	30,066,978
Ontario	39	1,867,404	66	14	149,442	231	397	457,300	4,293	66	905,004	2,369,186	1,464,182
British Columbia	11	125,464	15	.....	18,322	31	46	57,773	316	10	88,112	254,171	166,059
Other provinces	6	47,045	9	1	8,480	16	13	22,093	66	.....	31,425	86,962	55,537
1924													
Canada	96	29,965,903	919	192	2,121,120	1,799	3,170	3,249,305	71,740	1,957	11,554,487	42,700,252	31,145,765
Quebec	49	27,822,125	833	173	1,963,710	1,558	2,713	2,624,451	68,125	1,871	10,201,260	39,606,983	29,405,723
Ontario	35	1,990,201	71	18	129,856	217	413	572,924	3,327	76	1,273,451	2,850,928	1,577,477
British Columbia	9	124,192	11	1	22,804	17	38	41,321	234	10	62,670	202,363	139,693
Other provinces	3	29,385	4	.....	4,750	7	6	10,609	54	.....	17,106	39,978	22,872
1925													
Canada	89	30,563,901	934	187	2,277,755	1,701	3,024	3,020,227	60,123	2,038	14,425,683	41,985,554	27,559,871
Quebec	46	28,411,777	846	169	2,080,684	1,484	2,641	2,559,953	57,040	1,959	13,226,623	39,406,058	26,179,435
Ontario	33	2,024,619	76	17	174,704	201	356	423,695	2,913	69	1,132,173	2,406,152	1,273,979
British Columbia	8	108,215	8	1	18,808	14	23	32,916	140	10	59,271	152,094	92,823
Other provinces	2	19,290	4	.....	3,559	2	4	3,663	30	.....	7,616	21,250	13,634
1926													
Canada	84	33,395,516	964	263	2,399,560	1,838	3,269	3,359,872	75,092	2,250	16,090,776	50,011,400	33,920,624
Quebec	43	28,340,439	804	190	2,056,323	1,472	2,740	2,646,697	62,874	1,888	13,846,604	43,364,358	29,517,754
Ontario	30	4,971,296	154	72	329,737	348	501	669,349	12,011	352	2,179,502	6,471,077	4,291,575
British Columbia	8	62,917	6	1	13,500	14	25	37,419	170	10	59,054	157,593	98,539
Other provinces	3	20,864	.....	.....	.....	4	3	6,407	37	.....	5,616	18,372	12,756
1927													
Canada	79	34,371,252	994	253	2,486,827	1,773	3,227	3,390,041	72,641	2,257	17,350,343	55,801,338	38,450,995
Quebec	41	29,399,823	803	194	2,081,909	1,420	2,746	2,702,524	58,715	1,895	15,089,020	48,602,509	33,513,489
Ontario	27	4,888,408	183	58	391,245	325	451	644,896	13,700	357	2,194,780	7,027,402	4,832,622
British Columbia	8	57,490	5	1	11,521	22	26	38,634	175	5	62,082	152,527	90,445
Other provinces	3	25,531	3	.....	2,152	6	4	3,987	51	.....	4,461	18,900	14,439

[1]Estimated.

Table 222.—Smoking and Chewing Tobacco: Principal Statistics, 1917-27

Year and province	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	H.P.	$	$	$
1917													
Canada	30	9,038,196	279	35	476,021	846	1,223	950,805	45,897	1,020	3,791,055	14,641,039	10,849,984
Quebec	25	6,508,493	208	12	370,112	770	1,065	794,801	34,824	827	3,360,786	12,251,197	8,890,411
Other provinces	5	2,529,703	71	23	105,909	76	158	156,004	11,073	193	430,269	2,389,842	1,959,573
1918													
Canada	29	9,663,557	88	33	150,731	895	1,230	1,010,552	59,493	843	4,818,988	17,527,513	12,708,525
Quebec	24	7,553,069	54	6	61,207	771	1,029	850,195	47,612	707	4,302,402	14,999,066	10,696,664
Other provinces	5	2,110,488	34	27	89,524	124	201	160,357	11,881	136	516,586	2,528,447	2,011,861
1919													
Canada	30	12,890,715	297	49	752,612	998	1,236	1,195,361	50,224	835[1]	8,578,475	18,138,905	9,560,430
Quebec	24	9,991,293	231	19	630,927	828	995	984,233	37,598	568	7,153,028	14,889,725	7,736,697
Ontario	3	2,680,121	60	29	110,989	134	240	187,550	10,460	216	1,296,992	3,017,193	1,720,201
Other provinces	3	219,301	6	1	10,696	36	1	23,578	2,166	51	128,455	231,987	103,532
1920													
Canada	27	13,356,437	296	58	833,999	785	950	1,181,487	58,417	1,014	10,561,596	19,526,571	8,964,975
Quebec	20	9,769,804	209	12	597,925	681	850	1,013,662	45,957	802	9,222,405	15,418,490	6,196,085
Ontario	4	3,438,823	84	44	226,112	82	99	150,106	10,765	178	1,293,120	3,947,002	2,653,882
Other provinces	3	147,810	3	2	9,962	22	1	17,719	1,695	34	46,071	161,079	115,008
1921													
Canada	25	11,993,028	271	49	669,284	1,012	1,256	1,084,502	51,907	955[1]	8,064,946	14,910,006	6,845,060
Quebec	17	9,208,960	168	9	519,490	908	1,154	937,700	37,852	763	6,369,904	12,003,431	5,633,527
Ontario	5	2,709,723	100	39	142,294	81	101	129,657	11,643	182	1,608,136	2,700,626	1,092,490
Other provinces	3	74,345	3	1	7,500	23	1	17,145	2,412	10	86,906	205,949	119,043
1922													
Canada	34	12,377,913	218	58	859,460	780	1,110	1,130,256	47,642	1,063	7,916,590	16,560,263	8,643,673
Quebec	23	10,276,101	171	12	684,841	654	998	991,922	32,509	833	6,103,189	13,731,075	7,627,886
Ontario	7	2,020,488	43	45	164,769	85	112	113,676	12,761	215	1,740,899	2,612,803	871,904
Other provinces	4	81,324	4	1	9,850	41	.....	24,658	2,372	15	72,502	216,385	143,883

1923													
Canada	37	13,036,123	207	57	867,385	808	1,209	1,216,982	50,524	1,137	7,527,237	17,663,013	10,135,776
Quebec	26	10,505,643	162	15	713,221	675	1,073	1,038,287	31,970	908	5,402,395	14,241,346	8,838,951
Ontario	7	2,428,898	41	41	144,314	95	136	153,646	16,088	214	2,071,391	3,232,491	1,161,100
Other provinces	4	101,582	4	1	9,850	38	.....	25,049	2,466	15	53,451	189,176	135,725
1924													
Canada	34	14,080,329	195	55	763,742	822	1,226	1,203,891	44,300	1,022	6,318,439	17,253,250	10,934,811
Quebec	23	10,891,254	151	16	616,394	673	1,047	989,534	28,703	782	5,694,865	13,859,593	8,164,728
Ontario	7	3,099,912	41	38	138,728	114	178	188,371	13,300	224	545,045	3,223,210	2,678,165
Other provinces	4	89,163	3	1	8,620	35	1	25,986	2,297	16	78,529	170,447	91,918
1925													
Canada	39	12,418,376	218	50	851,175	853	1,256	1,255,879	48,057	1,219	9,016,141	18,168,225	9,152,084
Quebec	28	8,919,990	175	19	671,911	677	1,028	992,859	31,577	799	5,608,463	13,451,738	7,843,275
Ontario	7	3,415,281	40	30	170,864	144	228	238,160	14,153	404	3,320,821	4,550,855	1,230,034
Other provinces	4	83,105	3	1	8,400	32	.....	24,860	2,320	16	86,857	165,632	78,775
1926													
Canada	38	9,053,740	183	22	794,052	780	1,136	1,069,306	41,307	922	6,496,375	15,172,361	8,675,986
Quebec	30	8,508,747	167	21	746,488	679	992	971,881	33,408	828	5,318,441	13,759,130	8,440,689
Ontario	5	455,030	13	.....	33,875	67	144	69,669	6,146	78	1,080,529	1,236,861	156,332
Other provinces	3	89,963	3	1	13,689	34	.....	27,756	1,753	16	97,405	176,370	78,965
1927													
Canada	36	9,772,145	184	29	684,802	730	975	1,042,526	38,034	921	6,689,777	15,323,167	8,633,390
Quebec	29	9,266,490	167	27	625,725	649	911	959,116	29,928	827	5,535,740	13,941,113	8,405,373
Ontario	4	414,800	14	.....	39,027	45	64	55,661	6,006	78	1,051,618	1,190,841	139,223
Other provinces	3	90,855	3	2	20,050	36	.....	27,749	2,100	16	102,419	191,213	88,794

[1]Estimated.

Table 223.—Summary Statistics of the Tobacco Industry

		1917	1920	1921	1927
Cigars and Cigarettes					
Number of establishments		146	98	94	79
Capital	$	18,239,662	33,966,154	35,757,047	34,371,252
Average per establishment	$	124,929	346,593	380,394	435,079
Average per employee	$	2,323	4,727	4,954	5,502
Salaries	$	1,297,773	1,943,767	2,198,259	2,486,827
Average per salaried employee	$	1,322	1,793	1,627	1,994
Wages	$	3,267,236	4,659,816	3,647,144	3,390,041
Average per wage-earner	$	476	764	622	678
Total number of employees		7,852	7,186	7,218	6,247
Average per establishment		54	73	77	79
Gross value of products	$	32,145,194	55,125,617	52,050,244	55,801,338
Average per establishment	$	220,172	562,506	553,725	706,346
Average per employee	$	4,094	7,671	7,211	8,933
Value added by manufacture	$	16,843,404	37,299,466	36,675,858	38,450,995
Average per establishment	$	115,366	380,607	390,169	486,721
Average per employee	$	2,145	5,191	5,081	6,155
Power employed	h.p.	1,157	1,453	1,490	2,257
Average per establishment	h.p.	8	15	16	29
Average per wage-earner	h.p.	0·2	0·2	0·3	0·4
Smoking and Chewing Tobacco					
Number of establishments		30	27	25	36
Capital	$	9,038,196	13,356,437	11,993,028	9,772,145
Average per establishment	$	301,273	513,201	479,721	271,448
Average per employee	$	3,793	6,394	4,634	5,095
Salaries	$	476,021	833,999	669,284	684,802
Average per salaried employee	$	1,560	2,356	2,092	3,215
Wages	$	950,805	1,181,487	1,084,502	1,042,526
Average per wage-earner	$	460	681	478	611
Total number of employees		2,383	2,089	2,588	1,918
Average per establishment		79	77	104	53
Gross value of products	$	14,641,039	19,526,571	14,910,006	15,323,167
Average per establishment	$	488,035	723,206	596,400	425,644
Average per employee	$	6,144	9,347	5,761	7,989
Value added by manufacture	$	10,849,984	8,964,975	6,845,060	8,633,390
Average per establishment	$	361,666	332,036	273,802	239,816
Average per employee	$	4,553	4,292	2,645	4,501
Power employed	h.p.	1,020	1,014	955	921
Average per establishment	h.p.	34	38	38	26
Average per wage earner	h.p.	0·5	0·6	0·4	0·5

Capital.—The capital invested in the tobacco industry by classes for the years 1917 to 1927 and by classes and provinces for 1927 is given in Table 224. The combined capital of the two sections of the industry in 1927 amounted to $44,143,397, 78 p.c. of which was employed by the cigar and cigarette section. Also of the total capital employed about 22 p.c. was represented by fixed capital and 78 p.c. by working capital. This compares with a combined capital of $27,277,-858 in 1917 of which 21 p.c. was invested in fixed capital and 79 p.c. in working capital.

Table 224.—Tobacco Industry: Capital Invested, by Classes, 1917-27

Year	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Inventories, stocks in process, etc.	Cash, trading and operating accounts, etc.	
1917	$	$	$	$
Cigars and cigarettes	3,585,953	8,558,738	6,094,971	18,239,662
Smoking and chewing tobacco	2,143,574	5,299,497	1,595,125	9,038,196
Total	5,729,527	13,858,235	7,690,096	27,277,858
1918				
Cigars and cigarettes	3,917,736	13,203,855	6,163,208	23,284,799
Smoking and chewing tobacco	1,813,194	5,993,287	1,857,076	9,663,557
Total	5,730,930	19,197,142	8,020,284	32,948,356
1919				
Cigars and cigarettes	4,394,287	13,025,142	7,329,821	24,749,250
Smoking and chewing tobacco	2,274,948	7,500,398	3,085,369	12,890,715
Total	6,669,235	20,525,540	10,415,190	37,639,965

Table 224.—Tobacco Industry: Capital Invested, by Classes, 1917-27—Concluded

Year	Fixed capital	Working capital		Total capital
	Land, buildings, machinery and tools	Inventories, stocks in process, etc.	Cash, trading and operating accounts, etc.	
	$	$	$	$
1920				
Cigars and cigarettes	5,905,180	20,216,430	7,844,544	33,966,154
Smoking and chewing tobacco	2,134,421	9,202,840	2,019,176	13,356,437
Total	8,039,601	29,419,270	9,863,720	47,322,591
1921				
Cigars and cigarettes	6,483,860	17,358,769	11,914,418	35,757,047
Smoking and chewing tobacco	2,309,517	6,704,639	2,978,872	11,993,028
Total	8,793,377	24,063,408	14,893,290	47,750,075
1922				
Cigars and cigarettes	6,382,878	15,877,442	9,221,681	31,482,001
Smoking and chewing tobacco	2,511,805	6,044,850	3,821,258	12,377,913
Total	8,894,683	21,922,292	13,042,939	43,859,914
1923				
Cigars and cigarettes	5,794,085	15,392,803	10,125,322	31,312,210
Smoking and chewing tobacco	2,421,009	5,330,346	5,284,768	13,036,123
Total	8,215,094	20,723,149	15,410,090	44,348,333
1924				
Cigars and cigarettes	6,120,305	13,958,674	9,886,924	29,965,903
Smoking and chewing tobacco	2,491,319	6,240,602	5,348,408	14,080,329
Total	8,611,624	20,199,276	15,235,332	44,046,232
1925				
Cigars and cigarettes	6,349,627	13,164,726	11,049,548	30,563,901
Smoking and chewing tobacco	3,605,126	5,714,894	3,098,356	12,418,376
Total	9,954,753	18,879,620	14,147,904	42,982,277
1926				
Cigars and cigarettes	7,154,335	14,674,138	11,567,043	33,395,516
Smoking and chewing tobacco	2,792,477	3,939,674	2,321,589	9,053,740
Total	9,946,812	18,613,812	13,888,632	42,449,256
1927				
Cigars and cigarettes—				
Canada	7,067,399	15,797,151	11,506,702	34,371,252
Quebec	5,771,469	12,908,289	10,720,065	29,399,823
Ontario	1,272,977	2,852,818	762,613	4,888,408
British Columbia	15,522	23,815	18,153	57,490
Other provinces	7,431	12,229	5,871	25,531
Smoking and chewing tobacco—				
Canada	2,801,572	3,994,061	2,976,512	9,772,145
Quebec	2,578,918	3,864,195	2,823,377	9,266,490
Ontario	205,465	83,528	125,807	414,800
Other provinces	17,189	46,338	27,328	90,855
Total	9,868,971	19,791,212	14,483,214	44,143,397

Production.—A comparative summary of the principal products of the tobacco industry from 1919 to 1927 inclusive shows the quantity and value of each product and the fluctuations in the output and value year by year. Cigar production fell from 206,517 thousand in 1919 to 148,811 in 1925, but rose again in 1927 to 171,161 thousand. Cigarette production reached its maximum in 1927 with 3,613,194 thousand, the previous high point being reached in 1926. From 1919 to 1923 a gradual decline in quantity will be noted while from that date an upward tendency has prevailed.

Chewing tobacco production has decreased from 7,367,774 pounds in 1919 to 5,694,863 pounds in 1917 whilst smoking tobaccos on the other hand have increased from 15,141,014 pounds in 1919 to 20,204,388 pounds in 1927.

The production of snuff increased annually, with but two exceptions (1921 and 1923), from a total of 659,902 pounds in 1919 to 887,220 pounds in 1927 while the value increased during the period by $362,090.

Table 225.—Tobacco Industry: Summary of Production, 1919-27

Year	Cigars		Cigarettes		Tobacco, chewing	
	Quantity	Value	Quantity	Value	Quantity	Value
	M	$	M	$	Lb.	$
1919	206,517	12,810,890	2,963,905	25,274,926	7,367,774	7,911,207
1920	194,361	14,109,929	2,936,156	31,625,078	6,640,134	8,218,832
1921	163,075	11,364,753	2,603,971	31,113,848	6,227,758	6,796,721
1922	152,958	10,130,488	2,170,793	25,989,079	6,247,745	6,598,056
1923	174,286	10,442,351	2,079,036	23,964,031	6,064,303	6,084,250
1924	159,875	9,739,590	2,450,143	26,455,986	5,740,496	5,568,284
1925	148,811	8,716,866	2,705,330	27,868,568	5,840,170	4,914,880
1926	166,770	8,959,267	3,096,650	31,455,713	5,709,581	4,976,993
1927	171,161	9,414,582	3,613,194	36,281,937	5,694,863	5,129,890

Year	Tobacco, smoking		Snuff		Miscellaneous products	Total production
	Quantity	Value	Quantity	Value		
	Lb.	$	Lb.	$	$	$
1919	15,141,014	16,900,976	659,902	750,044	624,165	64,272,208
1920	14,109,929	19,749,247	711,186	829,017	120,085	74,652,188
1921	12,880,521	19,261,015	678,739	789,378	634,535	66,960,250
1922	15,258,951	18,181,293	728,969	867,922	860,122	62,626,960
1923	18,470,891	18,297,077	724,429	872,985	179,316	59,840,010
1924	16,930,988	17,204,408	774,525	947,693	37,541	59,953,502
1925	18,196,203	17,653,702	809,751	975,051	24,712	60,153,779
1926	20,063,789	18,717,054	835,561	1,045,006	29,728	65,183,761
1927	20,204,388	19,166,769	887,220	1,112,134	19,193	71,124,505

Table 226.—Tobacco Industry: Production, by Provinces, 1927

Principal products		Canada		Quebec	
		Quantity	Value	Quantity	Value
			$		$
Tobacco, chewing, plug	lb.	5,318,255	4,713,516	5,093,341	4,501,647
Tobacco, chewing, other	"	376,608	416,314	263,516	267,157
Tobacco, smoking, plug	"	2,836,181	2,940,378	2,082,448	2,209,780
Tobacco, smoking, package	"	12,470,178	14,517,768	12,423,586	14,467,867
Tobacco, smoking, twist	"	6,533	4,990	5,283	3,990
Tobacco, smoking, leaf	"	4,891,496	1,703,633	1,904,033	541,973
Tobacco, smoking, other	"	.....	.....	.....	.....
Snuff	"	887,220	1,112,134	887,220	1,112,134
Cigars	M	171,161	9,414,582	129,431	6,779,062
Cigarettes	M	3,613,194	36,281,937	3,254,944	32,645,414
Stems and cuttings sold		.....	18,116	.....	13,808
All other poducts		.....	1,077	.....	790
Total value		.....	**71,124,505**	.....	**62,543,622**

Principal products		Ontario		British Columbia		Other provinces[1]	
		Quantity	Value	Quantity	Value	Quantity	Value
			$		$		$
Tobacco, chewing, plug	lb.	.....	[2]	.....	.....	185,291	177,875
Tobacco, chewing, other	"	.....	[2]	.....	.....	.....	.....
Tobacco, smoking, plug	"	.....	[2]	.....	.....	.....	.....
Tobacco, smoking, package	"	.....	[2]	.....	.....	11,580	13,338
Tobacco, smoking, twist	"	.....	[2]	.....	.....	.....	.....
Tobacco, smoking, leaf	"	2,987,463	1,161,660	.....	.....	.....	.....
Tobacco, smoking, other	"	.....	.....	.....	.....	.....	.....
Snuff	"	.....	.....	.....	.....	.....	.....
Cigars	M	38,981	2,470,523	2,272	146,097	477	18,900
Cigarettes	M	.....	[2]	.....	.....	.....	.....
Stems and cuttings sold		.....	.....	.....	48	.....	.....
All other products		.....	4,586,060	.....	6,382	.....	.....
Total value		.....	**8,218,243**	.....	**152,527**	.....	**210,113**

[1]Includes New Brunswick (1), Alberta (1), Manitoba (1), Prince Edward Island (2), Saskatchewan (1).
[2]Included in all other products.

Table 227.—Production in Cigar and Cigarette Factories by Provinces, 1927

Principal products	Canada		Quebec		Ontario		Other Provinces	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$
Tobacco, chewing, plug..... lb.	2,336,314	1,955,006	2,295,691	1,920,952	.....	.....	.....	.....
Tobacco, chewing, other..... lb.	113,092	149,157	.....	.....	.....	.....	.....	.....
Tobacco, smoking, plug..... lb.	1,546,760	1,543,609	793,027	813,011	.....	.....	.....	.....
Tobacco, smoking, package.... lb.	7,476,024	9,526,344	7,468,194	9,518,962	.....	.....	8,580	6,382
Tobacco, smoking, twist..... lb.	1,250	1,000	.....	.....	.....	.....	.....	.....
Tobacco, smoking, leaf..... lb.	2,500	3,000	2,500	3,000	.....	.....	.....	.....
Tobacco, smoking, other..... lb.	.....	.....	.....	.....	.....	.....	.....	.....
Snuff..... lb.	.....	.....	.....	.....	.....	.....	.....	.....
Cigars..... M	171,161	9,414,582	129,431	6,779,062	38,981	2,470,523	2,749	164,997
Cigarettes..... M	3,287,839	33,190,580	2,929,589	29,554,057	.....	.....	.....	.....
Stems and cuttings sold.....	.....	17,116	.....	12,808	.....	4,260	.....	48
All other products.....	.....	944	.....	657	.....	4,552,619	.....	.....
Total value.....	.....	**55,891,238**	.....	**48,662,569**	.....	**7,027,402**	.....	**171,427**

Table 228.—Production in Tobacco Factories by Provinces, 1927

Principal products	Canada		Quebec		Ontario		Other Provinces	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		$		$		$		$
Tobacco, chewing, plug..... lb.	2,981,941	2,758,570	2,796,650	2,580,695	.....	.....	185,291	177,875
Tobacco, chewing, other..... lb.	263,516	267,157	263,516	267,157	.....	.....	.....	.....
Tobacco, smoking, plug..... lb.	1,289,421	1,396,769	1,289,421	1,396,769	.....	.....	.....	.....
Tobacco, smoking, package.... lb.	4,994,154	4,991,424	4,957,392	4,948,905	25,182	29,181	11,580	13,338
Tobacco, smoking, twist..... lb.	5,283	3,990	5,283	3,990	.....	.....	.....	.....
Tobacco, smoking, leaf..... lb.	4,888,996	1,700,633	1,901,533	538,973	2,987,463	1,161,660	.....	.....
Tobacco, smoking, other..... lb.	.....	.....	.....	.....	.....	.....	.....	.....
Snuff..... lb.	887,220	1,112,134	887,220	1,112,134	.....	.....	.....	.....
Cigars..... M	.....	.....	.....	.....	.....	.....	.....	.....
Cigarettes..... M	325,355	3,091,357	325,355	3,091,357	.....	.....	.....	.....
Stems and cuttings sold.....	.....	1,000	.....	1,000	.....	.....	.....	.....
All other products.....	.....	133	.....	133	.....	.....	.....	.....
Total value.....	.....	**15,323,167**	.....	**13,941,113**	.....	**1,190,841**	.....	**191,213**

Table 229.—Cigar Production by Groups of Values per Thousand, 1926 and 1927

Factories producing cigars at	1927			1926		
	Factories	Quantity	Value	Factories	Quantity	Value
	No.	M.	$	No.	M.	$
Less than $50 per thousand.....	39	50,560	1,476,980	40	62,850	2,533,223
From $50 to $60 per thousand.....	12	53,317	2,910,784	13	59,424	3,001,597
From $60 to $80 per thousand.....	14	57,851	4,185,834	18	35,947	2,654,526
From $80 to $100 per thousand.....	3	7,463	600,714	3	6,551	526,692
Over $100 per thousand.....	3	1,970	240,270	3	1,998	243,229
Total.....	**71**	**171,161**	**9,414,582**	**77**	**166,770**	**8,959,267**

Materials Used.—The quantity and cost value delivered at the works of the various materials used in the tobacco industry is shown by provinces in table 10 for the calendar years 1926 and 1927. The total cost of all materials rose from $22,587,151 in 1926 to $24,040,120 in 1927 or 6·4 per cent. Over 85 per cent of the total cost was used in the factories of the province of Quebec. A summary table showing the quantity and value of raw leaf tobacco whether domestic or imported for 1927 follows:

Table 230.—Raw Leaf Tobacco Used, 1927

Raw leaf tobacco used in the manufacture of	Imported		Domestic		Total tobacco	
	Quantity	Value	Quantity	Value	Quantity	Value
	lb.	$	lb.	$	lb.	$
Cigars.....	1,889,455	2,430,508	1,272,909	551,110	3,162,364	2,981,618
Cigarettes.....	6,473,251	4,802,449	2,769,259	1,440,542	9,242,510	6,242,991
Smoking and chewing tobacco.....	8,122,257	5,303,779	16,642,543	5,048,884	24,764,800	10,352,663
Totals.....	**16,484,963**	**12,536,736**	**20,684,711**	**7,040,536**	**37,169,674**	**19,577,272**

Table 231—Materials used in the Tobacco Industry, by Provinces, 1926 and 1927

Materials used		Canada		Quebec		Ontario		Other provinces	
		Quantity	Cost value	Quantity	Cost value	Quantity	Cost value	Quantity	Cost value
			$		$		$		$
1927									
Raw leaf tobacco, imported..	lb.	16,484,963	12,536,736	14,614,964	10,874,905	1,834,232	1,630,205	35,767	31,626
Raw leaf tobacco, domestic..	"	20,684,711	7,040,536	16,270,106	5,718,478	4,146,966	1,208,798	267,639	113,260
All other	"	46,904	9,539	42,664	8,320	4,240	1,219	.....	.....
Lead and tin foil	"	2,736,537	487,722	2,726,639	485,759	9,898	1,963	.....	.....
Boxes, cigar	No.	8,233,632	367,053	6,260,147	247,252	1,953,514	115,281	19,971	4,520
All other containers		.....	1,223,626	.....	2,122,756	.....	241,622	.....	10,530
All other materials		.....	2,374,908	.....	1,167,290	.....	47,310	.....	9,026
Total cost		.....	**24,040,120**	.....	**20,624,760**	.....	**3,246,398**	.....	**168,962**
1926									
Raw leaf tobacco, imported..	lb.	17,309,361	12,395,435	15,431,521	10,700,499	1,841,385	1,662,357	79,483	57,542
Raw leaf, domestic	"	19,314,543	5,864,731	14,188,646	4,555,327	4,870,086	1,201,170	212,783	83,271
All other	"	.....	27,787	.....	26,586	.....	1,007	.....	194
Lead and tin foil	"	2,689,287	519,847	2,683,287	518,597	3,500	750	2,500	500
Boxes, cigar	No.	6,836,757	402,510	5,376,605	287,525	1,442,055	112,164	18,097	2,821
All other containers		.....	2,580,480	.....	2,350,692	.....	226,273	.....	3,515
All other materials		.....	796,361	.....	725,819	.....	56,310	.....	14,232
Total cost		.....	**22,587,151**	.....	**19,165,045**	.....	**3,260,031**	.....	**162,075**

WHOLESALE PRICE OF TOBACCO

TOBACCO, CUT, SMOKING

Price per pound—Monthly quotations from manufacturer

Averages		Averages	
1917	$ 0·9297	1923	1·5500
1918	1·1605	1924	1·6300
1919	1·4400	1925	1·6300
1920	1·7000	1926	1·6300
1921	1·5500	1927	1·6300
1922	1·5500		

TOBACCO, PLUG, CHEWING

Price per pound.—Monthly quotations from manufacturer

Averages		Averages	
1917	$ 0·58	1923	$ 0·96
1918	0·72	1924	1·00
1919	1·08	1925	1·00
1920	1·06	1926	1·00
1921	0·96	1927	1·00
1922	0·96		

TOBACCO, ONTARIO, BURLEY, BARN RUN

Price per pound.—Monthly quotations from large buyers

Averages		Averages	
1917	$ 0·1816	1923	$ 0·1700
1918	0·3280	1924	0·1608
1919	0·3492	1925	0·1666
1920	0·3833	1926	0·2267
1921	0·1391	1927	0·2600
1922	0·1700		

Leaf Tobacco Production in Canada—The production of raw leaf tobacco in Canada on a commercial basis was confined to the provinces of Ontario and Quebec up till 1925 when British Columbia entered the field with an initial acreage of 10, an estimated yield of 11,000 pounds and an average yield of 1,100 pounds per acre. The following summary table gives the area, production and farm value of Canadian grown tobacco for the calendar years 1926 and 1927.

AREA, PRODUCTION AND FARM VALUE OF TOBACCO IN CANADA ,1926 AND 1927

Provinces	Area	Yield per acre	Estimated production	Estimated farm value
			lb.	$
1927				
Ontario	33,650	1,905	35,622,400	7,556,301
Quebec	10,018	769	7,824,300	1,469,217
British Columbia	360	1,305	470,000	86,760
Totals for Canada	**44,028**	**997**	**43,916,700**	**9,112,278**
1926				
Ontario	23,493	854	20,064,000	5,539,880
Quebec	9,808	886	8,693,000	1,825,530
British Columbia	55	1,225	67,000	14,070
Totals for Canada	**33,356**	**864**	**28,824,000**	**7,379,480**

A comparative summary of Canadian tobacco production is shown in the following table for the years 1919 to 1927 by acreage and yield and by provinces. The totals for Canada include figures for British Columbia and other provinces.

Year	Quebec	Ontario	Canada	Quebec	Ontario	Canada	Quebec	Ontario	Canada
	acres	acres	acres	lb.	lb.	lb.	lb. per acre	lb. per acre	lb. per acre
1919	22,360	9,226	31,586	16,770,000	17,000,000	33,770,000	750	1,843	1,069
1920	17,252	19,621	36,891	13,366,000	19,279,000	33,660,000	775	983	883
1921	5,256	6,553	11,809	6,127,000	7,122,000	13,249,000	1,166	1,091	1,124
1922	16,573	9,189	25,762	14,916,000	11,032,000	25,948,000	900	1,201	1,007
1923	15,302	8,630	23,932	10,500,000	10,797,000	21,297,000	680	1,251	890
1924	8,044	13,273	21,317	6,575,740	12,135,000	18,710,740	817	914	878
1925	9,554	18,261	27,825	8,632,000	20,623,000	29,266,000	910	1,130	1,052
1926	9,808	23,493	33,356	8,693,000	20,064,000	28,824,000	886	854	864
1927	10,018	33,650	44,028	7,824,000	35,622,000	43,916,700	769	1,095	997

The value of the tobacco growing industry to Canada is rapidly assuming an important place in Canada's export trade. In 1921 the total export of Canadian tobacco amounted to 200,153 pounds whilst in the fiscal year 1927 it had reached a total of 6,330,972 pounds, or more than 30 times that of 1921. The exports in the fiscal year 1928 show a slight decline of over 250,000 pounds as compared with 1927. A table showing the export of unmanufactured tobacco for the fiscal years 1921 to 1928 inclusive is appended. A column showing the approximate percentage exported to the United Kingdom has been added to complete the table.

EXPORTS OF CANADIAN TOBACCO, 1921-1927

Fiscal years	Quantity	Value	To United Kingdom
	lb.	$	p.c.
1921	200,153	130,457	80·0
1922	471,991	175,826	72·0
1923	1,100,007	297,923	80·0
1924	2,055,337	375,582	56·0
1925	3,531,422	733,166	63·0
1926	2,860,413	1,045,673	92·0
1927	6,330,972	2,569,300	99·6
1928	6,079,606	2,215,916	99·6

Employment and Salaries and Wages Paid.—From Table 232 which gives the employment of wage-earners by months and sex during 1926 and 1927, it is found that employment in the cigar and cigarette section of the tobacco industry is quite steady throughout the year with a little higher employment prevailing in the fall. In 1927 there was an average monthly employment of 5,000 persons of whom 3,227 or 65 p.c. were females and 1,773 or 35 p.c. males while the average employment during October November and December was 5,158 compared with 4,933 the other nine months of the year. In the smoking and chewing tobacco section, however, no seasonal tendency appears, January having been the month of highest employment in 1926 and 1927. In the latter year there was an average employment of 1,715 wage-earners of whom 975 or 57 p.c. were females and 730 or 43 p.c. males.

It appears on referring to table 233 which gives the number of hours worked per day by wage-earners during the month of highest employment that in the cigar and cigarette section, the 9 hour day is prevalent in Quebec and the 8 hour day in Ontario and British Columbia while in the smoking and chewing tobacco section, the majority of wage-earners in Quebec worked 9 hours or more per day and in Ontario 8 hours per day. Since 1917 there was very little change in the average number of hours worked.

The salaries paid by the tobacco industry increased in the cigar and cigarette section from $1,322 in 1917 to $1,994 in 1927 while in the smoking and chewing tobacco section they increased from $1,516 to $3,215 during the same period. The salaries paid compare quite favourably with the average for the whole vegetable products group which amounted to $1,945 in 1927. The wages paid, however, are much below the average. In the former section in 1927 the wages paid amounted to $678 and in the latter section to $611, compared with $900 for the whole vegetable products group of industries. The low wages paid are due to the large number of female wage-earners employed. The tobacco and the canning industries have the lowest percentage of male wage-earners of the entire group, in the former industry 35·6 p.c. and in the latter 37·3 p.c. of the wage-earners in 1927 were males.

Table 232.—Tobacco Industry: Employment of Wage-earners by Months, 1926 and 1927

Month	1927						1926					
	Cigars and cigarettes			Smoking and chewing tobacco			Cigars and cigarettes			Smoking and chewing tobacco		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
January	1,584	2,846	4,430	771	1,019	1,790	1,744	3,101	4,845	831	1,242	2,073
February	1,737	3,074	4,811	774	932	1,706	1,834	3,201	5,035	830	1,122	1,952
March	1,746	3,053	4,799	750	953	1,703	1,833	3,157	4,990	827	1,149	1,976
April	1,713	3,074	4,787	689	963	1,652	1,715	3,033	4,748	804	1,140	1,944
May	1,719	3,192	4,911	686	982	1,668	1,807	3,145	4,952	738	1,067	1,805
June	1,754	3,272	5,026	699	985	1,684	1,808	3,168	4,976	718	993	1,711
July	1,786	3,366	5,152	710	993	1,703	1,836	3,264	5,100	722	982	1,704
August	1,826	3,399	5,225	709	926	1,635	1,870	3,359	5,229	732	1,033	1,765
September	1,829	3,428	5,257	691	926	1,617	1,865	3,403	5,268	733	1,017	1,750
October	1,791	3,305	5,096	698	869	1,567	1,894	3,431	5,325	733	937	1,670
November	1,830	3,379	5,209	709	929	1,638	1,923	3,437	5,360	741	937	1,678
December	1,843	3,327	5,170	739	1,026	1,765	1,948	3,488	5,436	766	1,016	1,782
Average	**1,773**	**3,227**	**5,000**	**730**	**975**	**1,705**	**1,838**	**3,269**	**5,107**	**780**	**1,136**	**1,916**

Table 233.—Tobacco Industry: Hours Worked by Wage-earners in Month of Highest Employment, 1925-27

—		Number of wage-earners working per day				Percentage of wage-earners working per day			
		8 hours or less	9 hours	10 hours	Over 10 hours	8 hours or less	9 hours	10 hours	Over 10 hours
CIGARS AND CIGARETTES									
Canada	1925	1,567	3,639	225	35	28·7	66·6	4·1	0·6
	1926	1,261	4,285	271	30	21·6	73·3	4·6	0·5
	1927	873	4,302	352	23	15·7	77·5	6·4	0·4
Quebec	1925	853	3,634	225	35	18·0	76·6	4·7	0·7
	1926	693	3,863	265	30	14·3	79·6	5·5	0·6
	1927	369	3,900	339	23	8·0	84·2	7·3	0·5
Ontario	1925	629	5	.....	.....	99·2	0·8	.....	.....
	1926	509	422	5	.....	54·4	45·1	0·5	.....
	1927	442	397	13	.....	51·9	46·6	1·5	.....
British Columbia	1925	76	.....	.....	.....	100·0	.....	.....	.....
	1926	53	.....	.....	.....	100·0	.....	.....	.....
	1927	56	.....	.....	.....	100·0	.....	.....	.....
SMOKING AND CHEWING TOBACCO									
Canada	1925	1,156	1,174	122	.....	47·1	47·9	5·0	.....
	1926	254	1,706	225	.....	11·6	78·1	10·3	.....
	1927	275	1,277	396	9	14·1	65·3	20·2	0·4
Quebec	1925	956	777	83	.....	52·6	42·8	4·6	.....
	1926	106	1,587	158	.....	5·7	85·7	8·6	.....
	1927	63	1,249	361	7	3·8	74·3	21·5	0·4
Ontario	1925	193	368	39	.....	32·2	61·3	6·5	.....
	1926	140	91	67	.....	47·0	30·5	22·5	.....
	1927	203	.....	35	2	84·6	.....	14·6	0·8

Table 234.—Tobacco Industry: Hours Worked and Salaries and Wages Paid, 1917-27

—	Hours worked		Number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
				$	$
CIGARS AND CIGARETTES					
1917					
Canada	8·5	49·8	273	1,322	476
Quebec	8·9	51·5	279	1,320	414
Ontario	8·3	48·1	277	1,409	602
British Columbia	8·0	51·4	251	1,456	811
1920					
Canada	8·6	48·0	269	1,793	764
Quebec	8·9	49·1	275	1,798	744
Ontario	8·3	46·8	258	1,694	807
British Columbia	8·2	47·1	271	2,673	1,262
1921					
Canada	8·1	45·8	249	1,627	622
Quebec	8·4	46·8	258	1,772	612
Ontario	7·8	44·4	230	807	712
British Columbia	8·1	44·8	254	2,317	699
1925					
Canada	8·8	47·1	261	2,032	639
Quebec	8·9	49·5	268	2,050	621
Ontario	8·0	44·0	248	1,879	761
British Columbia	8·0	46·0	270	2,090	890
1927					
Canada	8·2	45·8	253	1,994	678
Quebec	8·6	48·5	259	2,088	649
Ontario	8·0	43·6	257	1,623	831
British Columbia	7·5	42·9	243	1,920	805
SMOKING AND CHEWING TOBACCO					
1917					
Canada	9·3	53·8	285	1,516	460
Quebec	9·3	54·1	283	1,682	433
Ontario	9·3	53·0	293	1,103	673
1920					
Canada	9·0	51·5	269	2,356	681
Quebec	9·1	51·7	288	2,706	662
Ontario	8·7	51·0	201	1,767	829
1921					
Canada	8·6	48·3	272	2,092	478
Quebec	9·0	50·8	288	2,935	455
Ontario	8·8	48·9	261	1,024	713
1925					
Canada	8·6	52·2	249	3,176	595
Quebec	8·5	53·7	261	3,463	582
Ontario	8·7	47·7	214	2,441	640
1927					
Canada	9·0	52·1	273	3,215	611
Quebec	9·2	53·2	279	3,256	615
Ontario	8·0	46·0	218	2,788	511

Fuel Consumption and Power Installation.—The quantity and cost value of the different classes of fuel used by the tobacco industry during 1926 and 1927 are shown in table 235 while the power installation by classes and units is shown in Table 236.

Table 235.—Tobacco Industry: Fuel Consumption, 1926-27

Classes of fuel	In cigar and cigarette factories		In tobacco factories		In all factories	
	Quantity	Cost value	Quantity	Cost value	Quantity	Cost value
1927		$		$		$
Bituminous coal ... ton	9,306	64,342	4,456	32,378	13,762	96,720
Anthracite coal ... "	470	6,273	155	2,327	625	8,600
Lignite coal ... "	16	189	...	...	16	189
Coke ... "	37	411	32	371	69	782
Gasoline ... gal.	...	...	1,800	480	1,800	480
Wood ... cord	123	607	368	1,985	491	2,592
Gas, artificial and natural ... M cu. ft.	783	803	464	493	1,247	1,296
All other, not specified (value only) ...	...	16	...	...	...	16
Total cost of fuel ...	...	**72,641**	...	**36,049**	...	**108,690**
1926						
Bituminous coal ... ton	9,497	66,159	4,792	33,650	14,289	99,809
Anthracite coal ... "	491	6,955	172	2,838	663	9,793
Lignite coal ... "	...	...	42	336	42	336
Coke ... "	10	143	15	194	25	337
Gasoline ... gal.	980	305	1,090	335	2,070	640
Wood ... cord	144	626	508	2,692	652	3,318
Gas, artificial and natural ... M cu. ft.	862	886	1,160	1,262	2,022	2,148
All other, not specified (value only) ...	...	18	...	...	...	18
Total cost of fuel ...	...	**75,092**	...	**41,307**	...	**116,399**

Table 236.—Tobacco Industry: Power Installation, 1926-27

Classes of power	In cigar and cigarette factories		In tobacco factories		All factories	
	Units	Capacity	Units	Capacity	Uni's	Capacity
1927	No.	h.p.	No.	h.p.	No.	h.p.
Steam engines and turbines ...	4	940	5	319	9	1,259
Electric motors operated by purchased power ...	302	1,317	99	602	401	1,919
Total installation ...	**306**	**2,257**	**104**	**921**	**410**	**3,178**
1926						
Steam engines and turbines ...	4	940	5	335	9	1,275
Electric motors operated by purchased power ...	259	1,310	96	587	355	1,897
Total installation ...	**263**	**2,250**	**101**	**922**	**364**	**3,172**
Boiler installation—						
1927 ...	15	1,904	24	1,025	39	2,929
1926 ...	14	1,844	24	1,101	38	2,945
Electric power purchased—						
1927 ... $	...	35,867	...	10,962	...	46,829
1926 ... $	...	35,333	...	11,565	...	46,898

Imports and Exports.—The imports and exports by classes of products for the calendar years 1921 to 1927 are shown in Tables 237-8 while the imports and exports by countries and classes of products for 1926 and 1927 are shown in Tables 239-40.

Since 1921 imports declined from $10,589,745 to $8,201,072 in 1927, the main decrease being in unmanufactured tobacco which declined by $2,557,130. Exports on the other hand, increased from $162,758 in 1921 to $2,672,606 in 1927; this increase being due to a very large increase in Canadian raw leaf exported to the United Kingdom which amounted to nearly 6 million pounds in 1927.

Table 237.—Imports of Tobacco and its Products, Calendar Years 1921-27

Products	1927		1926		1925		1924		1923		1922		1921	
	Quantity lb.	Value $	Quantity lb.	Value $	Quantity lb.	Value $	Quantity lb.	Value $	Quantity lb.	Value $	Quantity lb.	Value $	Quantity lb.	Value $
Tobacco, unmanufactured	18,678,745	7,032,217	16,100,333	6,203,918	14,847,553	6,328,582	18,029,551	7,835,489	14,365,860	5,897,008	14,453,671	5,768,093	19,924,721	9,589,347
Cigars	18,685	138,842	16,014	116,803	18,671	134,674	16,917	118,889	17,488	122,765	17,643	125,481	15,265	125,380
Cigarettes	45,649	175,474	46,953	177,209	50,523	189,707	40,185	142,694	34,325	126,685	32,148	111,975	25,721	103,483
Snuff	6,738	14,298	7,090	15,028	5,843	12,087	6,726	11,828	6,142	11,950	5,411	8,647	5,025	8,02
Tobacco, cut	336,455	666,746	344,262	691,763	327,911	701,345	337,539	687,792	388,087	836,445	384,318	814,681	341,939	630,54
Tobacco, all other, n.o.p.	74,781	173,495	71,628	158,073	69,646	151,105	79,916	161,752	74,138	150,788	67,613	123,557	76,883	132,96
Total	**19,161,053**	**8,201,072**	**16,586,280**	**7,362,794**	**15,320,147**	**7,517,500**	**18,510,834**	**8,958,444**	**14,886,040**	**7,145,641**	**14,960,804**	**6,952,434**	**20,389,554**	**10,589,745**
Importation by countries—														
United Kingdom	254,988	792,641	362,195	839,010	274,714	838,150	380,388	839,064	302,738	903,766	304,873	828,610	.....	.....
United States	17,295,677	5,995,184	15,035,352	5,243,292	13,759,519	5,358,258	16,550,866	6,332,412	12,615,350	4,708,046	13,676,095	5,312,121	.....	.....
Cuba	1,356,187	1,113,156	941,738	1,010,483	1,124,200	1,144,475	.....	.....	.....	.....	.....	.....	.....	.....
Other countries	254,201	300,091	246,995	270,009	161,714	176,617	1,579,580	1,786,968	1,967,952	1,533,829	979,836	811,703	.....	.....
Total	**19,161,053**	**8,201,072**	**16,586,280**	**7,362,794**	**15,320,147**	**7,517,500**	**18,510,834**	**8,958,444**	**14,886,040**	**7,145,641**	**14,960,804**	**6,952,434**	**20,389,554**	**10,589,745**

Table 238.—Exports of Tobacco and its Products, Calendar Years 1921-27

Products	1927		1926		1925		1924		1923		1922		1921	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quanttiy	Value
	lb.	$	lb.	$	lb.	$	lb.	$	lb.	$	lb.	$	lb.	$
Tobacco, unmanufactured	5,867,479	2,572,656	5,050,118	1,883,477	1,974,765	62,9518	2,927,826	626,911	1,425,299	290,198	1,162,189	335,492	236,039	91,845
Cigars	1,290	4,664	1,106	4,317	1,345	4,435	2,359	7,016	2,256	8,660	758	2,733	647	2,207
Cigarettes	12,390	11,850	72,656	28,356	55,542	29,617	83,154	43,535	92,607	68,625	28,175	20,910	25,558	25,703
Plug and twist tobacco	8,841	5,643	7,891	4,789	8,086	4,321	8,191	5,945	10,438	5,926	5	13	1,083	1,169
Stems and cuttings	430,700	8,338	457,500	12,434	541,600	12,898	685,500	21,966	412,100	14,758	573,300	20,115	648,000	24,477
Tobacco, all other, n.o.p.	234,639	69,455	169,440	114,033	56,161	78,839	46,300	67,111	29,054	39,239	13,747	21,384	12,929	17,357
Total	**6,555,339**	**2,672,606**	**5,758,711**	**2,047,406**	**2,637,499**	**759,626**	**3,753,330**	**772,484**	**1,971,754**	**427,406**	**1,778,174**	**400,648**	**924,256**	**162,758**
Exportation by countries—														
United Kingdom	5,859,472	2,570,341	4,998,043	1,873,639	1,897,742	639,203	1,901,598	520,827	998,410	238,979	882,637	267,036	.....	.....
United States	453,529	36,868	545,257	107,063	552,918	61,218	159,525	61,397	237,708	39,634	465,310	25,900	.....	.....
Other countries	242,338	65,397	215,411	66,704	186,839	59,205	1,692,207	190,260	735,636	148,793	430,227	107,712	.....	.....
Total	**6,555,339**	**2,672,606**	**5,758,711**	**2,047,406**	**2,637,499**	**759,626**	**3,753,330**	**772,484**	**1,971,754**	**427,406**	**1,778,174**	**400,648**	**924,256**	**162,758**

Table 239.—Imports of Tobacco, Cigars, etc., by Countries, during the Calendar Years 1926 and 1927

Articles imported by countries	1927		1926	
	Quantity	Value	Quantity	Value
	lb.	$	lb.	$
Tobacco, unmanufactured—				
United Kingdom	22,035	29,528	115,232	51,07
United States	17,094,943	5,737,594	14,844,092	5,005,740
Cuba	1,339,239	984,981	927,454	904,286
Other countries	222,528	280,114	213,555	242,820
Total	18,678,745	7,032,217	16,100,333	6,203,918
Cigars—				
United Kingdom	363	2,545	104	670
United States	950	6,572	722	4,943
Cuba	16,948	128,175	14,284	106,197
Other countries	424	1,550	904	4,993
Total	18,685	138,842	16,014	116,803
Cigarettes—				
United Kingdom	24,196	122,622	27,624	128,701
United States	20,239	49,296	17,841	43,217
Other countries	1,214	3,556	1,488	5,291
Total	45,649	175,474	46,953	177,209
Snuff—				
United Kingdom	4,092	12,266	4,182	12,436
United States	2,316	1,966	2,756	2,476
Other countries	330	66	152	116
Total	6,738	14,298	7,090	15,028
Tobacco, cut—				
United Kingdom	134,707	459,051	149,320	494,760
United States	172,053	192,905	164,070	180,240
Other countries	29,695	14,790	30,872	16,763
Total	336,455	666,746	344,262	691,763
Tobacco, all other manufacturing, n.o.p.—				
United Kingdom	69,595	166,629	65,733	151,371
United States	5,176	6,851	5,871	6,676
Other countries	10	15	24	26
Total	74,781	173,495	71,628	158,073
Grand total, all tobacco by countries—				
United Kingdom	**254,988**	**792,641**	**342,195**	**839,010**
United States	**17,295,677**	**5,995,184**	**15,035,352**	**5,243,292**
Cuba	**1,356,187**	**1,113,156**	**941,738**	**1,010,483**
Other countries	**254,201**	**300,091**	**246,995**	**270,009**
Total	**19,161,053**	**8,201,072**	**16,586,280**	**7,362,794**

Table 240.—Export of Canadian Tobacco, Cigarettes, etc., by Countries, during the Calendar Years 1926 and 1927

Articles exported by countries		1927		1926	
		Quantity	Value	Quantity	Value
			$		$
Tobacco, unmanufactured—					
United Kingdom	lb.	5,859,120	2,569,678	4,994,627	1,871,531
United States		7,422	2,791	42,197	8,660
Other countries		937	187	13,294	3,286
Total		5,867,479	2,572,656	5,050,118	1,883,477
Cigars—					
United Kingdom	lb.	84	437	100	433
United States		.....	.....	49	176
Other countries		1,206	4,227	957	3,708
Total		1,290	4,664	1,106	4,317
Cigarettes—					
United Kingdom	lb.	76	79	1,170	397
United States		.....	.....	292	413
Other countries		12,314	11,771	71,194	27,546
Total		12,390	11,850	72,656	28,356
Plug and twist tobacco—					
United Kingdom	lb.	.....	.....	30	23
United States		12	15	580	540
Other countries		8,829	5,628	7,281	4,226
Total		8,841	5,643	7,891	4,789
Stems and cuttings—					
United Kingdom	cwt.	.....	.....	13	155
United States		4,307	8,338	4,535	11,849
Other countries		.....	.....	27	430
Total		4,307	8,338	4,575	12,434
All other tobaccos, n.o.p.—					
United Kingdom	lb.	192	147	816	1,100
United States		15,395	25,724	48,639	85,425
Other countries		219,052	43,584	119,985	27,508
Total		234,639	69,455	169,440	114,033
Grand total, exports of tobacco—					
United Kingdom		**5,859,472**	**2,570,341**	**4,998,043**	**1,873,639**
United States		**453,529**	**36,868**	**545,257**	**107,063**
Other countries		**242,338**	**65,397**	**215,411**	**66,704**
Total		**6,555,339**	**2,672,606**	**5,758,711**	**2,047,406**

CHAPTER X

MISCELLANEOUS PRODUCTS

THE LINSEED OIL INDUSTRY

Previous to 1920, statistics for this industry were included with lubricating oils and greases under the heading of "Oils." Since 1920, however, due to the classification of oils according to their component raw materials, such as, animal, vegetable or mineral oils, establishments producing linseed oil as their principal commodity were treated as a separate industry. On referring to table 242 which gives the principal statistics of the linseed oil industry since 1920, the following features of its development may be noted. Although the number of establishments remained the same, the capital invested decreased by $569,901 from $2,911,634 in 1920 to $2,341,733 in 1927; this decrease being due to a reduction in the working capital of $639,076 and an increase in fixed capital of $69,175. Production also decreased from $9,230,084 to $5,839,314. The reduction in output was, however, due to a drop in the price of linseed oil and oil cake for the physical volume of production in 1927 was greater than that of 1920 as the following figures show:

—		1920	1927
Linseed oil, raw	gal.	2,627,265	3,112,520
Linseed oil, boiled	"	798,975	1,062,985
Special oils	"	97,433	592,955
Oil cake	tons	22,876	35,349

Employment was the only other factor which recorded an increase, the number of persons employed having increased slightly from 222 to 239.

The general depression of 1921 hardly affected this industry at all. In spite of a decrease in capital and the gross value of products, the number of persons employed increased by 70 and the physical volume of production if anything, was greater than the previous year while the value added by manufacture dropped only $65,952.

In 1927 there were eight establishments whose principal product was linseed oil, situated by provinces as follows:—Quebec 3, Ontario 2, Manitoba 2 and Alberta 1. These establishments had a capital investment of $2,341,733, employed 239 persons with a payroll of $308,602 and produced goods that had a selling value at the factory of $5,839,314.

The centre of the industry is in Quebec; the three establishments there located in 1927 used 49 p.c. of the capital invested, gave employment to 48 p.c. of the persons engaged in the industry and produced 57 p.c. of the total output.

Table 242.—Linseed Oil Industry: Principal Statistics, 1920-27

—	Establishments	Capital	Employees on Salaries			Employees on Wages			Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
			Male	Female	Salaries	Male	Female	Wages					
	No.	$	No.	No.	$	No.	No.	$	$	h.p.	$	$	$
1920													
Canada	8	2,911,634	35	7	81,744	178	2	224,324	34,137	1,830	7,180,011	9,230,084	2,050,073
Quebec	3	1,344,149	15	2	34,466	74	2	90,782	5,962	904	3,631,042	4,899,599	1,268,557
Other provinces	5	1,567,485	20	5	47,278	104	.....	133,542	28,175	926	3,548,969	4,330,485	781,516
1921													
Canada	8	2,509,124	33	10	74,321	243	6	250,657	23,184	1,908	4,239,255	6,223,376	1,984,121
Quebec	3	1,090,623	16	2	34,692	123	3	109,486	13,275	1,054	2,264,410	3,151,704	887,294
Other provinces	5	1,418,501	17	8	39,629	120	3	141,171	9,909	854	1,974,845	3,071,672	1,096,827
1922													
Canada	8	2,603,241	33	5	79,274	211	2	224,191	17,541	1,467	4,319,555	5,558,627	1,239,072
Quebec	3	1,098,752	16	1	39,306	94	2	110,145	8,902	572	2,474,638	3,202,098	727,460
Other provinces	5	1,504,489	17	4	39,968	117	.....	114,046	8,639	895	1,844,917	2,356,529	511,612
1923													
Canada	8	2,818,291	34	6	82,562	207	2	217,344	18,601	1,121	4,697,051	5,761,840	1,064,789
Quebec	3	1,243,790	17	1	39,286	102	2	114,189	7,540	528	2,617,979	3,201,504	583,525
Other provinces	5	1,574,501	17	5	43,276	105	.....	103,155	11,061	593	2,079,072	2,560,336	481,264
1924													
Canada	8	2,231,954	32	6	76,378	177	2	210,599	27,631	1,712	4,851,264	5,911,530	1,060,266
Quebec	3	1,057,366	14	1	34,397	90	1	108,655	8,358	807	2,908,767	3,447,729	538,962
Other provinces	5	1,174,588	18	5	41,981	87	1	101,944	19,273	905	1,942,497	2,463,801	521,304
1925													
Canada	8	2,490,462	31	6	81,691	174	2	199,155	28,413	1,623	4,876,835	6,005,969	1,129,134
Quebec	3	1,226,015	13	1	40,594	83	1	103,176	7,887	718	2,836,904	3,455,954	619,050
Other provinces	5	1,264,447	18	5	41,097	91	1	95,979	20,526	905	2,039,931	2,550,015	510,084
1926													
Canada	8	2,691,550	31	6	84,369	193	1	198,263	20,006	1,532	5,364,364	6,486,924	1,122,560
Quebec	3	1,384,102	13	1	42,907	90	1	98,114	7,923	707	2,996,217	3,689,595	693,378
Other provinces	5	1,307,448	18	5	41,462	103	.....	100,149	12,083	825	2,368,147	2,797,329	429,182
1927													
Canada	8	2,341,733	28	5	87,659	205	1	220,943	23,580	1,850	4,840,168	5,839,314	999,146
Quebec	3	1,159,351	11	1	45,034	102	1	107,664	5,793	727	2,755,140	3,305,661	550,521
Other provinces	5	1,182,382	17	4	42,625	103	.....	113,279	17,787	1,123	2,085,028	2,533,653	448,625

Table 243.—Linseed Oil Industry: Capital Invested, by Classes, 1926 and 1927

Items of capital	1926	1927
	$	$
Fixed capital—		
Lands, buildings, etc. / Machinery and tools	1,421,990	1,338,866
Working capital—		
Materials and stocks on hand	939,313	689,040
Cash, trading and operating accounts, etc	330,247	313,827
Total working capital	1,269,560	1,002,867
Grand Total of Capital	**2,691,550**	**2,341,733**

Table 244.—Linseed Oil Industry: Production, 1926-27

Classes of products	Unit of measure	1926		1927	
		Quantity	Selling value at mill	Quantity	Selling value at mill
			$		$
Linseed oil, raw	Imp. gal.	3,239,916	3,068,410	3,112,520	2,535,805
Linseed oil, boiled	"	968,663	918,787	1,062,985	868,224
Refined and special oils	"	547,720	582,741	592,955	520,301
Hydrogenated oils	"	99,597	101,972	98,882	88,994
Oilcake	ton	11,907	501,466	5,988	258,669
Oilcake meal	"	30,099	1,313,548	35,349	1,567,321
Total value of products			**6,486,924**		**5,839,314**

Table 245.—Linseed Oil Industry: Materials Used, 1926 and 1927

Principal materials	1926		1927	
	Quantity bushels	Cost value	Quantity bushels	Cost value
		$		$
Flaxseed	2,292,518	5,197,447	2,263,655	4,574,374
Containers, etc		107,041		150,011
All other materials		59,876		115,783
Total		**5,364,364**		**4,840,168**

Employment and Salaries and Wages Paid.—As may be seen from table 246 which gives the employment of wage-earners by months during 1926 and 1927, employment in the linseed oil industry is fairly steady throughout the year, no seasonal tendency being apparent. In 1927 there was an average of 206 wage-earners employed each month compared with 194 the previous year.

The number of hours worked per day and per week, the average number of days that establishments operated on full time and the average salaries and wages paid from 1920 to 1927 are shown in table 247. Since 1920 the average salary increased from $1,946 to $2,656 or 37 p.c. while the average wage decreased 14 p.c. from $1,246 to $1,073. Although wages have dropped since 1920, they compare, nevertheless, quite favourably with the average for the whole vegetable products group which amounted to $900 in 1927.

Table 246.—Linseed Oil Industry: Employment of Wage-earners, by Months, 1926-27

—	1927			1926		
	Male	Female	Total	Male	Female	Total
January	212	1	213	210	1	211
February	216	1	217	216	1	217
March	207	1	208	202	1	203
April	201	1	202	176	1	177
May	236	1	237	213	1	214
June	224	1	225	208	1	209
July	198	1	199	193	1	194
August	192	1	193	191	1	192
September	182	1	183	162	1	163
October	183	1	184	162	1	163
November	197	1	198	185	1	186
December	211	1	212	201	1	202
Average	**205**	**1**	**206**	**193**	**1**	**194**

Table 247.—Linseed Oil Industry: Hours Worked and Salaries and Wages Paid, 1920-27

Year	Hours worked		Average number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
1920	9·9	60·3	205	1,946	1,246
1921	11·3	67·7	230	1,729	1,007
1922	12·2	72·4	233	2,086	1,053
1923	9·7	58·0	238	2,064	1,040
1924	9·9	58·5	245	2,010	1,177
1925	9·4	57·2	250	2,208	1,132
1926	9·6	58·0	251	2,280	1,022
1927	9·9	58·4	258	2,656	1,073

Table 248.—Linseed Oil Industry: Fuel Consumption, 1926 and 1927

Classes of fuel	—	1927		1926	
		Quantity	Cost value at mill or factory	Quantity	Cost value at mill or factory
			$		$
Bituminous coal	ton	3,378	22,598	2,499	19,295
Wood	cord	30	300	.....	.....
Gas	m. c. ft.	3,197	682	6,362	435
All other fuel	.....	.....	.....	.....	276
Total cost of fuel	.....	.....	**23,580**	.....	**20,006**

Table 249.—Linseed Oil Industry: Power Installation, 1926 and 1927

Kinds of power	1927		1926	
	Number of units	Horse-power according to manufacturers' rating	Number of units	Horse-power according to manufacturers' rating
Internal combustion engines	4	17	1	12
Hydraulic turbines or water wheels	.....	.....	1	20
Total primary power	4	17	2	32
Electric motors operated by purchased power	102	1,833	65	1,500
Total power used in manufacturing	**106**	**1,850**	**67**	**1,532**

Imports and Exports.—Imports and exports of flaxseed, oils and oilcake and meal are shown in table 250 by quantities, values and principal countries for the calendar years 1926 and 1927. The total value of imports for consumption in Canada fell from $1,644,167 in 1926 to $741,885 in 1927 while exports also show a decrease from $6,232,334 in 1926 to $5,331,439 in 1927.

Table 250.—Imports and Exports of Flaxseed, Linseed Oil and Oilcake and Meal, 1926-27

Articles by countries	Imports		Exports	
	Quantity	Value	Quantity	Value
1926		$		$
Flax or linseed oil boiled or raw—				
United Kingdom ..... Lb.	593,698	46,511	.....	.....
United States	327,107	42,055	10	10
Newfoundland	15,067	1,789	2,490	2,368
Other countries	1,145	162	3,768	3,991
Total	937,017	90,517	6,268	6,369
Flaxseed, n.o.p.—				
United Kingdom ..... Bush.	30	157	.....	.....
United States	58,202	116,600	2,653,386	5,353,666
Argentina	750,050	1,406,737	.....	.....
Other countries	1,640	2,867	.....	.....
Total	809,922	1,526,364	2,653,386	5,353,666
Linseed oilcake and meal—				
United Kingdom ..... Cwt.	.....	.....	14,560	32,071
United States	12,240	27,286	151,392	317,173
British Guiana	.....	.....	5,302	12,461
British West Indies	.....	.....	12,425	29,801
Netherlands	.....	.....	81,510	179,992
Other countries	.....	.....	128,041	300,801
Total	12,240	27,286	393,230	872,299
Grand Total, Value of Imports and Exports	.....	**1,644,167**	.....	**6,232,334**
1927				
Flax or linseed oil boiled or raw—				
United Kingdom ..... Lb.	406,437	30,948	.....	.....
United States	311,638	38,560	3,944	3,592
Other countries	20,322	2,118	1,909	1,804
Total	738,397	71,626	5,853	5,396
Flaxseed, n.o.p.—				
United Kingdom ..... Bush.	1,032	4,858	.....	.....
United States	363	1,069	2,184,860	4,317,221
Argentina	351,954	644,309	.....	.....
Other countries	991	2,311	.....	.....
Total	354,340	652,547	2,184,860	4,317,221
Linseed oilcake and meal—				
United Kingdom ..... Cwt.	.....	.....	16,800	36,009
United States	7,246	17,712	241,376	517,280
British West Indies	.....	.....	120,589	277,414
Netherlands	.....	.....	72,101	155,852
Other countries	.....	.....	10,601	22,267
Total	7,246	17,712	461,467	1,008,822
Grand Total, Value of Imports and Exports	.....	**741,885**	.....	**5,331,439**

PRODUCTION OF FLAXSEED IN CANADA

According to the "Monthly Bulletin of Agriculture" the production of flaxseed in Canada fell from 9,694,700 bushels valued at $18,849,300 in 1924 to 5,994,700 bushels valued at $9,688,000 in 1926, a decrease of 3,700,000 bushels and $9,161,300 in value, whilst in 1927 the production of flaxseed had fallen to 4,884,600 bushels and in value $7,562,000.

CONSUMPTION OF FLAXSEED, LINSEED OIL AND OILCAKE, 1927

The consumption of the above commodities in 1927 is shown in table 251. In order to compare the statistics of linseed oil, the quantity imported and exported has been converted into gallons at the rate of 9·35 lb. to the gallon of a stated specific gravity.

Table 251.—Consumption of Flaxseed, Linseed Oil, and Oilcake and Meal, 1927

—	Flaxseed		Linseed oil, boiled or raw		Oilcake and meal	
	Quantity	Value	Quantity	Value	Quantity	Value
	bush.	$	gallons	$	ton	$
Production	4,884,600	7,562,000	4,175,505	3,404,029	41,337	1,825,990
Imports	354,340	652,547	78,973	71,626	7,246	17,712
Total	5,238,940	8,214,547	4,254,478	3,475,655	48,583	1,843,702
Less exports	2,184,860	4,317,221	5,853	5,396	23,073	1,008,822
Available for consumption	3,054,080	3,897,326	4,248,625	3,470,259	25,510	834,880

MISCELLANEOUS VEGETABLE PRODUCTS INDUSTRY

Establishments producing as their principal commodities, shortening, yeast, hops or other miscellaneous vegetable products not elsewhere specified are grouped together under the above heading. In 1927 there were 6 establishments manufacturing these products, 2 of which were located in Ontario and 4 in Quebec. Until 1926 there was also one establishment in British Columbia primarily engaged in packing hops and usually working only a few months during the year. Statistics for this industry are only available since 1920 for previous to that year establishments producing shortening, yeast, etc., were included with other industries of the vegetable products group. The principal statistics from 1921 to 1927 are given in table 252. Statistics for 1920, cannot be published as there were only two establishments operating that year.

The six establishments engaged in the production of miscellaneous vegetable products had in 1927 a capital investment of $2,255,426, they gave employment to 210 persons who were paid $242,765 in salaries and wages and produced goods with a selling value at the factory of $3,877,031.

Other statistics for production, materials used, hours of labour and average salaries and wages paid are given in Tables 253 to 255.

Table 252.—Miscellaneous Vegetable Products Industry: Principal Statistics, 1921-27

Year and province	Establishments	Capital	Employees on Salaries			Employees on Wages		
			Male	Female	Salaries	Male	Female	Wages
	No.	$	No.	No.	$	No.	No.	$
1921								
Canada	4	1,752,885	47	5	102,229	89	13	120,962
1922								
Canada	8	2,840,892	73	10	130,263	159	25	200,577
Ontario	5	948,763	21	2	26,200	37	6	38,792
Other provinces	3	1,892,129	52	8	104,063	122	19	161,785
1923								
Canada	7	2,787,168	51	9	116,922	126	25	126,049
Ontario	4	964,312	18	3	23,810	44	6	37,573
Other provinces	3	1,822,856	33	6	93,112	82	19	88,476
1924								
Canada	9	2,019,050	28	3	60,341	119	18	121,162
Ontario	4	887,456	6	1	16,372	41	4	50,706
Other provinces	5	1,131,594	22	2	43,969	78	14	70,456
1925								
Canada	8	2,035,379	42	3	104,963	108	20	147,138
Ontario	4	898,537	7	1	25,660	47	10	58,005
Other provinces	4	1,136,842	35	2	79,303	61	10	89,133
1926								
Canada	6	1,658,435	11	3	25,355	106	10	116,788
Ontario	3	737,457	4	.....	7,871	39	.....	40,984
Quebec	3	920,978	7	3	17,484	67	10	75,804
1927								
Canada	6	2,255,426	21	2	49,261	180	7	193,504

Table 252.—Miscellaneous Vegetable Products Industry: Principal Statistics, 1921-27 —Concluded.

Year and Province	Total number of employees	Salaries and wages paid	Cost of fuel	Power installation	Materials used	Gross value of products	Value added by manufacture
	No.	$	$	h.p.	$	$	$
1921							
Canada	154	223,191	102,953	1,100	1,101,396	1,744,377	642,981
1922							
Canada	267	330,840	80,476	1,039	2,126,757	3,100,498	973,741
Ontario	66	64,992	7,751	143	1,056,700	1,240,183	183,483
Other provinces	201	265,848	72,725	896	1,070,057	1,860,315	790,258
1923							
Canada	211	242,971	56,722	1,419	2,390,794	3,236,896	846,102
Ontario	71	61,383	7,442	567	1,264,875	1,510,367	245,492
Other provinces	140	181,588	49,280	852	1,125,919	1,726,529	600,610
1924							
Canada	168	181,503	48,383	1,702	1,976,664	2,677,119	700,455
Ontario	52	67,078	26,738	722	1,320,893	1,525,557	204,664
Other provinces	116	114,425	21,645	980	655,771	1,151,562	495,791
1925							
Canada	173	252,101	48,847	1,799	2,504,237	3,390,976	886,739
Ontario	65	83,665	26,084	707	1,729,364	2,102,162	372,798
Other provinces	108	168,436	22,763	1,092	774,873	1,288,814	513,941
1926							
Canada	130	142,143	39,232	1,253	2,769,388	3,790,567	1,021,179
Ontario	43	48,855	27,120	453	2,028,358	2,389,014	360,656
Quebec	87	93,288	12,112	800	741,030	1,401,553	660,523
1927							
Canada	210	242,765	63,004	1,816	2,671,470	3,877,031	1,205,561

Table 253.—Miscellaneous Vegetable Products Industry: Production, 1926-27

Products	Quantity	Value
1926	lb.	$
Yeast and yeast food	7,476,106	910,144
Shortening and lard compound	16,893,882	2,371,597
Oils, stearines, etc.	3,780,290	451,411
All other products	.....	57,415
Total	.....	**3,790,567**
1927		
Yeast and yeast food	7,918,148	1,011,251
Shortening and lard compound	20,442,647	2,479,767
Oils and stearines	2,694,344	276,877
Syrups	105,000 [1]	78,600
All other products	.....	30,536
Total	.....	**3,877,031**

[1]Gallons.

Table 254.—Miscellaneous Vegetable Products Industry: Materials Used, 1927

Materials	Quantity	Value
	lb.	$
Cottonseed oil	17,038,909	1,519,595
Peanut oil	3,177,447	295,785
Cocoanut oil	1,420,000	121,000
Soya bean oil	1,388,180	113,379
Corn and palm kernel oil	114,911	12,289
All other materials	.....	361,271
Containers, wrappers, etc.	.....	248,151
Total	.....	**2,671,470**

Table 255.—Miscellaneous Vegetable Products Industry: Hours Worked and Salaries and Wages Paid, 1921-27

Year	Hours worked		Average number of days establishments operated on full time	Average salary	Average wage
	Per day	Per week			
				$	$
1921	9·2	52·2	271	1,966	1,186
1922	9·2	52·1	274	1,569	1,090
1923	9·1	52·4	250	1,949	835
1924	9·6	47·1	221	1,946	884
1925	9·5	52·6	257	2,333	1,150
1926	9·7	52·0	298	1,811	1,007
1927	9·8	54·5	293	2,142	1,035

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