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CANADA
DEPARTMENT OF MINES
HON. P. E. BLONDIN, MINISTER; R. G. MCCONNELL, DEPUTY MINISTER.

MINES BRANCH
EUGENE HAANEL, PH.D., DIRECTOR.

THE
PRODUCTION OF COAL AND COKE

IN

CANADA

During the Calendar Year

1915

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ADVANCE CHAPTER OF THE ANNUAL REPORT ON THE
MINERAL PRODUCTION OF CANADA DURING THE
CALENDAR YEAR 1915.

*(Tons used throughout this report are short tons of 2,000 pounds, except where
otherwise stated.)*

COAL.

The term "production" in the text and tables of this report is used to represent the tonnage of coal actually sold, or used, by the producer, as distinguished from the term "output" which is applied to the total coal extracted from the mine, and which includes, in some cases, coal lost or unsaleable, or coal carried into stock on hand at the end of the year.

The production of coal during 1915 was 13,267,023 short tons (11,845,556 long tons) valued at \$32,111,182 or an average of \$2.42 per ton, as compared with a production in 1914 of 13,637,529 short tons (12,176,365 long tons) valued at \$33,471,801 or an average of \$2.45 per ton, and a production in 1913 of 15,012,178 short tons (13,403,730 long tons) valued at \$37,334,940 or an average of \$2.49 per ton. The falling off in 1915 from the previous year was 370,506 tons or 2.7 per cent while compared with 1913, the year of greatest production, the decrease was 1,745,155 tons, or about 11.6 per cent.

The average number of men employed during 1915 was 24,574 and total wages paid \$17,385,200, as compared with an average of 27,571 men employed during 1914 and \$19,060,011 paid in wages.

The values given are partially estimated or assumed since complete returns have not been received with respect to amounts realized from coal sales. In the case of Nova Scotia an average value of \$2.50 per long ton is placed upon the total production, while for British Columbia an average value of \$3.50 per long ton is used. The values placed upon the Alberta production are those furnished by the operating companies.

The total exports of domestic coal from Canada in 1915 were 1,766,543 tons valued at \$5,406,058, as compared with 1,423,126 tons valued at \$3,880,175 in 1914. There is also a small export of coal "not the produce of Canada."

The total imports of coal in 1915 were 12,465,902 tons valued at \$28,345,605, as compared with imports in 1914 of 14,721,057 tons valued at \$39,801,498.

The total consumption of coal in 1915 was 23,906,692 tons, as compared with 26,852,323 tons in 1914 and 31,582,545 tons in 1913.

Bituminous coal constitutes by far the largest proportion of the annual production. Lignite only is produced in Saskatchewan, and in Alberta it forms a large proportion of the Province's production. Of anthracite there is a small output, less than 200,000 tons annually, from one mine, at Bankhead, Alberta.

Statistics of the production of coal by provinces in 1915 and 1914, and comparisons of 1915 production with that of 1914, and of the production of 1914 with that of 1913, are given in the tables following:—

Production of Coal by Provinces, 1915.

Province.	Average No. of men employed.	Wages paid.	PRODUCTION OF COAL.			Per cent of total quantity.
			Short tons.	Value.	Average per ton.	
Nova Scotia.....	12,557	\$8,133,085	\$7,463,370	\$16,659,308	\$2.23	56.25
Alberta.....	6,349	4,840,213	3,360,818	8,283,079	2.46	25.33
British Columbia.....	4,957	3,974,622	2,065,613	6,455,041	3.12½	15.57
Saskatchewan.....	344	203,657	240,107	365,246	1.52	1.81
New Brunswick.....	332	201,373	127,391	309,612	2.43	0.96
Yukon Territory.....	35	32,250	9,724	38,896	4.00	0.08
	24,574	17,385,200	13,267,023	32,111,182	2.42	100.00

Production of Coal by Provinces, 1914.

Province.	Average No. of men employed.	Wages paid.	PRODUCTION OF COAL.			Per cent of total quantity.
			Short tons.	Value.	Average per ton.	
Nova Scotia.....	14,080	\$8,270,869	7,370,924	\$16,452,955	\$2.23	54.05
Alberta.....	7,334	5,912,718	3,683,035	9,350,392	2.54	27.01
British Columbia.....	5,541	4,503,283	2,239,799	6,999,374	3.12	16.42
Saskatchewan.....	336	200,578	232,299	374,245	1.61	1.70
New Brunswick.....	236	138,547	98,049	241,075	2.46	0.72
Yukon Territory.....	44	34,016	13,443	53,760	4.00	0.10
	27,571	19,060,011	13,637,529	33,471,801	2.45	100.00

Comparison of Production, 1913 with 1914, and 1914 with 1915.

Province.	(i) INCREASE OR (d) DECREASE.			
	Years 1913 and 1914.		Years 1914 and 1915.	
	Short tons.	Per cent.	Short tons.	Per cent.
Nova Scotia.....	(d) 609,149	7.63	(i) 92,446	1.25
British Columbia.....	(d) 474,621	17.48	(d) 174,186	7.78
Alberta.....	(d) 331,740	8.26	(d) 322,197	8.75
Saskatchewan.....	(i) 19,402	9.11	(i) 7,898	3.36
New Brunswick.....	(i) 27,738	39.45	(i) 29,342	29.92
Yukon Territory.....	(d) 6,279	31.94	(d) 3,719	27.66
Total for Canada.....	(d) 1,374,649	9.16	(d) 370,506	2.72

A small increase is shown in production in Nova Scotia and Saskatchewan. There was also an increase in New Brunswick which, although not of great importance from the point of view of tonnage, is nevertheless an advance of nearly 30 per cent. There was a decreased production in Alberta, British Columbia, and the Yukon.

The proportions of the total production contributed by the different provinces show no wide variations from the two preceding years. Nova Scotia with a production 92,446 tons greater than in 1914 (an increase of 1.25 per cent) led the list with 56.25 per cent of the total. Alberta, with a decrease of 322,197 tons from the 1914 production (equivalent to 8.75 per cent) continues as second largest producer with 25.33 per cent of the total. The British Columbia production, with a decrease of 174,186 tons or 7.78 per cent, contributed 15.57 per cent of the total. In 1910 this Province produced nearly 26 per cent and in 1900 over 31 per cent of the total Canadian output. Saskatchewan, with an increase in 1915 of 7,808 tons or 3.36 per cent, contributed only 1.81 per cent of the total, and New Brunswick and the Yukon each less than one per cent.

The relative importance of the different provinces as coal producers for a number of years past is shown in the next table, in which is set forth the proportional contribution of each province to the total tonnage of coal produced in Canada. The coal-fields on the Atlantic sea-board still continue to produce more than half the total, although from 1910 onwards the combined production of the western provinces has only been a little less than 50 per cent of the total.

Province.	1874.	1890.	1900.	1910.	1911.	1912.	1913.	1914.	1915.
	%	%	%	%	%	%	%	%	%
Nova Scotia.....	91	71	62.9	50.25	62.35	53.94	53.62	54.77	57.21
New Brunswick.....									
Saskatchewan*.....			0.7	1.40	1.83	1.55	1.42	1.70	1.81
Alberta*.....		4	5.4	22.42	13.34	22.33	26.75	27.01	25.33
British Columbia.....	8	25	31.0	25.80	22.45	22.12	18.08	16.42	15.57
Yukon Territory.....				0.13	0.03	0.06	0.13	0.10	0.08

*Alberta and Saskatchewan were established as provinces on September 1, 1905. For the purpose of comparison, the coal production during the years previous to that date has been separated according to the present boundaries of these Provinces.

The following tables show the production and distribution of coal mined, by provinces, during recent years. The sales for consumption in Canada during 1915 were 9,826,712 tons, a decrease of 532,678 tons from 1914. The sales for export to the United States were 1,330,718 tons, an increase of 149,182 tons over 1914; and the sales for export to other countries were 297,343 tons, an increase of 57,416 tons over 1914. The total sales of Canadian coal were 11,454,773 tons as against 11,780,853 tons in 1914. The quantity used by colliery operators in the manufacture of coke, in steel plants, and in brick plants, etc., was 701,975 tons, while 1,110,275 tons were used in the operation of collieries and by workmen. Stocks show a falling off during the year of 99,294 tons. The loss due to breakage, washing, unmarketable slack, so far as returns were furnished, which are far from complete in this respect, were 312,467 tons.

Production and Distribution of Coal Mined, by Provinces, 1915.

(IN SHORT TONS.)

	Nova Scotia.	New Brunswick.	Sas-katch-ewan.	Alberta.	Yukon.	British Columbia.	Total.
Sold in Canada.....	5,693,615	119,694	225,497	3,038,761	9,264	739,881	9,826,712
Sold for export to U.S....	596,171	3,343	145	25,050	230	705,779	1,330,718
Sold for export to other countries.....	271,675					25,668	297,343
Total sales.....	6,561,461	123,037	225,642	3,063,811	9,494	1,471,328	11,454,773
Used by producers in making coke, steel, brick, etc.....	257,312		960	38,878		404,825	701,975
Used by producers for colliery consumption and by workmen.....	644,597	4,354	13,505	258,129	230	189,460	1,110,275
Total used.....	901,909	4,354	14,465	297,007	230	594,285	1,812,250
Production*.....	7,463,370	127,391	240,107	3,360,818	9,724	2,065,613	13,267,023
Stock on hand Jan. 1....	138,795	1,081	27	82,453	4,623	43,520	270,499
" " Dec. 31....	96,468	501	10	35,865	1,000	37,361	171,205
Difference.....	- 42,327	- 580	- 17	- 46,588	- 3,623	- 6,159	- 99,294
Losses due to breakage or other causes.....	92,696	112	3,035	76,337	1,386	138,901	312,467
Total output.....	7,513,739	126,923	243,125	3,390,567	7,487	2,198,355	13,480,196

*Production is obtained by adding coal sold and coal used.

Production and Distribution of Coal Mined, by Provinces, 1914.

(IN SHORT TONS.)

	Nova Scotia.	New Brunswick.	Sas-katch-ewan.	Alberta.	Yukon.	British Columbia.	Total.
Sold in Canada.....	5,851,735	94,455	217,898	3,218,234	7,547	969,521	10,359,390
Sold for export to U.S....	399,533	1,185		105,699		675,119	1,181,536
Sold for export to other countries.....	239,927						239,927
Total sales.....	6,491,195	95,640	217,898	3,323,933	7,547	1,644,640	11,780,853
Used by producers in making coke, steel, brick, etc.....	145,915		3,050	44,249		398,117	591,331
Used by producers for colliery consumption and by workmen.....	733,814	2,409	11,351	314,833	5,896	197,042	1,265,345
Total used.....	879,729	2,409	14,401	359,082	5,896	595,159	1,856,676
Production*.....	7,370,924	98,049	232,299	3,683,015	13,443	2,239,799	13,637,529
Stock on hand Jan. 1....	231,840	405		68,741	4,623	19,666	325,275
Stock on hand Dec. 31....	138,774	1,596	6	53,545	4,645	43,586	242,152
Difference.....	- 93,066	+ 1,191	+ 6	- 15,196	+ 22	+ 23,920	- 83,123
Losses due to breakage or other causes.....	170,184		7,995	75,853		180,305	434,337
Total output.....	7,448,042	99,240	240,300	3,743,672	13,465	2,444,024	13,988,743

*Production is obtained by adding coal sold and coal used.

Distribution of Coal Mined During the Years 1910-11-12-13.

(IN SHORT TONS.)

	1910.	1911.	1912.	1913.
Sold in Canada.....	8,956,450	8,559,952	10,572,365	11,381,960
Sold for export to United States.....	1,847,943	1,068,572	1,537,585	1,255,401
" other countries.....	291,273	280,235	314,410	263,189
Total sales.....	11,095,666	9,908,759	12,424,360	12,900,550
Used by producers for the manufacture of coke.....	759,703	452,354	870,885	914,421
" colliery consumption, and workmen.....	1,053,783	962,275	1,217,584	1,197,207
Production.....	12,909,152	11,323,388	14,512,829	15,012,178
Stock on hand Jan. 1.....	200,019	265,046	314,742	385,456
" Dec. 31.....	263,666	307,755	282,069	500,477
Difference.....	+ 63,647	+ 42,709	- 32,673	+ 115,021
Loss due to washing, breakage, or other causes.....	243,716	182,567	167,291	405,679
Total output.....	13,216,515	11,548,664	14,647,447	15,532,878

Statistics of the annual production of coal in Canada from 1785 to date are given in the following table. The total production has been 239,969,180 tons. Of this amount Nova Scotia has produced 152,760,879 tons, or 63.6 per cent; British Columbia 52,878,270 tons, or 22 per cent; Alberta 30,839,717 tons or 12.8 per cent; Saskatchewan 2,542,826 tons or 1.06 per cent; New Brunswick 823,493 tons or 0.34 per cent; and Yukon Territory 123,993 tons or 0.05 per cent.

Annual Production of Coal Showing Increase or Decrease.

Year.	Short tons.	Value.	Average per ton.	Increase (i) or decrease (d).	
				Short tons.	Per cent.
1785 to 1873.....	*8,592,150				
1874.....	1,063,742	\$ 1,763,423	\$1.66		
1875.....	1,039,974	1,747,016	1.68	(d) 23,768	2.2
1876.....	994,762	1,729,546	1.74	(d) 45,212	4.3
1877.....	1,036,670	1,794,415	1.73	(i) 41,908	4.2
1878.....	1,089,744	1,941,285	1.78	(i) 53,074	5.1
1879.....	1,126,497	2,050,639	1.82	(i) 36,753	3.4
1880.....	1,482,714	2,657,194	1.79	(i) 356,217	31.6
1881.....	1,537,106	2,688,621	1.75	(i) 54,392	3.7
1882.....	1,848,148	3,248,446	1.76	(i) 311,042	0.2
1883.....	1,818,684	3,109,635	1.71	(d) 29,464	21.6
1884.....	1,984,959	3,593,831	1.81	(i) 166,275	9.1
1885.....	1,920,977	3,417,807	1.78	(d) 63,982	3.2
1886.....	2,116,653	3,739,840	1.77	(i) 195,676	10.2
1887.....	2,429,330	4,388,206	1.81	(i) 312,677	14.8
1888.....	2,602,552	4,674,140	1.80	(i) 173,222	7.1
1889.....	2,658,303	4,894,287	1.84	(i) 55,751	2.1
1890.....	3,084,682	5,676,247	1.84	(i) 426,379	16.0
1891.....	3,577,749	7,019,425	1.96	(i) 493,067	16.0
1892.....	3,287,745	6,363,757	1.94	(d) 290,004	8.1
1893.....	3,783,499	7,359,080	1.95	(i) 495,754	15.1
1894.....	3,847,070	7,429,468	1.93	(i) 63,571	1.7
1895.....	3,478,344	6,739,153	1.94	(d) 368,726	9.6
1896.....	3,745,716	7,226,462	1.93	(i) 267,372	7.7
1897.....	3,786,107	7,303,597	1.93	(i) 40,391	1.1
1898.....	4,173,108	8,224,288	1.97	(i) 387,001	10.2
1899.....	4,925,051	10,283,497	2.09	(i) 751,943	18.0
1900.....	5,777,319	13,742,178	2.38	(i) 852,268	17.3
1901.....	6,486,325	12,699,243	1.96	(i) 709,006	12.3
1902.....	7,466,681	15,210,877	2.04	(i) 780,356	15.1
1903.....	7,960,364	15,942,833	2.00	(i) 493,683	6.6
1904.....	8,254,595	16,592,231	2.01	(i) 294,231	3.7
1905.....	8,667,948	17,520,263	2.02	(i) 413,353	5.0
1906.....	9,762,601	19,732,019	2.02	(i) 1,094,653	12.6
1907.....	10,511,426	24,381,842	2.32	(i) 748,825	7.7
1908.....	10,886,311	25,194,573	2.31	(i) 374,885	3.5
1909.....	10,501,475	24,781,236	2.36	(d) 384,836	3.5
1910.....	12,909,152	30,909,779	2.39	(i) 2,407,677	22.93
1911.....	11,323,388	26,467,646	2.34	(d) 1,585,764	12.28
1912.....	14,512,829	36,019,044	2.48	(i) 3,189,441	28.04
1913.....	15,012,178	37,334,940	2.49	(i) 499,349	3.44
1914.....	13,637,529	33,471,801	2.45	(d) 1,374,649	9.16
1915.....	13,267,023	32,111,182	2.42	(d) 370,506	2.72

*The total production for the years 1785 to 1873 is made up as follows:—

Nova Scotia (1785 to 1873).....	8,053,670 tons of 2,000 pounds.
British Columbia (1836 to 1873).....	538,480 " 2,000 "

Exports of Canadian Coal.

Statistics of the exports of coal, according to the records of the Department of Customs, are given in the following table. The exports of Canadian coal in 1915 were 1,766,543 tons valued at \$5,406,058, or an average of \$3.06 per ton, as compared with exports in 1914 of 1,423,126 tons, valued at \$3,880,175, or an average of \$2.73 per ton, and exports in 1913 of 1,562,020 tons valued at \$3,961,351, or an average of \$2.54 per ton. The 1915 exports, compared with those of 1914, show an increase of 24.13 per cent in tonnage, and 39.33 per cent in value. Besides Canadian coal exported there is also a small export of "coal not the produce of Canada."

Exports of Coal Produced During 1913-14-15.

Exported to	1913.			1914.			1915.		
	Short tons.	Per cent.	Value.	Short tons.	Per cent.	Value.	Short tons.	Per cent.	Value.
Great Britain.....	12,098	0·8	\$ 39,103	25,576	1·8	\$ 86,764	53,882	3·1	\$ 185,317
United States.....	1,250,769	80·1	2,978,067	1,088,983	76·5	2,742,425	1,328,803	75·2	3,945,149
Newfoundland.....	220,147	14·1	653,346	174,921	12·2	523,728	228,634	12·9	683,732
Other countries.....	79,006	5·0	290,835	133,646	9·5	527,258	155,224	8·8	591,860
Total.....	1,562,020	100·0	3,961,351	1,423,126	100·0	3,880,175	1,766,543	100·0	5,406,058

Annual Exports of Coal.

(IN SHORT TONS.)

Calendar Year.	Produce of Canada.	Not the produce of Canada.	Calendar Year.	Produce of Canada.	Not the produce of Canada.
1873.....	420,683	5,403	1894.....	1,103,694	89,786
1874.....	310,988	12,859	1895.....	1,011,235	96,836
1875.....	250,348	14,026	1896.....	1,106,661	116,774
1876.....	248,638	4,995	1897.....	986,130	101,848
1877.....	301,317	4,829	1898.....	1,150,029	99,189
1878.....	327,959	5,468	1899.....	1,293,169	101,004
1879.....	306,648	8,468	1900.....	1,787,777	62,776
1880.....	432,188	14,217	1901.....	1,573,661	53,894
1881.....	395,382	14,245	1902.....	2,090,268	23,453
1882.....	412,682	37,576	1903.....	1,954,629	27,138
1883.....	486,811	44,388	1904.....	1,557,412	27,308
1884.....	474,405	62,665	1905.....	1,635,287	86,792
1885.....	427,937	71,003	1906.....	1,835,041	44,758
1886.....	520,703	78,443	1907.....	1,894,074	101,778
1887.....	580,965	89,098	1908.....	1,729,833	102,071
1888.....	588,627	84,316	1909.....	1,588,099	161,098
1889.....	665,315	89,294	1910.....	2,377,049	159,859
1890.....	724,486	82,534	1911.....	1,500,639	133,943
1891.....	971,259	77,827	1912.....	2,127,133	46,706
1892.....	823,733	93,988	1913.....	1,562,020	69,566
1893.....	960,312	102,827	1914.....	1,423,126	83,137
			1915.....	1,766,543	59,690

These figures show an increase of 22 per cent in exports to the United States, which, however, with an importation from Canada of 1,328,803 tons, took 75·2 per cent of Canada's exports. Exports to Newfoundland showed an increase of 30·7 per cent. Those to Great Britain showed an increase of 110 per cent, the total for the year reaching 53,882 tons. Under exports to other countries of 155,224 tons is included 22,723 tons to Australia, as compared with 40,978 tons in 1914.

Imports of Coal.

The fact that the populous Provinces of Quebec and Ontario have no coal-fields and can secure most of their requirements more cheaply from the

coal-fields of Pennsylvania, Ohio, and Virginia, than from Canadian coal-fields accounts for Canadian imports exceeding 50 per cent of Canada's annual coal consumption. The 1915 imports were 12,465,902 tons valued at \$28,345,605, as compared with total imports in 1914 of 14,721,057 tons valued at \$39,801,498 and imports in 1913 of 18,201,953 tons, valued at \$47,949,119.

Imports of coal into Canada are subdivided into three classes as follows: anthracite, including anthracite dust; bituminous, round and run-of-mine; and bituminous slack such as will pass through a $\frac{3}{4}$ -inch screen.

The imports of anthracite represent, practically, Canada's consumption of coal of this variety, as less than 200,000 tons is produced yearly by Canada's one anthracite coal mine at Bankhead, Alberta. The 1915 imports were 4,072,192 tons valued at \$18,753,980, an average of \$4.61 per ton, which was less by 362,818 tons or 8.2 per cent than the 1914 imports which amounted to 4,435,010 tons valued at \$21,241,924 or an average of \$4.79 per ton.

The imports of bituminous coal of all classes were 8,393,710 tons valued at \$9,591,625, as against 10,286,047 tons valued at \$18,559,574 in 1914, a decrease of 1,892,337 tons or 18.6 per cent. These imports included: bituminous round and run-of-mine 6,106,794 tons valued at \$7,564,369, or an average of \$1.24 per ton, and bituminous slack 2,286,916 tons valued at \$2,027,256, or an average of \$0.89 per ton. Imports during 1914 included bituminous, round and run-of-mine 7,776,415 tons valued at \$14,954,321 or an average of \$1.92 per ton, and bituminous slack 2,509,632 tons valued at \$3,605,253 or an average of \$1.43 per ton.

Annual Imports of Coal.

Fiscal Year.	BITUMINOUS COAL.		ANTHRACITE COAL AND ANTHRACITE DUST.		BITUMINOUS COAL DUST.	
	Short tons.	Value.	Short tons.	Value.	Short tons.	Value.
1880.....	457,049	\$ 1,220,761	516,729	\$ 1,509,960	3,565	\$ 8,877
1881.....	587,024	1,741,568	572,092	2,325,937	337	666
1882.....	636,374	1,992,081	638,273	2,666,356	471	900
1883.....	911,629	2,996,198	754,891	3,344,936	8,154	10,082
1884.....	1,118,615	3,613,470	868,000	3,831,283	12,782	14,600
1885.....	1,011,875	3,197,539	910,324	3,909,844	20,185	20,412
1886.....	930,949	2,591,554	995,425	4,028,050	36,230	36,996
1887.....	1,149,792	3,126,225	1,100,165	4,423,062	31,401	33,178
1888.....	1,231,234	3,451,661	†2,138,627	5,291,875	28,808	34,730
1889.....	1,248,540	3,255,171	1,291,705	5,199,481	39,980	47,139
1890.....	1,409,282	3,528,959	1,201,335	4,595,727	53,104	29,818
1891.....	1,598,855	4,060,896	1,399,067	5,224,452	60,127	36,130
1892.....	1,615,220	4,099,221	1,479,106	5,640,346	82,091	39,840
1893.....	1,603,154	3,967,764	1,500,550	6,355,285	109,585	44,474
1894.....	1,359,509	3,315,094	1,530,522	6,354,040	117,573	49,510
1895.....	1,444,928	3,321,387	1,404,342	5,350,627	181,318	52,221
1896.....	1,538,489	3,299,025	1,574,355	5,667,096	210,386	53,742
1897.....	1,543,476	3,254,217	1,457,295	5,695,168	225,562	59,609
1898.....	1,684,024	3,179,595	1,460,701	5,874,685	229,445	45,556
1899.....	2,171,358	3,691,946	1,745,460	6,490,509	276,547	44,717
1900.....	2,439,764	4,310,964	1,654,401	6,602,912	330,174	98,349
1901.....	2,516,392	4,956,025	1,933,283	7,923,950	414,432	275,559
1902.....	3,047,392	5,712,058	1,652,451	7,021,939	489,548	264,550
1903.....	3,511,412	7,776,717	1,456,713	7,028,664	550,883	420,317
1904.....	4,053,900	9,108,208	2,275,018	10,461,223	608,041	544,128
1905.....	4,176,274	8,002,896	2,604,137	12,093,371	650,261	343,456
1906.....	4,495,550	8,360,348	2,200,863	10,304,308	747,251	489,180
Calendar Year.	Bituminous round and run of the mine (a)		Anthracite coal and Anthracite dust (b).		Bituminous slack such as will pass through a ½ screen (c).	
1907.....	6,370,152	13,232,445	3,141,873	14,506,129	1,139,256	1,121,949
1908.....	6,025,374	12,516,748	3,160,110	14,478,536	1,111,811	1,355,677
1909.....	5,625,063	11,455,818	3,017,844	13,906,152	1,230,017	1,469,889
1910.....	5,966,466	11,939,341	3,266,235	14,735,062	1,365,281	1,795,598
1911.....	8,905,815	18,407,603	4,020,577	18,794,192	1,632,500	2,090,796
1912.....	8,491,840	16,846,727	4,184,017	20,080,388	1,919,953	2,550,922
1913.....	10,743,473	21,756,658	4,642,057	22,034,839	2,816,423	4,157,622
1914.....	7,776,415	14,954,321	4,435,010	21,241,924	2,509,632	3,605,253
1915.....	6,106,794	7,564,369	4,072,192	18,753,980	2,286,916	2,027,256

(a). Duty, 53 cents per ton. (b). Coal, anthracite, and anthracite coal dust; duty free. (c). Duty 14 cents per ton.

† In the anthracite column the imports show a very considerable increase in 1888 over 1887, an increase of over 94 per cent, the falling off again in 1889 being quite as remarkable. The average values per ton for the three years 1887, 1888, and 1889, were \$4.02, \$2.47 and \$4.03, respectively. Although a duty of 50 cents per ton on anthracite coal was removed May 13, 1887, it is hardly thought this would account for the changes indicated, and unless some error may possibly have crept into the Trade and Navigation report, no explanation is available.

Consumption of Coal.

The consumption of coal estimated on the basis of production, imports and exports, was in 1915, 23,906,692 tons, as compared with 26,852,323 tons in 1914 and 31,582,545 tons in 1913, showing a decrease of 7,675,853 tons or 24 per cent in two years.

Consumption of Coal, 1913-14-15.

(IN SHORT TONS.)

	1913.	1914.	1915.
Production.....	15,012,178	13,637,529	13,267,023
Exports of Canada.....	1,562,020	1,423,126	1,766,543
Home consumption of Canadian coal.....	13,450,158	12,214,403	11,500,480
Imports.....	18,201,953	14,721,057	12,465,902
Exports not produce of Canada.....	69,566	83,137	59,690
Canadian consumption of imported coal.....	18,132,387	14,637,920	12,406,212
Total consumption of coal in Canada.....	31,582,545	26,852,323	23,906,692

Annual Consumption of Coal.

(IN SHORT TONS.)

Calendar Year.	Canadian.	Percentage Canadian.	Imported.	Percentage imported.	Total.	Tons per capita.
1886.....	1,595,950	45.9	1,884,161	54.1	3,480,111	0.758
1887.....	1,848,365	45.7	2,192,260	54.3	4,040,625	0.871
1888.....	2,013,925	37.8	3,314,353	62.2	5,328,278	1.137
1889.....	1,992,988	44.4	2,490,931	55.6	4,483,919	0.946
1890.....	2,360,196	47.8	2,581,187	52.2	4,941,383	1.031
1891.....	2,606,490	46.7	2,980,222	53.3	5,586,712	1.153
1892.....	2,464,012	44.4	3,082,429	55.6	5,546,441	1.133
1893.....	2,823,187	47.6	3,110,462	52.4	5,933,649	1.198
1894.....	2,743,376	48.5	2,917,818	51.5	5,661,194	1.130
1895.....	2,467,109	45.7	2,933,752	54.3	5,400,861	1.066
1896.....	2,639,055	45.1	3,206,456	54.9	5,845,511	1.140
1897.....	2,799,977	47.3	3,124,485	52.7	5,924,462	1.143
1898.....	3,023,079	48.0	3,274,981	52.0	6,298,060	1.200
1899.....	3,631,882	47.0	4,092,361	53.0	7,724,243	1.454
1900.....	3,989,542	47.8	4,361,563	52.2	8,351,105	1.561
1901.....	4,912,664	50.5	4,810,213	49.5	9,722,877	1.810
1902.....	5,376,413	51.0	5,165,938	49.0	10,542,351	1.927
1903.....	6,005,735	52.2	5,491,870	47.8	11,507,605	2.055
1904.....	6,697,183	49.2	6,909,651	50.8	13,606,834	2.346
1905.....	7,032,661	48.9	7,343,880	51.1	14,376,541	2.362
1906.....	7,927,560	51.7	7,398,906	48.3	15,326,466	2.425
1907.....	8,617,352	45.0	10,549,503	55.0	19,166,855	2.947
1908.....	9,156,478	47.3	10,195,424	52.7	19,351,902	2.820
1909.....	8,913,376	47.9	9,711,826	52.1	18,625,202	2.682
1910.....	10,532,103	50.2	10,438,123	49.8	20,970,226	2.960
1911.....	9,822,749	40.5	14,424,949	59.5	24,247,698	3.384
1912.....	12,385,696	46.0	14,549,104	54.0	26,934,800	3.596
1913.....	13,450,158	42.6	18,132,387	57.4	31,582,545	4.071
1914.....	12,214,403	45.5	14,637,920	54.5	26,852,323	3.325
1915.....	11,500,480	48.1	12,406,212	51.9	23,906,692	.....

Nova Scotia.

The production of coal in Nova Scotia in 1915 was 7,463,370 tons, as compared with a production in 1914 of 7,370,924 tons, showing an increase of 92,446 tons or 1.25 per cent. This production, however, was exceeded in both 1912 and 1913 by several hundred thousand tons although it was greater than that of any other previous year.

The total sales of coal during 1915 were 6,561,461 tons, of which 5,693,615 tons were sold for consumption in Canada, 596,171 tons for export to the United States, and 271,675 tons for export to other countries. The total quantity used by producers and in connexion with the collieries was

901,909 tons, including 257,312 tons used by producers in making coke and for other commercial purposes, and 644,597 tons used in the operations of the collieries, or by workmen.

A considerable tonnage of coal reported as sold for consumption in Canada is also used in the manufacture of coke, the total coal charged to coke ovens in the Province during the year being 981,369 tons.

The Dominion Coal Company has for many years been the principal operator, the total production of this firm's collieries at Cape Breton and at Springhill being 5,151,404 tons or over 69 per cent of the Province's production. The Nova Scotia Steel and Coal Company produced 384,759 tons or 5.8 per cent of the total; the Acadia Coal Company 336,748 tons or 5.1 per cent; the Inverness Railway and Coal Company 203,669 tons or 3.1 per cent; the Maritime Coal Railway and Power Company 172,402 tons; and the Intercolonial Coal Mining Company 167,507 tons. Cape Breton maintained its position as the chief coal producing county with 78.8 per cent of the total coal raised, Cumberland county being second with 9.8 per cent. Pictou county is credited with 7.7 per cent, and Inverness county with 3.7 per cent of the total.

Coal Production by Companies, in Nova Scotia, 1915.

(IN SHORT TONS.)

	Total sales.	USED.			Production. ²	STOCKS.		Losses. ³	Output.
		For coke. ¹	Colliery consumption.	Workmen.		Jan. 1.	Dec. 31.		
Inverness Ry. and Coal Co.....	203,669		31,183	6,675	241,527	2,604	3,495	32,631	275,049
Sydney Coal Co., Ltd.....	6,496		90	134	6,720	13			6,707
Dominion Coal Co., Ltd.....	4,776,447		317,923	57,034	5,151,404	89,971	58,092	42,531	5,162,056
Cape Breton Coal, Iron, and Ry. Co.	5,907		373	39	6,319	10,421	6,892		2,790
Nova Scotia Steel and Coal Co., Ltd.....	384,759	253,422	31,931	15,044	685,156	10,892	643	10,446	685,353
The Colonial Coal Co. Ltd.....	59,261		4,097	638	63,996	382	150		63,764
Acadia Coal Co., Ltd.....	336,748		33,512	10,128	380,388	1,537	3,041		381,892
Intercolonial Coal Mining Co.....	167,507	3,890	28,964	6,957	207,318	11,831	2,813	1,034	199,334
Maritime Coal Ry. and Power Co.....	172,402		10,275	3,379	186,056		9,303		195,359
Dominion Coal Co., Ltd. (Springhill)	378,821		63,409	11,489	453,719	8,777	3,669	275	448,886
Minudie Coal Co., Ltd.....	66,380		9,061	2,094	77,535	2,367	8,370	5,779	89,317
J. L. Rector, Fundy Mine.....	824				824				824
Royal Coal Co., Ltd. (L. Betts).....	2,240		112	56	2,408				2,408
	6,561,461	257,312	530,930	113,667	7,463,370	138,795	96,468	92,696	7,513,739

¹ Includes also coal used by producers for steel making and other purposes.

² Production is obtained by adding sales and coal used.

³ Complete records of losses are not furnished by all producers.

Coal Production by Companies, in Nova Scotia, 1914.

(IN SHORT TONS.)

	Total sales.	USED.			Production. ²	Stocks.		Losses. ³	Output.
		For coke. ¹	Colliery consumption.	Workmen.		Jan. 1.	Dec. 31.		
Inverness Ry. and Coal Co.....	225,807	742	31,216	7,374	265,139	1,942	2,604	30,823	296,624
Sydney Coal Co., Ltd.....	7,840		280	280	8,400	48			8,352
Dominion Coal Co., Ltd.....	4,412,463		314,939	61,642	4,789,044	206,289	89,971	129,518	4,802,244
Cape Breton Coal, Iron, and Ry. Co.....	37,119		8,548	655	46,322	2,174	9,914		54,062
Nova Scotia Steel and Coal Co., Ltd.....	615,041	139,625	58,543	24,302	837,511	15,120	10,892	9,128	842,411
The Colonial Coal Co., Ltd.....	54,645		4,914	707	60,266		382		60,497
Acadia Coal Co., Ltd.....	382,879		46,596	12,714	442,189	2,000	1,536		441,725
Intercolonial Coal Mining Co.....	182,636	5,548	31,397	8,613	228,194	785	11,842	380	239,631
Maritime Coal Ry. and Power Co.....	126,377		26,788	3,349	156,514		2,856		159,370
Dominion Coal Co., Ltd. (Springhill).....	382,029		67,030	12,645	461,704	2,974	8,777		467,507
Minudie Coal Co., Ltd.....	61,965		8,644	2,367	72,976				72,976
Atlantic Grindstone Coal and Ry. Co.....	714		45	58	817	22			795
Royal Coal Co., Ltd.....	1,680		112	56	1,848				1,848
	6,491,195	145,915	599,052	134,762	7,370,924	231,840	138,774	170,184	7,448,042

¹ Includes also coal used by producers for steel making and other purposes.

² Production is obtained by adding sales and coal used.

³ Complete records of losses are not furnished by all producers.

Output, Sales, Colliery Consumption, and Production of Coal in Nova Scotia.

Calendar Year.	Output.	Sold or used.	Colliery consumption.	Production.*	Output.	Sold or used.	Colliery consumption.	Production.*	Price per ton of 2,240 lbs.	Value of production.
	Tons of 2,240 pounds.				Tons of 2,000 pounds.					
1872.....	880,950	785,914	110,341	896,255	986,664	880,224	123,582	1,003,806	\$1.75	\$ 1,568,446
1873.....	1,051,467	881,106	108,398	989,504	1,177,643	986,839	121,406	1,108,245	1.75	1,731,632
1874.....	872,720	749,127	119,582	868,709	977,446	839,022	133,932	972,954	1.75	1,520,240
1875.....	781,165	706,795	124,110	830,905	874,905	791,610	139,003	930,613	1.75	1,454,084
1876.....	709,646	634,207	113,788	747,995	794,804	710,312	127,443	837,755	1.75	1,308,991
1877.....	757,496	687,065	98,841	785,906	848,396	769,513	110,702	880,215	1.75	1,375,339
1878.....	770,603	693,511	88,627	782,138	863,075	776,732	99,262	875,994	1.75	1,368,741
1879.....	788,271	688,624	84,787	773,411	882,863	771,259	94,961	866,220	1.75	1,353,469
1880.....	1,032,710	954,659	96,831	1,051,490	1,156,635	1,069,213	108,451	1,177,669	1.75	1,840,108
1881.....	1,124,270	1,035,014	107,888	1,142,902	1,259,183	1,159,216	120,834	1,280,050	1.75	2,000,079
1882.....	1,365,811	1,250,179	111,381	1,361,560	1,529,708	1,400,200	124,747	1,524,947	1.75	2,382,730
1883.....	1,422,553	1,297,523	111,949	1,409,472	1,503,259	1,453,226	125,383	1,578,609	1.75	2,466,576
1884.....	1,389,295	1,261,650	116,769	1,378,419	1,556,011	1,413,048	130,781	1,543,829	1.75	2,412,233
1885.....	1,352,205	1,254,510	127,624	1,382,134	1,514,470	1,405,051	142,939	1,547,990	1.75	2,418,735
1886.....	1,502,611	1,373,666	142,421	1,516,087	1,682,924	1,538,506	159,512	1,698,018	1.75	2,653,152
1887.....	1,670,830	1,519,684	139,777	1,659,461	1,871,330	1,702,046	156,550	1,858,596	1.75	2,904,057
1888.....	1,776,128	1,576,692	157,443	1,734,135	1,989,263	1,765,895	176,336	1,942,231	1.75	3,034,735
1889.....	1,756,279	1,555,107	158,131	1,713,238	1,967,032	1,741,720	177,107	1,918,827	1.75	2,998,167
1890.....	1,984,001	1,786,111	161,240	1,947,351	2,222,081	2,000,444	180,589	2,181,033	1.75	3,407,864
1891.....	2,044,784	1,849,945	174,983	2,024,928	2,290,158	2,071,938	195,981	2,267,919	1.75	3,543,624
1892.....	1,942,780	1,752,934	175,092	1,928,026	2,175,913	1,963,286	196,103	2,159,389	1.75	3,374,046
1893.....	2,223,042	1,977,543	205,425	2,182,968	2,489,807	2,214,848	230,076	2,444,924	1.75	3,820,194
1894.....	2,250,631	2,060,920	196,206	2,257,126	2,520,707	2,308,231	219,751	2,527,982	1.75	3,949,970
1895.....	1,999,756	1,793,098	193,639	1,986,737	2,239,727	2,008,270	216,875	2,225,145	1.75	3,476,790
1896.....	2,292,675	2,046,828	192,975	2,239,808	2,537,706	2,202,447	216,132	2,508,579	1.75	3,919,355
1897.....	2,340,031	2,044,672	181,716	2,226,388	2,020,835	2,290,032	203,522	2,493,554	1.75	3,806,170
1898.....	2,262,656	2,121,126	187,428	2,288,554	2,584,175	2,375,661	187,519	2,563,180	1.75	4,004,970
1899.....	2,865,443	2,633,989	177,460	2,811,449	3,209,296	2,950,067	138,775	2,148,822	2.00	5,622,808
1900.....	3,298,791	2,998,737	236,563	3,235,300	3,694,646	3,358,585	264,051	3,623,536	2.50	8,088,250
1901.....	3,821,033	3,411,127	301,434	3,712,561	4,279,557	3,820,462	337,606	4,158,068	1.75	6,496,982
1902.....	4,725,480	4,229,120	379,198	4,608,318	5,292,538	4,736,614	424,702	5,161,316	2.00	9,216,636
1903.....	5,215,562	4,565,720	481,903	5,047,623	5,841,429	5,113,607	539,731	5,653,338	2.00	10,095,246
1904.....	5,131,985	4,551,740	144,904	4,996,644	5,747,823	5,097,949	498,292	5,596,241	2.00	9,993,288

Output, Sales, Colliery Consumption, and Production of Coal in Nova Scotia.

Calendar Year.	Output.	Sold or used.	Colliery consumption.	Production.*	Output.	Sold or used.	Colliery consumption.	Production.*	Price per ton of 2,240 lbs.	Value of production.
	Tons of 2,240 pounds.				Tons of 2,000 pounds.					
1905.....	5,197,877	4,613,818	427,774	5,041,592	5,821,622	5,167,476	479,107	5,646,583	\$2.00	\$10,083,184
1906.....	5,844,813	5,093,131	460,891	5,554,022	6,546,191	5,704,307	516,198	6,220,505	2.00	11,108,044
1907.....	5,775,503	5,236,077	437,256	5,673,333	6,468,563	5,864,406	489,727	6,354,133	2.25	12,764,999
1908.....	6,076,330	5,224,787	576,509	5,939,767	6,805,489	5,851,761	645,690	6,652,539	2.25	13,364,476
1909.....	5,106,135	4,524,029	322,479	5,046,508	5,718,871	5,066,912	585,177	5,652,089	2.25	11,354,643
1910.....	5,817,109	5,199,715	542,376	5,742,091	6,515,162	5,823,681	607,461	6,431,142	2.25	12,919,705
1911.....	6,362,099	5,676,857	577,089	6,253,946	7,125,551	6,358,080	646,340	7,004,420	2.25	14,071,379
1912.....	6,995,289	6,296,940	652,960	6,949,900	7,834,724	7,052,573	731,315	7,783,888	2.50	17,374,750
1913.....	7,263,485	6,479,469	645,596	7,125,065	8,135,104	7,257,006	723,067	7,980,073	2.50	17,812,663
1914.....	6,650,038	5,925,991	655,191	6,581,182	7,448,042	6,637,110	733,814	7,370,924	2.50	16,452,955
1915.....	6,708,695	6,088,190	575,533	6,663,723	7,513,739	6,818,773	644,597	7,463,370	2.50	16,659,308

*This production is obtained by adding sales and colliery consumption.

Coal Trade by Counties in Nova Scotia, Calendar Years Since 1906.

(IN SHORT TONS.)

Calendar Year.	CUMBERLAND.		PICTOU.		CAPE BRETON.		OTHER COUNTIES.		TOTAL.	
	Raised.	Sold.*	Raised.	Sold.*	Raised.	Sold.*	Raised.	Sold.*	Raised.	Sold.*
1906.....	659,734	566,308	769,496	657,310	4,804,407	4,221,293	312,554	259,396	6,546,191	5,704,307
1907.....	534,047	445,288	840,533	729,043	4,698,147	4,346,180	395,836	343,895	6,468,563	5,864,406
1908.....	662,157	530,648	849,802	678,025	4,840,653	4,267,346	452,877	375,742	6,805,489	5,851,761
1909.....	494,919	403,371	743,860	599,743	4,081,333	3,723,135	398,759	340,663	5,718,871	5,066,912
1910.....	350,363	288,706	714,846	588,678	5,035,800	4,571,347	414,153	374,950	6,515,162	5,823,681
1911.....	538,296	436,125	833,956	691,852	5,405,355	4,917,902	347,944	312,201	7,125,551	6,358,080
1912.....	716,914	595,138	765,678	641,890	6,039,296	5,530,765	312,836	284,780	7,834,724	7,052,573
1913.....	675,544	553,845	817,177	694,659	6,313,275	5,709,995	329,108	298,507	8,135,104	7,257,006
1914.....	702,496	572,765	681,356	571,063	5,767,566	5,266,733	296,624	226,549	7,448,042	6,637,110
1915.....	736,794	620,667	581,226	508,145	5,920,670	5,486,292	275,049	203,669	7,513,739	6,818,773

*Sales include coal used for making coke and steel.

The statistics prepared and published by the Provincial Department of Mines cover the fiscal years ending September 30; the long ton of 2,240 pounds is used exclusively in these reports. A number of tables appearing in the Provincial report for the fiscal year 1915 are reproduced below, the figures having been changed to show tons of 2,000 pounds.

Output of Coal in Nova Scotia by Collieries.

(IN SHORT TONS.)

Colliery.	Fiscal Year ending September 30.		
	1913.	1914.	1915.
<i>Cape Breton County.</i>			
Dominion Coal Company.....	5,285,968	5,097,589	4,840,133
Nova Scotia Steel and Coal Co.....	908,806	890,262	645,547
Cape Breton Coal, Iron and Railway Co.....		42,269	20,280
Sydney Coal Company.....	6,089	5,825	6,020
Colonial Mining Co.....	64,632	63,587	64,073
<i>Cumberland County.</i>			
Cumberland Railway and Coal Co.....	438,964	448,824	455,630
Maritime Coal, Railway, and Power Co., Chignecto.....	183,558	160,376	179,740
Minudie Coal Co.....	70,926	69,582	91,903
Atlantic Grindstone and Coal Co.....	3,040	962	501
Royal (Eastern) Coal Co., Lawson Mine.....			1,646
Provincial Mining Co.....			2,264
<i>Pictou County.</i>			
Acadia Coal Co.....	570,501	511,269	363,416
Intercolonial Coal Co.....	217,512	247,441	212,596
<i>Inverness County.</i>			
Inverness Coal and Railway Co.....	318,387	308,134	261,250

Production and Sales of Coal by Companies, in Nova Scotia, Year Ending September 30, 1915.

(IN SHORT TONS.)

Name of company.	Output.	Sales.	Colliery consumption.	Supplied workmen.	On bank at close of year.	Difference on bank compared with 1914.	
						Increase.	Decrease.
Dominion Coal Co., Ltd.	4,840,133	4,445,076	276,531	58,605	76,668		21,628
Nova Scotia Steel & Coal Co., Ltd.	645,547	622,616	36,897	23,093	4,751		39,644
Cumberland Railway & Coal Co., Ltd.	455,636	386,664	59,760	12,111	3,088		1,252
Acadia Coal Co., Ltd.	363,416	319,533	32,005	10,424	1,951		1,186
Maritime Coal Railway & Power Co.	179,740	155,050	5,835	3,299	12,759	11,471	
Inverness Railway & Coal Co.	261,250	188,148	22,853	6,841	2,648		401
Intercolonial Coal Co.	212,596	175,488	30,323	8,073	7,883		2,038
Sydney Coal Co.	6,020	5,589	132	208	113	91	
Colonial Mining Co.	64,073	58,433	5,049	591			
Minudie Coal Co.	91,903	70,912	8,891	2,167			
Lawson Mine.	1,646	1,658	50	6			67
Atlantic Grindstone Coal & Ry. Co.	501	447	25	29			
Cape Breton Coal, Iron & Railway Co.	20,280	16,978	2,662	334	6,892	305	
Provincial Mining Co.	2,264	2,264					
Total	7,144,999	6,448,856	481,013	125,781	116,753	11,867	72,216

Distribution of Coal Sold by Nova Scotia Producers.

Markets.	FISCAL YEARS ENDING SEPTEMBER 30.									
	1911.		1912.		1913.		1914.		1915.	
	Short tons.	Per cent.	Short tons.	Per cent.	Short tons.	Per cent.	Short tons.	Per cent.	Short tons.	Per cent.
Nova Scotia—										
Transported by land	2,007,192	32.25	2,197,213	31.76	2,530,566	34.88	2,099,186	30.40	1,976,943	30.65
" " sea	354,514	5.70	373,594	5.40	380,363	5.24	368,551	5.34	392,340	6.08
Total Nova Scotia	2,361,706	37.95	2,570,807	37.16	2,910,929	40.12	2,467,737	35.74	2,369,283	36.73
New Brunswick	606,582	9.74	732,411	10.59	724,239	9.98	762,150	11.04	675,693	10.48
Prince Edward Island	90,314	1.45	103,378	1.49	107,612	1.48	107,275	1.55	93,171	1.45
Quebec Province	2,315,971	37.22	2,418,086	34.95	2,456,416	33.85	2,667,372	38.63	2,048,222	31.76
Newfoundland	206,299	3.32	224,719	3.25	235,810	3.25	252,660	3.66	233,735	3.63
United States	372,177	5.98	462,035	6.68	524,262	7.23	336,741	4.88	596,606	9.25
St. Pierre	10,107	0.16	10,535	0.13	7,449	0.10	9,673	0.14	11,729	0.18
Bunker coal	229,243	3.68	265,142	3.83	262,278	3.62	278,645	4.04	383,273	5.94
Other countries	(a) 30,841	0.50	(b) 131,816	1.90	(c) 27,160	0.37	(d) 22,099	0.32	(e) 37,144	0.58
Total	6,223,240	100.00	6,918,929	100.00	7,256,155	100.00	6,904,352	100.00	6,448,856	100.00
	(a) Tons.	Per cent.	(b) Tons.	Per cent.	(c) Tons.	Per cent.	(d) Tons.	Per cent.	(e) Tons.	Per cent.
For time chartered boats	28,610	0.46	28,972	0.42	23,958	0.33	20,787	0.30	18,968	0.29
Loss at sea									9,427	0.15
Other countries	2,231	0.04	102,844	1.48	3,202	0.04	1,312	0.02	8,749	0.14
	30,841	0.50	131,816	1.90	27,160	0.37	22,099	0.32	37,144	0.58

Number and Class of Workmen employed in the Coal Mines of Nova Scotia, Year ended September 30, 1915.

COMPANY.	Average day's work a month.	AVERAGE DAILY FORCE.					Total workmen.	Total days.	Horses.
		Surface.	Under-ground labour.	Cutting coal.	Transportation commercial, upkeep repairs, construction.				
Dominion Coal Co.....	19	871	4,504	1,189	3,249	9,813	1,695,987	574	
N.S. Steel and Coal Co.....	18	325	1,483	454	148	2,410	568,120	97	
Cumberland Ry. and Coal Co.....	21	202	421	386	60	1,069	284,713	61	
Acadia Coal Co.....	25 ^{1/2}	185	304	215	66	770	239,300	42	
Intercolonial Coal Co.....	18 ^{1/2}	211	235	171	33	650	160,965	36	
Maritime Coal, Ry. and Power Co.....	18 ^{1/2}	73	222	119	35	449	109,843	8	
Inverness Ry. and Coal Co.....	18 ^{1/2}	92	230	212	127	661	158,651	38	
Sydney Coal Co.....	18 ^{1/2}	3	2	3	3	11	2,387	3	
Minudie Coal Co.....	15 ^{1/2}	75	65	136	14	290	66,215	6	
Lawson.....	12	1	2	1	.....	4	350	.....
Atlantic Grindstone and Coal Co.....	12	1	2	1	.....	4	373	.....
Provincial Co.....	14	2	3	2	.....	7	600	.....
Colonial Coal Co.....	21 ^{1/2}	24	32	67	5	128	24,480	21	
C. B. Coal Iron and Ry. Co.....	10	5	25	25	5	60	1,550	9	
Totals.....		2,070	7,530	2,981	3,745	16,326	3,313,534	895	

New Brunswick.

The production of coal in New Brunswick during 1915 is estimated as 127,391 tons, as against 98,049 tons in 1914, an increase of 29,342 tons, or nearly 30 per cent. This is the largest production of coal that has been recorded for this Province. Several of the smaller operators have neglected to furnish this Department with returns of their production but close estimates have been made based on statistics published by the Provincial Department of Lands and Mines, and other records. The total shipments by rail from New Brunswick collieries, as kindly furnished by the Deputy Minister of Lands and Mines, were 122,422 short tons.

The coal producing areas include the Grand Lake coal-field in Queens and Sunbury counties, and the Beersville area in Kent county. The Minto Coal Company, the chief operator, produced 86,592 tons; the Rothwell Coal Company 5,932 tons; the Northfield Coal Company 3,994 tons; and the Dean Coal Company 4,984 tons. Other operators include: G. H. King, Harvey Welton, A. J. McEvoy, Dr. M. F. Keith, and the Winterport Mining Company.

Annual Production of Coal in New Brunswick.

Calendar Year.	Short tons.	Value.	Average per ton.	Calendar Year.	Short tons.	Value.	Average per ton.
1887.....	10,040	\$ 23,607	\$2.35	1901.....	17,630	\$ 51,857	\$2.94
1888.....	5,730	11,050	1.93	1902.....	18,795	39,680	2.11
1889.....	5,673	11,733	2.07	1903.....	16,000	40,000	2.50
1890.....	7,110	13,850	1.95	1904.....	9,112	18,224	2.00
1891.....	5,422	11,030	2.03	1905.....	29,400	58,800	2.00
1892.....	6,768	9,375	1.39	1906.....	34,076	68,152	2.00
1893.....	6,200	9,837	1.59	1907.....	34,584	77,814	2.25
1894.....	6,469	10,264	1.59	1908.....	60,000	135,000	2.25
1895.....	9,500	14,250	1.50	1909.....	49,029	98,496	2.25
1896.....	7,500	11,250	1.50	1910.....	55,455	110,910	2.00
1897.....	6,000	9,000	1.50	1911.....	55,781	111,562	2.00
1898.....	6,160	9,240	1.50	1912.....	44,780	89,560	2.00
1899.....	10,528	15,792	1.50	1913.....	70,311	166,637	2.37
1900.....	10,000	15,000	1.50	1914.....	98,049	241,075	2.46
				1915.....	127,391	309,612	2.43

In the Grand Lake area the coal seam which varies in thickness from 20 to 32 inches, is found at a depth of from 30 to 60 feet below the surface. The following description of operations is quoted from the Annual Report of the Crown Lands Department of the Province of New Brunswick, page XVI.

“Minto Coal Company:—During the year this Company has made a number of borings on properties which they control, with a view to extending their operations and providing for new fields as the present ones become worked out. It must be remembered that the coal seam in this vicinity is, on the average, but thirty inches in thickness, and, although comparatively easy to mine, yet at the present rate of mining only thirteen working days

are required to work out an acre. The system pursued by this Company in its operations is about as follows:—

“A line of shafts about 800 feet apart were sunk on what was formerly known as the Michael Coakley property (Lease No. 140), parallel, and 125 feet north of the southern boundary. Another line of shafts 425 feet north of these was also run and a third line 425 feet farther north again was likewise started. When the stratum of coal was reached in the shafts at a distance of from 30 to 60 feet below the surface, main levels were run connecting these shafts. These main levels have a cross section of about $4\frac{1}{2}$ feet high by six feet wide, and from them at intervals of 30 feet are run the by-levels connecting the series of main levels. A 10 foot wall is left next to the main level in order to always maintain this level as a means of drainage. The mine is drained with a natural flow through these main levels to their opening on the channel cut by the creek. After leaving this 10 foot wall next to the main level, the miner, who usually works alone, opens the side level for a width of 15 feet, with a height of about $3\frac{1}{2}$ feet, the latter being sufficient for him to work sitting on a stool, and allows the upper surface of the coal seam to be cleared of rock before blasting. A low power dynamite is used, having been found sufficiently effective as an explosive without pulverizing the coal as a higher explosive would be apt to do. The by-level is continued until it is met by a similar one worked out in the opposite direction from the next parallel main level. These 15 feet side levels having been opened up, there is left a wall 15 feet thick between the levels, but this wall is also taken out by propping the roof and working back towards the main level.

“The coal is taken to the shaft on push cars or boxes, as they are called, moved by hand, containing about 800 pounds of coal. A miner will send out from 8 to 10 of these boxes per day, or, if he has a helper to look after the cars, 15 or 16 boxes. He is paid 35 cents a box for this, delivered at the foot of the shaft. Out of this amount he must pay for his explosive, about 25 cents a day, and he must either stow away or deliver without cost at the foot of the shaft the overlying waste rock. He is also required, if a married man, to pay \$1.00 a month physician's fees, or 75 cents per month if unmarried. The Company furnishes houses at a nominal or small rental, and gives the miner his fuel. As there is no fire damp in the mine, small, unprotected acetylene lamps are used by the miners. The large shafts also at 800 foot intervals provide excellent ventilation.

“The thickness of the stratum is very uniform at thirty inches, and the dip, usually quite uniform, is one inch per 100 feet, south-easterly. The shaft houses where the coal is hoisted are not of a permanent character, as they are moved to newer shafts after each area is worked out. The coal after being hoisted is run out and dumped on a five-eighth inch mesh screen, the slack dropping directly into a railway freight car and the screened coal passing on directly by a chute to another car. Here the coal is looked

over by the Company's inspector, who picks out any foreign rock. There are at present about 200 miners on the payroll, consisting of about sixty Italians, forty-three Belgians, twenty-five French-speaking Canadians, twenty-six Germans and Austrians, six Russians, and forty who are English-speaking. The Company provides a foreman for each shaft. This foreman controls all the men working the levels which lead to the shaft.

"Mr. Henderson, the mines manager for the Company, tells me that there is a demand at present for fifty per cent more coal than the Company is able to raise, and the only reason that the demand cannot be satisfied is the lack of labor.

"During the spring and early summer there was not a very large demand for coal, and at the same time a number of miners were recruited for overseas regiments. The demand for coal, however, has been increased very rapidly during the autumn and the beginning of the winter, so that not only the Minto Coal Company, but other coal companies in this region are finding it very difficult, with the labor they are at present able to obtain, to keep up with the demand. The Minto Coal Company have erected a new office at their mines, and there is a resident manager with an office staff of three men.

"The following is a chemical analysis of a sample taken from top to bottom of the Minto Coal Company's coal seam:—

	Percentage.
Moisture.....	0·19
Volatile Combustible Matter.....	37·56
Fixed Carbon.....	57·20
Ash.....	5·05
Volatile Matter.....	37·75
Coke.....	62·25
Sulphur.....	3·12
Total Combustible Matter.....	94·76
Heating Value (in terms of British Thermal Units).....	14·279

"The Rothwell Coal Company are operating in a similar way to the Minto Coal Company, but on a very much smaller scale. The thickness of the seam in which they are working is only about twenty inches. They employ about forty men and are at present only working one shaft, although there is another shaft in readiness as soon as they can provide more help. With this Company their men will raise from two to two and a half tons per day, and are paid \$1.10 per ton, less the cost of their explosives. Explosives, however, are not in general use in this mine, many of the men preferring to take the coal out with the pick.

"The King Mining Company are operating two shafts at the present time and employ about thirty-five men, many of whom are Belgians. The

others are Italian, French, English and Scotch. Miners here are earning from \$70.00 to \$100.00 per month.

"The Northfield Coal Company are working one shaft and employing about twenty men at the present time, most of whom are French Canadians and Belgians. Their seam of coal will run from thirty to thirty-two inches in thickness.

"All these companies are using steam for hoisting and small cars in the mines running on steel rails, but in all cases pushed by hand.

"Harvey Welton is operating a mine in the vicinity of the Minto Coal Company, and conditions here are very similar to those of the larger company. He is working the two shafts, and employs from twenty to thirty English speaking workmen. He hoists by horse-power, as does Mr. J. S. Gibbon of the Winterport Mining Company, and with these last two operators the coal is loaded in smaller boxes run on wooden rails to the shaft.

"In most of the mines at Minto there is natural drainage, the principle being to conduct the water through one of the main levels to its intersection with a creek bed.

"The Canadian Pacific and the Government Railways are the principal customers."

Saskatchewan.

The coal deposits of Saskatchewan furnish coal of the lignite variety only. As some of the physical characteristics of this lignite in its raw state tend to prevent its successful and economical use, the yearly production of recent years shows only a slight increase, in no way comparable with the increase in population of the Province, and the consequent increased demand for fuel for heating, and the generation of power. The importance of devising better methods for utilizing this lignite, of which vast quantities exist in the adjacent Province of Alberta, as well as in the Province of Saskatchewan, has prompted both the Government of the Province of Saskatchewan, and the Fuel Testing Division of the Mines Branch, Ottawa, to undertake investigations of western lignites, the first results of which have already been published.¹

The production of lignite in 1915 from 33 collieries was 240,107 tons valued at \$365,246, as compared with 232,299 tons valued at \$374,245 in 1914, an increase of 7,808 tons or 3 per cent. The 1915 production included 225,642 tons of coal sold and 14,465 tons used by producers for colliery consumption, by workmen, or in brick making.

The output of coal comes chiefly from the vicinity of Estevan, located on the Souris river, near the southeastern corner of the Province. Coal deposits exist for 75 or 100 miles in a northwest southeast direction along

¹"The carbonizing and briquetting of Lignite," by S. M. Darling, 1915. Investigation for the Government of the Province of Saskatchewan.

Results of the Investigation of Six Lignite Samples obtained from the Province of Alberta, by Haanel and Blizard, 1915. Mines Branch publication No. 331.

the Souris river, on Big Muddy creek draining Willowbunch lake (only lately reached by a branch line of railway) and on the north branch of the Saskatchewan river about 100 miles southwest of Saskatoon.

The principal operators are, The Western Dominion Collieries, Ltd., Taylorton, with a production of 88,500, The Manitoba and Saskatchewan Coal Co. Ltd., Bienfait, 63,584 tons, The Bienfait Commercial Co., Ltd., Bienfait, 41,040 tons, and The Maple Leaf Mines, Ltd., Shand, 26,581 tons.

We are able through the courtesy of the operators to publish for the first time a record of the production from individual properties as shown in the following table:—

Production of Coal in Saskatchewan in 1915, by Principal Operators.

(IN SHORT TONS.)

Name of Company.	Days in operation.	Total sales.	Total for colliery use.*	Total production.
Western Dominion Collieries, Ltd., Taylorton.....	188	83,309	5,200	88,500
Manitoba and Saskatchewan Coal Co., Ltd., Bienfait.....	176	58,600	4,984	63,584
Bienfait Commercial Co., Ltd., Bienfait.....	202	39,385	1,655	41,040
Maple Leaf Mines, Ltd., Shand.....	239	24,286	2,295	26,581
Geo. Parkinson, Estevan.....	305	5,448	.....	5,448
McNeil & Rooks, Estevan.....	300	3,000	200	3,200
Great West Brick and Coal Co., Estevan.....	150	2,000	.....	2,000
Eidness Bros., Gladmar.....	266	1,645	.....	1,645
H. Nicholson, Estevan.....	.....	1,317	.....	1,317
J. F. Bulmer, Roche Percee.....	69½	980	38	1,018
All other operators.....	.....	5,681	93	5,774
Total production, Saskatchewan.....	.....	225,642	14,465	240,107

*Includes consumption under boilers, etc., and coal used by workmen.

Annual Production of Coal in Saskatchewan.

Calendar Year.	Short tons.	Value.	Average per ton.	Calendar Year.	Short tons.	Value.	Average per ton.
1887.....	(a) 400	\$ 800	\$ 2.00	1902.....	70,400	\$ 112,640	\$ 1.52
1890.....	200	200	1.00	1903.....	116,703	169,618	1.45
1891.....	.....	.....	.....	1904.....	124,885	187,021	1.50
1892.....	5,400	9,325	1.73	1905.....	107,596	152,334	1.42
1893.....	8,325	12,485	1.50	1906.....	108,398	164,146	1.51
1894.....	(b) 15,051	15,153	1.01	1907.....	151,232	252,437	1.67
1895.....	15,769	31,538	2.00	1908.....	150,556	253,790	1.69
1896.....	16,706	25,059	1.50	1909.....	192,125	296,339	1.54
1897.....	25,000	37,500	1.50	1910.....	181,156	293,923	1.62
1898.....	25,000	37,500	1.50	1911.....	206,779	347,248	1.68
1899.....	25,000	37,500	1.50	1912.....	225,342	368,135	1.63
1900.....	40,500	60,750	1.50	1913.....	212,897	358,192	1.68
1901.....	45,000	72,000	1.60	1914.....	232,299	374,245	1.61
				1915.....	240,107	365,246	1.52

(a) From Turtle Mountain district, Manitoba.

(b) Including a small quantity from the Turtle Mountain district, Manitoba.

Alberta.

Lignite, bituminous, and anthracite coals are all produced in Alberta. Bituminous coal comprises over 50 per cent of the production, lignite between 40 and 45 per cent, and anthracite, less than 5 per cent.

As mentioned in the notes on the Saskatchewan production, the vast tonnage of lignites available in the western provinces has prompted investigations with a view to the better utilization of these lignites. The first results of the investigation of Alberta samples by the Fuel Testing Division of the Mines Branch, Ottawa, have been published as a special report.¹

The production of coal in Alberta in 1915 according to returns received from the operators was 3,360,818 tons valued at \$9,283,079 or an average of \$2.46 per ton, as compared with a production in 1914 of 3,683,015 tons valued at \$9,350,392 or an average of \$2.54 per ton, showing a decrease in 1915 of 322,197 tons, or 8.75 per cent.

The highest production in Alberta was reached in 1913 with a total of 4,014,755 tons, this Province having in 1912 become the second largest coal-producing province, which position is still maintained. There are many small operators in the Province—in fact so many new operators are producing coal each year that it is difficult to keep lists of them complete. The production of each of the larger collieries is shown in the following table. In 1915 there were 39 companies reporting a production in excess of 10,000 tons, the aggregate production by these firms being nearly 93 per cent of the total of the Province. Eight of these companies reported a production exceeding 100,000 tons each, the largest operator being the Canadian Pacific Railway with a total of 541,567 tons from Bankhead and Lethbridge.

Of the total production 3,063,811 tons were reported as sales, including 3,038,761 tons sold for consumption in Canada and 25,050 tons sold for export to the United States, 297,007 tons were used by the producers, including 38,878 tons in coke ovens and 258,129 tons used for colliery operation and by workmen.

¹ Results of the Investigation of Six Lignite Samples obtained from the Province of Alberta, by Haanel and Blizard, 1915, Mines Branch publication No. 331.

Production of Coal in Alberta, in 1915, by Principal Collieries.

(IN SHORT TONS.)

Name of Company.	Days in operation.	Total sales.	Total for colliery use.*	Total production.
Alberta Coal Mining Co., Ltd., Cardiff.....	167	45,750	3,000	48,750
Battle River Collieries, Ltd., Rosenroll.....	152	9,776	1,540	11,316
Brazeau Collieries, Ltd., Nordegg.....	237	254,934	6,222	261,156
Brule Lake Coal Mine Entrance.....	312	14,726	.....	14,726
Bush Mine Coal Co., Beverley.....	284	14,395	475	14,870
Byers Bros., Clover Bar.....	197	10,000	.....	10,000
Canada West Coal Co., Ltd., Taber.....	102	37,073	12,792	49,865
Canmore Coal Co., Ltd., Canmore.....	169	140,544	13,310	153,854
Canadian Pacific Ry. Bankhead.....	144	(a) 130,250	(b) 21,877	152,127
" " Lethbridge, Galt No. 3.....	167	125,993	24,000	149,993
" " " " " " 6.....	164	210,447	29,000	239,447
Cardiff Collieries, Ltd., Cardiff.....	162	91,932	6,645	98,577
Chinook Coal Co., Commerce.....	220	50,801	8,602	59,403
City of Lethbridge Coal Mine, Lethbridge.....	261	11,830	.....	11,830
Consumers Co-operative Co., Ltd., Big Valley.....	234	12,253	500	12,753
Dawson Coal Co., Edmonton.....	239	15,832	550	16,382
Dobell Canal Co., Ltd., Tofield.....	236	15,968	1,894	17,862
Drumheller Land Co., Ltd., Drumheller.....	129	13,317	1,025	14,342
Franco-Canadian Collieries, Ltd., Frank.....	227	67,849	12,918	80,767
Georgetown Collieries, Ltd., Canmore.....	228	42,021	2,727	44,748
Great West Coal Co., Edmonton.....	247	49,654	3,179	52,833
Hillcrest Collieries, Ltd., Hillcrest.....	202	214,021	10,730	224,751
Humberstone Coal Co., Beverley.....	288	41,868	2,885	44,753
International Coal and Coke Co., Ltd., Coleman.....	151	52,700	(c) 51,937	104,637
Jasper Park Collieries, Ltd., Pocahontas.....	210	67,394	4,377	71,771
McGillivray Creek Coal & Coke Co., Ltd., Coleman.....	194	148,681	5,090	153,771
Midland Collieries, Ltd., Drumheller.....	248	40,000	3,200	43,200
Mountain Park Coal Co., Ltd., Mountain Park.....	195	77,129	4,508	81,637
Newcastle Coal Co., Ltd., and Alberta Block Coal Co., Ltd., (Drumheller.....	280	62,206	1,050	63,256
North American Collieries, Ltd. (Pacific Pass, Lovett- formerly Canadian Coal and ville, Lethbridge, Coke Co., Ltd.) Coalhurst, St. Albert	189	69,208	4,636	73,844
	185	138,021	11,108	149,129
	247	6,290	4,624	10,914
Pembina Coal Operators, Ltd., Evansburgh.....	160	28,869	3,665	32,534
Rock Springs Coal & Brick Co., Elean.....	113	19,200	2,000	21,200
Round Hill Collieries, Ltd., Roundhill.....	241	23,840	189	24,029
Rosedale Coal & Clay Products Co., Rosedale.....	269	18,194	481	18,675
Rose Deer Coal Mining Co., Wayne.....	220	17,450	2,575	20,025
Star Coal Mines, Rosedale.....	216	26,098	750	26,848
Tofield Coal Co., Tofield.....	.....	26,440	1,350	27,790
Twin City Coal Co., Edmonton South.....	262	60,810	5,820	66,630
West Canadian Collieries, Ltd., Bellevue.....	179	291,050	10,964	302,014
" " " Blairmore.....	175	39,364	2,479	41,843
All other companies.....		2,834,178	284,674	3,118,852
		229,633	12,333	241,966
Total production, Alberta.....		3,063,811	297,007	3,360,818

*Includes consumption under boilers, etc., and coal used by workmen.

(a) 82,249 briquettes; (b) 1,007 briquettes; (c) 38,878 for manufacture of coke.

Production of Coal in Alberta, in 1914, by Principal Collieries.

(IN SHORT TONS).

Name of Company.	Days in operation.	Total sales.	Total colliery consumption*	Total production.
Alberta Coal Mfg. Co., Cardiff.....	175	46,690	3,000	49,690
Battle River Collieries, Rosenroll.....	224	10,298	1,267	11,565
Brazeau Collieries, Ltd., Nordegg.....	290	153,011	2,311	155,322
Canada West Coal Co., Taber.....	87	45,744	15,064	60,808
Can. Coal & Coke Co., Ltd., Beaver Mines.....	112	28,055	5,323	33,378
" " " Lethbridge.....	151	98,381	13,065	111,446
" " " Pacific Pass.....	283	85,709	4,208	89,917
Canmore Coal Co., Ltd., Canmore.....	241	158,137	12,385	170,522
Can. Pacific Railway, Bankhead.....	237	151,513	34,657	186,170
" " Lethbridge No. 1.....	184	135,965	32,057	168,022
" " " No. 2.....	189	230,071	39,104	269,175
Capital Coal Co., Cardiff.....	179	33,363	1,591	34,954
Cardiff Collieries, Ltd., Cardiff.....	176	126,000	5,025	131,025
Chinook Coal Co., Canmore.....	191	59,771	8,710	68,481
City of Lethbridge Coal Mine, Lethbridge.....	261	11,323	.....	11,323
Davenport Coal Co., Burmis.....	70	10,560	647	11,207
Dawson Coal Co., Edmonton.....	249	21,340	650	21,990
Dobell Coal Co., Tofield.....	269	18,479	1,874	20,353
Edmonton Standard Coal Co., Edmonton.....	293	12,869	1,606	14,475
Franco-Can. Collieries, Ltd., Frank.....	268	29,423	13,317	42,740
Georgetown Collieries, Ltd. (The), Canmore.....	266	35,318	3,581	38,899
Hillcrest Collieries, Ltd., Hillcrest.....	211	203,308	10,672	213,980
Humberstone Coal Co., Clover Bar.....	285	69,000	5,600	74,600
International Coal & Coke Co., Coleman.....	226	(c) 218,543	21,049	239,592
Jasper Park Collieries, Ltd., Pochontas.....	279	74,213	4,014	78,227
Leitch Colliery, Ltd., Passburg.....	243	57,401	4,024	61,425
McGillivray Ck. Coal & Coke Co., Coleman.....	252	184,965	5,646	190,611
Midland Collieries, Ltd., Drumheller.....	165	15,000	1,750	16,750
Mountain Park Coal Co., Ltd., Bickerdike.....	273	79,210	3,783	82,993
Newcastle Coal Co., Drumheller.....	211	60,000	950	60,950
Pembina Coal Co., Ltd., Evansburgh.....	276	31,896	6,920	38,816
Redcliff Brick & Coal Co., Redcliff.....	191	10,662	.....	10,662
Rock Springs Coal & Brick Co., Elean.....	169	17,655	2,200	19,855
Rosedale Coal & Clay Products Co., Rosedale.....	203	21,211	177	21,388
Tofield Coal Co., Tofield.....	284	21,351	1,200	22,551
Twin City Coal Co., Edmonton.....	235	36,914	3,533	40,467
West Can. Collieries, Bellevue.....	228	389,960	16,471	406,431
" " Blairmore.....	38	18,931	1,117	20,048
Two other companies each producing over 10,000 tons.....	.....	51,440	7,815	59,255
All other companies each under 10,000 tons.....		3,063,680	296,383	3,360,063
		304,502	18,450	322,952
Total production, Alberta.....		3,368,182	314,833	3,683,015

*Includes consumption under boilers, etc., and coal used by workmen.
 (a) Briquettes 107,809; (b) Briquettes 1,261; (c) For manufacture of coke 44,249.

Annual Production of Coal in Alberta.

Calendar Year.	Short tons.	Value.	Average per ton.	Calendar Year.	Short tons.	Value.	Average per ton.
1887.....	74,152	\$ 157,577	\$ 2.13	1901.....	340,275	\$ 850,687	\$ 2.50
1888.....	115,124	183,354	1.59	1902.....	402,819	960,601	2.38
1889.....	97,364	179,640	1.85	1903.....	495,893	1,117,541	2.25
1890.....	128,753	198,298	1.54	1904.....	661,732	1,404,524	2.12
1891.....	174,131	437,243	2.51	1905.....	931,917	1,993,915	2.14
1892.....	178,970	460,605	2.57	1906.....	1,246,360	2,614,762	2.10
1893.....	230,070	586,260	2.55	1907.....	1,591,579	3,836,286	2.41
1894.....	184,940	473,827	2.56	1908.....	1,685,661	4,127,311	2.45
1895.....	169,885	382,526	2.25	1909.....	1,994,741	4,838,109	2.43
1896.....	209,162	581,832	2.78	1910.....	2,894,469	7,065,736	2.44
1897.....	242,163	630,408	2.60	1911.....	1,511,036	3,979,264	2.63
1898.....	315,088	788,720	2.50	1912.....	3,240,577	8,113,525	2.50
1899.....	309,600	774,000	2.50	1913.....	4,014,755	10,418,941	2.59
1900.....	311,450	778,625	2.50	1914.....	3,683,015	9,350,392	2.54
				1915.....	3,360,818	8,283,079	2.46

Statistics collected and published by Mr. John T. Stirling, Chief Inspector of Coal Mines, in Alberta, covering coal mining operations in 1915, are given in the following tables:—

The output as given by Mr. Stirling is 3,434,891 tons, or after deducting 134,922 tons of slack put on waste heap, 3,299,969 tons of marketable coal.

For inspection purposes the Province is divided into four districts, the outputs of which were as follows: Crowsnest Pass district, 919,383 tons; Calgary district, 943,897 tons; Lethbridge district, 719,728 tons; and Edmonton district, 851,883 tons. Compared with 1914 the Crowsnest Pass district showed a decreased output of 26 per cent, Calgary an increase of 10 per cent, Lethbridge a decrease of 8 per cent, and Edmonton a decrease of 9 per cent.

The total sales including briquettes, were: 3,052,847 tons of which 2,201,558 tons were sold for consumption in Alberta; 57,614 tons for consumption in British Columbia; 702,893 tons for consumption in Saskatchewan; 65,735 tons for consumption in Manitoba; and 25,047 tons for export to the United States.

Output of Coal in Alberta, 1915.

(IN SHORT TONS.)

	Crowsnest pass.	Calgary.	Lethbridge.	Edmonton.	Total.
Sold for consumption in Alberta.....	728,298	574,376	186,151	640,305	2,129,130
Sold for consumption in other provinces.....	80,736	190,058	432,516	112,264	815,574
Sold for export to the United States..	20,724	917	3,406	.....	25,047
Total Sales.....	829,758	765,351	622,073	752,569	2,969,751
Used in making briquettes.....	.....	50,222	.....	.....	50,222
Used in making coke.....	38,878	.....	.....	.....	38,878
Used under colliery boilers.....	50,970	54,979	85,240	54,339	245,528
Difference in stocks.....	- 448	- 2,682	- 1,294	+ 14	- 4,410
Slack put on waste heap.....	225	76,027	13,709	44,961	134,922
Total output.....	919,383	943,897	719,728	851,883	3,434,891

Output of Bituminous Coal in Alberta, 1915.

(IN SHORT TONS.)

	Crowsnest pass.	Calgary.	Lethbridge.	Edmonton.	Total.
Sold for consumption in Alberta.....	728,298	396,480	.....	230,915	1,355,693
Sold for consumption in other provinces.....	80,736	23,471	.....	7,871	112,078
Sold for export to the United States..	20,724	64	.....	.....	20,788
Total sales.....	829,758	420,015	.....	238,786	1,488,559
Used in making coke.....	38,878	.....	.....	.....	38,878
Used under colliery boilers.....	50,970	21,163	.....	12,958	85,091
Difference in stocks.....	- 448	- 100	.....	- 2,519	- 3,067
Slack put on waste heap.....	225	12,281	.....	4,270	16,776
Total.....	919,383	453,359	.....	253,495	1,626,237

Output of Anthracite Coal in Alberta, 1915.

(IN SHORT TONS.)

	CALGARY DISTRICT.	
	Coal.	Briquettes.
Sold for consumption in Alberta.....	21,159	72,428
Sold for consumption in other provinces.....	26,062	10,668
Sold for export to the United States.....	853	.....
Total sales.....	48,074	83,096
Used under colliery boilers.....	20,797	159
Used in making briquettes.....	50,222	.....
Difference in stock.....	- 2,203	75
Stock put on waste heap.....	8,842	.....
Total.....	125,732	83,180

Output of Lignite Coal in Alberta, 1915.

(IN SHORT TONS.)

	Crownsnest pass.	Calgary.	Lethbridge.	Edmonton.	Total.
Sold for consumption in Alberta.....		156,737	186,151	409,390	752,278
Sold for consumption in other provinces.....		140,525	432,516	104,393	677,434
Sold for export to the United States.....		3,406	.....	3,406
Total sales.....		297,262	622,073	513,783	1,433,118
Used under colliery boilers.....		13,019	85,240	41,381	139,640
Slack put on waste heap.....		54,904	13,709	40,691	109,304
Difference in stocks.....		- 379	- 1,294	+ 2,533	+ 860
Total output.....		364,806	719,728	598,388	1,682,922

Sales of Coal and Briquettes by Districts.

(IN SHORT TONS.)

District.	SOLD FOR CONSUMPTION IN				For export to United States.	Total.
	Alberta.	British Columbia.	Saskatchewan.	Manitoba.		
<i>Bituminous.</i>						
Crowsnest Pass.....	725,316	7,701	71,439	1,596	20,724	826,776
Pincher Creek.....	2,982					2,982
Okotoks.....	247					247
Aldersyde.....	11,565					11,565
Banff.....	160,990	15,368	5,683	2,420	64	184,525
Brazeau.....	223,678					223,678
Yellowhead Pass.....	148,488	384	7,307	120		156,299
Jasper Park.....	82,427		60			82,487
Total Bituminous.....	1,355,693	23,453	84,489	4,136	20,788	1,488,559
<i>Anthracite and Briquettes.</i>						
Bankhead						
Coal.....	21,159	16,307	9,496	259	853	48,074
Briquettes.....	72,428	2,754	6,995	919		83,096
Total Anthracite.....	93,587	19,061	16,491	1,178	853	131,170
<i>Lignite.</i>						
Wetaskiwin.....	33,467		22,336			55,803
Edmonton.....	208,394		17,915	442		226,751
St. Albert.....	9,327		656			9,983
Tofield.....	38,509		6,435	1,089		44,944
Cardiff.....	98,190	495	45,038			144,812
Pembina.....	21,503		9,987	45,144	1,201	31,490
Lethbridge.....	163,801	13,030	322,809	8,660	2,205	545,985
Taber.....	9,844	1,515	41,358			63,582
Bow Island.....	8,081					8,081
Milk River.....	4,425					4,425
Medicine Hat.....	17,827		3,510			21,337
Carbon.....	10,750		1,500			12,250
Trochu.....	2,105					2,105
Drumheller.....	82,529	60	128,200	5,086		215,895
Three Hills.....	1,940					1,940
Lacombe.....	41,586		2,149			43,735
Total Lignite.....	752,278	15,100	601,913	60,421	3,406	1,433,118
	2,201,558	57,614	702,893	65,735	25,047	3,052,847

Average Number of Persons Employed in Alberta Coal Mines.

Character of labour.	Bituminous.		Anthracite.		Lignite.		Total.	
	Above.	Below.	Above.	Below.	Above.	Below.	Above.	Below.
Supervision and clerical assistance.....	104	109	9	8	135	141	248	258
Miners and helpers.....		1,260		119		1,441		2,820
Mechanics or skilled labour.....	167	87	54	1	219	93	440	181
Other employees.....	547	647	100	52	617	535	1,264	1,234
Total.....	818	2,103	163	180	971	2,210	1,952	4,493

British Columbia.

The production of coal in British Columbia in 1915 was 2,065,613 tons, as compared with 2,239,799 tons in 1914, a falling off of 174,186 tons or 7·8 per cent, and is the lowest recorded since 1905.

The Provincial Mineralogist states: "The consumption of coal in the Province during the past two years has been sadly interfered with by the war, through its retarding or stopping of many industries; this has had a reflex action on the transportation lines, which are the largest consumers of coal."

"The market for the Coast collieries was seriously affected by the diminished sales of bunker coal to ocean steamers, as a result of war conditions on the Pacific Ocean steamer trade."

"The competition of fuel-oil has been keenly felt, and the adoption of this fuel by the three transcontinental railways for use in British Columbia has removed a steady and growing market for coal."

Of the total production in 1915, 1,471,328 tons were reported as sales including 739,881 tons sold for consumption in Canada; 705,779 tons sold for export to the United States; and 25,668 tons sold for export to other countries; 594,285 tons were used by producers, including 404,825 tons for making coke, and 189,460 tons for the operation of collieries and for workmen.

The production of collieries on Vancouver Island was 1,008,468 tons, of which 559,587 tons were sold for consumption in Canada, 292,669 tons for export to the United States, and 25,668 tons for export to other countries, 20,115 tons were used in the coke ovens at Comox, and 110,429 tons were used in the operation of collieries and by workmen. Vancouver Island collieries produced 48·8 per cent of the production of the Province, while compared with the previous year there was a decrease of 9,215 tons or less than one per cent.

The production in the Crowsnest district was 951,289 tons of which 91,867 tons were sold for consumption in Canada, and 407,817 tons for export to the United States; 384,710 tons were used for making coke, and 66,895 tons were used in the operation of collieries and by workmen. This district contributed 46 per cent of the total in 1915 and the production was less than that of 1914 by 115,435 tons, or over 10 per cent.

The production at Nicola and Princeton, etc., was 105,856 tons of which 88,427 tons were sold for consumption in Canada, and 5,293 tons for export to the United States, and 12,136 tons were used in the operation of collieries and by workmen. These areas contributed a little over 5 per cent of the total and the production showed a decrease of 49,536 tons or 31·8 per cent, compared with 1914.

The three largest operators were the Crow's Nest Pass Coal Company with 888,745 tons, the Canadian Collieries (Dunsmuir), Limited, with

370,291 tons, and the Western Fuel Company with 460,489 tons. These three companies contributed over 83 per cent of the Province's production.

Coal Production by Districts in British Columbia, 1915.

(IN SHORT TONS.)

Coal.	Vancouver Island.	Nicola and Princeton.	Crowsnest and East Kootenay.	Total.
Sold for consumption in Canada.....	559,587	88,427	91,867	739,881
Sold for export to United States.....	292,669	5,293	407,817	705,779
Sold for export to other countries.....	25,668	.....	.....	25,668
Total sales.....	877,924	93,720	499,684	1,471,328
Used for making coke or brick.....	20,115	.....	384,710	404,825
Used for colliery consumption, etc.....	110,429	12,136	66,895	189,460
Production.....	1,008,468	105,856	951,289	2,065,613

Coal Production by Districts in British Columbia, 1914.

(IN SHORT TONS.)

Coal.	Vancouver Island.	Nicola and Princeton.	Crowsnest and East Kootenay.	Total.
Sold for consumption in Canada.....	674,928	134,995	159,598	969,521
Sold for export to United States.....	236,004	3,006	436,109	675,119
Sold for export to other countries.....	.....	.....	.....	.....
Total sales.....	910,932	138,001	595,707	1,644,640
Used for making coke or brick.....	.....	.....	398,117	398,117
Used for colliery consumption, etc.....	106,751	17,391	72,900	197,042
Production.....	1,017,683	155,392	1,066,724	2,239,799

Coal Production by Collieries in British Columbia, in 1915

(IN SHORT TONS.)

Colliery.	SOLD.				USED.		Production.	Lost in washing, etc.	STOCKS.		Output.
	In Canada.	To United States.	To other countries.	Total.	Making coke.	Under colliery boilers, etc.			First of year.	Last of year.	
1. No. 1 Mine.....	157,125	230,665	2,463	390,253		38,852	429,105		7,699	12,043	433,449
Reserve.....	8,459	6,571	59	15,089		16,295	31,384		44	820	32,160
2. East Wellington No. 1.....	46,695	1,806		48,501		7,309	55,810		5,100	3,023	53,733
3. Wellington Extension Mine, Lady-smith.....	97,057	27,598	12,551	137,206		14,688	151,894	29,197	4,737	10,653	187,007
Comox Mines, Cumberland.....	172,225	2,971	10,595	185,791	20,115	12,491	218,397	84,706	19,180	8,220	292,143
4. South Wellington Mines.....	78,026	23,058		101,084		20,794	121,878	23,363	2,434	2,154	144,961
5. Michel.....	41,028	105,312		146,340	145,939	20,479	312,758		1,312	52	311,498
Coal Creek.....	47,154	247,465		294,619	238,771	42,597	575,987		2,714	59	573,332
6. Corbin.....	3,685	55,040		58,725		3,819	62,544				62,544
7. Middlesboro.....	48,720			48,720		5,264	53,984		300	303	53,987
8. Inland.....	32,530			32,530		2,474	35,004				35,004
9. Princeton.....	6,054	5,293		11,347		4,398	15,745	1,635			17,414
10. Miscellaneous.....	1,123			1,123			1,123				1,123
	739,881	705,779	25,668	1,471,328	404,825	189,460	2,065,613	138,901	43,520	37,361	2,198,555

1. Western Fuel Company.
2. Vancouver-Nanaimo Coal Mining Co.
3. Canadian Collieries (Dunsmuir), Ltd.
4. Pacific Coast Coal Mines, Ltd.
5. Crow's Nest Pass Coal Co., Ltd.

6. Corbin Coal and Coke Co., Ltd.
7. Middlesboro Collieries, Ltd.
8. Inland Coal and Coke Co., Ltd.
9. Princeton Coal and Land Co., Ltd.
10. Pacific Coast Colliery of B.C.

Coal Production by Collieries in British Columbia, in 1914.

(IN SHORT TONS.)

Colliery.	SOLD.			USED.		Production.	Lost in washing, etc.	Stocks.		Output.
	In Canada.	To United States.	Total.	Making coke.	Under colliery boilers, etc.			First of year.	Last of year.	
1. Protection, No. 1.....	149,677	140,711	290,388		49,505	339,893		290	7,699	347,302
Northfield and Reserve.....	248	40	288		495	783		295	44	532
2. New East Wellington.....	100,294	8,111	108,405		10,793	119,198		4,279	5,099	120,018
3. Ladysmith (Wellington).....	88,396	16,953	105,349		9,352	114,701	26,113	830	4,738	144,722
Cumberland (Comox).....	247,616	54,005	301,621		17,567	319,188	115,386	11,656	19,180	442,098
4. Fiddick, Richardson, Suquash and Morden.....	88,697	16,184	104,881		19,039	123,920	21,116	1,148	2,434	146,322
5. Michel.....	39,857	71,720	111,577	93,882	18,466	223,925			1,312	225,237
Coal Creek.....	60,423	304,231	364,654	237,790	41,522	643,966		105	2,714	646,575
6. Hosmer.....	39,109		39,109	66,445	10,048	115,602	17,064	330	0	132,336
7. Corbin.....	20,209	60,158	80,367		2,864	83,231				83,231
8. Middlesboro.....	58,491		58,491		9,796	68,287		688	366	67,965
9. Inland.....	57,782		57,782		2,952	60,734				60,734
10. Princeton.....	14,862	2,806	17,668		3,523	21,191	626	45	0	21,772
11. Other mines.....	3,860	200	4,060		1,120	5,180				5,180
Total.....	969,521	675,119	1,644,640	398,117	197,042	2,239,799	180,305	19,666	43,586	2,444,024

1. Western Fuel Co.
2. Vancouver-Nanaimo Coal Mining Co.
3. Canadian Collieries (Dunsmuir), Ltd.
4. Pacific Coast Collieries, Ltd.
5. Crow's Nest Pass Coal Co., Ltd.
6. The Hosmer Mines Ltd.
(Can. Pac. Railway, Dept. of Natural Resources.)

7. Corbin Coal and Coke Co., Ltd.
8. Nicola Valley Coal and Coke Co., Ltd.
9. Inland Coal and Coke Co., Ltd.
10. Princeton Coal and Land Co., Ltd.
11. {Coalmont Collieries, Ltd.
{Pacific Coast Colliery Co. of B.C.

Annual Production of Coal in British Columbia.

Calendar Year.	Output.	Home consumption.	Sold for export.	PRODUCTION*.		Price per long ton.	Value.
				Long tons.	Short tons.		
1836-52...	10,000				11,200	\$4.00	\$ 40,000
1852-59...	25,398				28,446	4.00	101,592
1859†...	1,989				2,228	4.00	7,956
1860.....	14,247				15,957	4.00	56,988
1861.....	13,774				15,427	4.00	55,096
1862.....	18,118				20,292	4.00	72,472
1863.....	21,345				23,096	4.00	85,380
1864.....	28,632				32,068	4.00	114,528
1865.....	32,819				36,757	4.00	131,276
1866.....	25,115				28,129	4.00	100,460
1867.....	31,239				34,988	4.00	124,956
1868.....	44,005				49,286	4.00	176,020
1869.....	35,080				40,098	4.00	143,208
1870.....	29,843				33,424	4.00	119,372
1871-2-3...	148,459				166,274	4.00	593,836
1874.....	81,547	25,023	56,038	81,061	90,788	3.00	243,183
1875.....	110,145	31,252	66,392	97,644	109,361	3.00	292,932
1876.....	139,192	17,856	†122,329	140,185	157,007	3.00	420,555
1877.....	154,052	24,311	115,381	139,692	156,455	3.00	419,076
1878.....	170,846	26,166	164,682	190,848	213,750	3.00	572,544
1879.....	241,301	40,294	192,096	232,300	260,277	3.00	697,170
1880.....	267,595	46,513	225,849	272,362	305,045	3.00	817,086
1881.....	228,357	40,191	189,323	229,514	257,056	3.00	688,542
1882.....	282,139	56,161	232,411	288,572	323,201	3.00	865,716
1883.....	213,299	64,786	149,567	214,353	240,075	3.00	643,059
1884.....	394,070	87,388	306,478	393,866	441,130	3.00	1,181,598
1885.....	365,596	95,227	237,797	333,024	372,987	3.00	999,072
1886.....	326,636	85,987	249,205	335,192	375,415	3.00	1,065,576
1887.....	413,360	99,216	334,839	434,055	486,142	3.00	1,302,165
1888.....	489,301	115,953	365,714	481,667	539,467	3.00	1,445,001
1889.....	579,830	124,574	443,675	568,249	636,439	3.00	1,704,747
1890.....	678,140	177,075	508,270	685,345	767,586	3.00	2,056,035
1891.....	1,029,097	202,697	806,479	1,009,176	1,130,277	3.00	3,027,528
1892.....	826,335	196,223	640,579	836,802	937,218	3.00	2,510,406
1893.....	978,294	207,851	768,917	976,768	1,093,980	3.00	2,930,304
1894.....	1,012,953	165,776	827,642	993,418	1,112,628	3.00	2,980,254
1895.....	939,654	188,349	756,334	944,683	1,058,045	3.00	2,834,049
1896.....	894,882	261,984	634,238	896,222	1,003,769	3.00	2,688,666
1897.....	802,296	290,310	619,860	910,170	1,019,390	3.00	2,730,510
1898.....	1,136,485	375,423	752,863	1,128,286	1,263,680	3.00	3,384,858
1899.....	1,306,324	526,058	751,711	1,277,769	1,431,101	3.00	3,833,307
1900.....	1,590,178	685,667	914,184	1,599,851	1,791,833	3.00	4,799,553
1901.....	1,691,557	799,666	914,163	1,713,829	1,919,488	3.00	5,141,487
1902.....	1,641,626	837,871	776,809	1,614,680	1,808,441	3.00	4,844,040
1903.....	1,450,663	947,499	549,449	1,496,948	1,676,581	3.00	4,490,844
1904.....	1,685,698	1,129,465	533,593	1,663,058	1,862,625	3.00	4,989,174
1905.....	1,736,696	1,089,667	647,343	1,737,010	1,945,452	3.00	5,211,030
1906.....	1,899,076	1,236,476	679,829	1,916,305	2,146,262	3.00	5,748,915
1907.....	2,219,602	1,438,402	673,114	2,111,516	2,364,898	3.50	7,390,306
1908.....	2,111,931	1,486,511	597,157	2,083,668	2,333,708	3.50	7,292,838
1909.....	2,388,196	1,585,232	741,667	2,326,899	2,606,127	3.50	8,144,147
1910.....	3,152,207	1,798,873	1,175,007	2,973,880	3,330,745	3.50	10,408,530
1911.....	2,304,794	1,657,422	612,696	2,270,118	2,542,532	3.50	7,945,413
1912.....	2,857,345	1,898,213	966,963	2,865,176	3,208,997	3.50	10,028,116
1913.....	2,587,357	1,799,643	623,946	2,423,589	2,714,420	3.50	8,482,562
1914.....	2,182,164	1,397,036	602,785	1,999,821	2,239,799	3.50	6,999,374
1915.....	1,962,817	1,191,219	653,078	1,844,297	2,065,613	3.50	6,455,041

*This production is obtained by adding "Home Consumption" and "Sold for Export."

†52,935 tons of this amount were exported as sales without the division into "Home Consumption" and "Sold for Export."

‡Two months only.

Yukon.

The total production was 9,724 tons from two companies, the Five Fingers Coal Company, operating at Tantalus, and the Northern Light, Power and Coal Company, on Coal Creek.

Annual Production of Coal in Yukon Territory.

Calendar Year.	Short tons.	Value.	Average per ton.
1901.....	*5,864	\$ 86,230	\$14.70
1902.....	4,910	37,280	7.59
1903.....	1,849	29,584	16.00
1904.....			
1905.....	7,000	21,000	3.00
1906.....	7,000	28,000	4.00
1907.....	15,000	60,000	4.00
1908.....	3,847	21,158	5.50
1909.....	7,364	49,502	6.72
1910.....	16,185	110,925	6.85
1911.....	2,840	12,780	4.50
1912.....	9,245	44,958	4.86
1913.....	19,722	95,945	4.86
1914.....	13,443	53,760	4.00
1915.....	9,724	38,896	4.00

*Part of this production was mined in 1900.

COKE.

Both domestic and imported coal are used in the manufacture of coke in Canadian coke-oven plants.

In 1915, 1,425,172 tons of domestic and 431,221 tons of imported coal were charged to coke ovens from which was obtained an output of 1,200,766 tons of coke, thus averaging 0.647 tons of coke per ton of coal charged. Coke from by-product ovens comprised 66 per cent of the total.

In 1914, 1,038,235 tons of domestic, and 503,312 tons of imported coal were used to produce an output of 1,015,253 tons of coke, showing a return of 0.658 tons of coke per ton of coal charged. Coke from by-product ovens comprised 67 per cent of the total.

In 1913 there were 1,698,912 tons of domestic coal, and 549,001 tons of imported coal used to produce an output of 1,517,133 tons of coke.

The amount of coke sold or used by coke producers in 1915 was 1,170,473 as compared with 1,023,860 tons in 1914, an increase of 146,613 tons or over 18 per cent.

In addition to the tonnage sold or used by producers there was imported during 1915, 637,857 tons of coke, while the exports totalled 35,869 tons. The Canadian consumption for 1915 was therefore 1,772,461 tons, an increase of 263,393 tons or 17 per cent over the consumption in 1914. The consumption of oven coke during recent years has been as follows: 1,285,228 tons in 1908; 1,449,369 tons in 1909; 1,581,832 tons in 1910; 1,677,188 tons in 1911; 1,981,832 tons in 1912; 2,186,170 tons in 1913; and 1,509,068 tons in 1914.

At the close of the year there were 921 ovens idle and 1,742 in operation.

Coke Production, 1915.

(IN SHORT TONS).

Province.	Coal charged to ovens.	Coke output.	STOCK ON HAND.		Coke sold or used.	Per cent of total production.	Value of coke sold or used.
			Jan. 1.	Dec. 31.			
Nova Scotia.....	981,369	584,993	2,621	1,741	585,873	50.05	1,905,766
Ontario.....	(a) 431,221	316,211	2,953	33,913	285,251	24.37	1,141,004
Alberta.....	38,878	24,187	.....	361	23,826	2.04	95,304
British Columbia.....	404,925	275,375	3,097	2,949	275,523	23.54	1,116,506
Total.....	1,856,393	1,200,766	8,671	38,964	1,170,473	100.00	4,258,580

(a) All imported coal.

Coke Production, 1914.

(IN SHORT TONS.)

Province.	Coal charged to ovens.	Coke output.	STOCK ON HAND.		Coke sold or used.	Per cent of total production.	Value of coke sold or used.
			Jan. 1.	Dec. 31.			
Nova Scotia.....	595,868	345,880	3,386	5,877	343,289	33.53	\$1,118,614
Ontario.....	(a) 503,312	377,514	11,753	2,953	386,314	37.73	1,352,099
Alberta.....	44,249	28,541	518	0	29,059	2.84	116,236
British Columbia.....	398,118	263,318	4,977	3,097	265,198	25.90	1,071,565
Total.....	1,541,547	1,015,253	20,634	12,027	1,023,860	100.00	3,658,514

(a) All imported coal.

Distribution of Coke Production, 1915.

(IN SHORT TONS.)

	Nova Scotia.	Ontario.	Alberta.	British Columbia.	Total.
Sold in Canada.....	7,289	52,826	23,360	247,928	331,403
Sold for export.....			62	27,549	27,611
Total sales.....	7,289	52,826	23,422	275,477	359,014
Used by maker in blast furnace or otherwise.....	578,584	232,425	404	46	811,459
Total sold or used.....	585,873	285,251	23,826	275,523	1,170,473
Number of ovens in operation December 31.....	638	110	75	919	1,742
Number of ovens idle December 31.....		100	292		392
Number of ovens building December 31.....	0	0	0	0	0

Annual Production of Coke.

Calendar Year.	Short tons.	Value.	Average per ton.	Calendar Year.	Short tons.	Value.	Average per ton.
1886.....	35,396	\$ 101,940	\$ 2.88	1901.....	365,531	\$1,228,225	\$ 3.36
1887.....	40,428	135,951	3.36	1902.....	502,043	1,519,185	3.03
1888.....	45,373	134,181	2.96	1903.....	561,318	1,734,404	3.09
1889.....	54,539	155,043	2.84	1904.....	554,083	2,032,048	3.66
1890.....	56,450	166,298	2.95	1905.....	700,488	2,436,211	3.48
1891.....	57,084	175,592	3.08	1906.....	782,055	2,863,503	3.66
1892.....	56,135	160,249	2.85	1907.....	842,003	3,583,468	4.26
1893.....	61,078	161,790	2.65	1908.....	858,257	3,449,361	4.02
1894.....	58,044	148,551	2.56	1909.....	862,011	3,484,393	4.04
1895.....	53,356	143,047	2.68	1910.....	902,715	3,462,872	3.84
1896.....	49,619	110,257	2.22	1911.....	935,651	3,630,410	3.88
1897.....	60,686	176,457	2.91	1912.....	1,411,229	5,164,331	3.66
1898.....	87,600	286,000	3.26	1913.....	1,530,499	5,919,596	3.87
1899.....	100,820	350,022	3.47	1914.....	1,023,860	3,658,514	3.55
1900.....	157,134	649,140	4.13	1915.....	1,170,473	4,258,580	3.64

Annual Production of Coke by Provinces.

Calendar Year.	NOVA SCOTIA.		ONTARIO.		ALBERTA.		BRITISH COLUMBIA.	
	Short tons.	Value.	Short tons.	Value.	Short tons.	Value.	Short tons.	Value.
1897.....	41,532	\$ 90,950					19,154	\$ 85,507
1898.....	48,400	111,000					39,200	175,000
1899.....	62,459	178,767					38,361	171,255
1900.....	61,767	223,395					95,367	425,745
1901.....	222,694	590,560					142,837	637,665
1902.....	363,330	899,930					138,713	619,255
1903.....	371,745	888,094					189,753	846,310
1904.....	275,927	808,022			20,984	\$ 78,936	257,172	1,148,090
1905.....	386,366	1,054,712			44,866	179,464	269,256	1,202,035
1906.....	476,364	1,540,976			69,486	268,042	236,205	1,054,485
1907.....	524,110	1,688,070			76,321	297,595	241,572	1,049,432
1908.....	505,929	1,658,151			75,645	309,019	276,683	1,482,191
1909.....	492,992	1,608,092			87,233	366,734	281,786	1,509,567
1910.....	508,058	1,655,775	24,685	\$ 148,110	121,578	486,312	248,394	1,172,675
1911.....	557,554	1,814,977	259,554	1,318,303	36,216	146,251	82,327	350,879
1912.....	625,918	1,840,129	379,854	1,709,343	105,684	424,027	299,773	1,190,832
1913.....	722,038	2,352,153	419,287	1,991,613	67,403	269,612	321,771	1,306,218
1914.....	343,289	1,118,614	386,314	1,352,099	29,059	116,236	265,198	1,071,565
1915.....	585,873	1,905,766	285,251	1,141,004	23,826	95,304	275,523	1,116,506

Annual Exports of Coke.

Calendar Year.	Short tons.	Value.	Calendar Year.	Short tons.	Value.
1897.....	2,987	\$ 6,078	1906.....	37,003	\$ 168,571
1898.....	3,774	8,394	1907.....	70,617	320,357
1899.....	5,557	18,726	1908.....	58,708	248,759
1900.....	41,529	131,278	1909.....	74,067	329,051
1901.....	57,505	176,990	1910.....	57,971	250,715
1902.....	62,568	180,920	1911.....	9,852	39,823
1903.....	32,608	135,957	1912.....	57,744	252,763
1904.....	102,463	345,031	1913.....	68,235	308,410
1905.....	116,071	509,908	1914.....	67,838	306,117
			1915.....	35,869	160,053

Annual Imports of Oven Coke.

Fiscal Year.	Short tons.	Value.	Fiscal Year.	Short tons.	Value.
1880.....	3,837	\$ 19,353	1898.....	135,060	\$ 347,040
1881.....	5,492	26,123	1899.....	141,284	362,826
1882.....	8,157	36,670	1900.....	178,878	506,839
1883.....	8,943	38,588	1901.....	308,786	680,138
1884.....	11,207	44,518	1902.....	267,142	842,815
1885.....	11,564	41,391	1903.....	256,723	1,222,756
1886.....	11,858	39,756	1904.....	221,050	765,123
1887.....	15,110	56,222	1905.....	371,593	807,842
1888.....	25,487	102,334	1906.....	480,222	1,311,375
1889.....	29,557	91,902	Calendar Year.		
1890.....	36,564	133,344	1907.....	624,649	2,206,084
1891.....	38,533	177,605	1908.....	426,971	1,135,125
1892.....	43,499	194,429	1909.....	661,425	1,508,627
1893.....	41,821	156,277	1910.....	737,088	1,908,725
1894.....	42,864	176,996	1911.....	751,389	1,843,248
1895.....	43,235	149,434	1912.....	628,174	1,702,856
1896.....	61,612	203,826	1913.....	723,906	2,180,830
1897.....	83,330	267,540	1914.....	553,046	1,585,259
			1915†.....	637,857	1,608,464

†Duty free.

In Nova Scotia, coke was made at Sydney, Sydney Mines, and Westville.

In Ontario, the Atikokan Iron Company's plant at Port Arthur was idle throughout the year. The whole production of the Province came, therefore, from the Algoma Steel Corporation's plant at Sault Ste. Marie.

In Alberta, the plants at Lille and Passburg were idle, and one at Coleman was in operation part of the year.

In British Columbia, coke was made by the Crow's Nest Pass Coal Company at Fernie and Michel, and by the Canadian Collieries (Dunsmuir), Limited, at Union Bay.

The coke production of the eastern provinces is used almost entirely in the iron and steel industry, while that of the western provinces is used chiefly by the copper and lead smelters, finding a market in the United States as well as in Canada.

In Nova Scotia at the close of 1915 there were 638 ovens in operation, and 168 idle. The Dominion Iron and Steel Company had 488 of its 620 ovens in operation. All these ovens are of the Otto-Hoffman by-product type, from which are recovered tar, sulphate of ammonia, and gas. The gas is used in the Company's steel plant operations, and the sulphate of ammonia in the crystallized state is disposed of to the trade. Benzol, toluol, and other hydro-carbons are also being recovered. The crude tar is sold to the Dominion Tar and Chemical Company, who have a plant close at hand for the separation of a variety of coal-tar products. All the ovens of the Nova Scotia Steel and Coal Company were in operation at the close of the year. The surplus gas from the Baur ovens is used in generating steam for general colliery use, while that from the Bernard ovens is used for the production of steam for the power generating plant. The ovens formerly operated at Stellarton (45) and Londonderry (97) are not included amongst those idle, being regarded as abandoned.

In Ontario, the Atikokan Iron Company's 100 Beehive ovens at Port Arthur were idle throughout the year, but the Algoma Steel Company's 110 Koppers Regenerative By-Product ovens at Sault Ste Marie were in operation most of the year, none being idle on December 31. At the Sault Ste. Marie plant, crude tar, crystallized sulphate of ammonia, and gas are recovered. Benzol, toluol, and other hydro-carbons were recovered by the Toronto Chemical Company, a branch of the Dominion Tar and Chemical Co. The latter Company also takes the tar which is treated for the separation of coal-tar products.

In Alberta, all of the Western Canadian Collieries' 50 Bernard ovens at Lille, all of the Leitch Collieries' 101 Mitchell rectangular ovens at Passburg, and some of the International Coal and Coke Company's 216 Beehive ovens at Coleman, were idle throughout the year. The latter Company had 75 ovens in operation on December 31.

In British Columbia at the end of the year the Crow's Nest Pass Coal Company had only 20 of its 454 Beehive ovens, at Fernie, idle, and 101 of its 486, at Michel, idle; its 240 Beehive ovens at Carbonade have been idle for some years and are now regarded as permanently abandoned. The 240 Beehive ovens at Hosmer, were idle throughout the year. On Vancouver island the Canadian Collieries (Dunsmuir) Limited rebuilt and placed in operation 100 ovens at Union Bay and all were in operation at the end of the year.

The exports of coke in 1915 were 35,869 tons, all from British Columbia, a falling off of nearly 50 per cent from the exports of 1914.

Coke-Oven By-Products.

Coke-oven by-products were recovered at Sydney, N.S., and Sault Ste. Marie, Ontario. The 1915 recoveries included 7,365,931 gallons of tar, 10,448 tons of sulphate of ammonia, together with important quantities of benzol, toluol, and solvent naphthas. In 1914 the recoveries were 5,714,172 gallons of tar, and 8,572 tons of sulphate of ammonia.

Annual Production of Coke-Oven By-products.

Year.	Tar.	Sulphate of ammonia.	Year.	Tar.	Sulphate of ammonia.
	Gallons.	Short tons.		Gallons.	Short tons.
1901.....	2,662,612	1,614	1908.....	4,450,166	3,342
1902.....	4,094,135	2,393	1909.....	4,016,824	3,416
1903.....	3,281,249	3,207	1910.....	3,963,591	3,491
1904.....	1,649,197	1,773	1911.....	6,464,155	7,124
1905.....	3,407,784	2,500	1912.....	8,428,896	11,289
1906.....	3,725,723	2,364	1913.....	8,371,600	10,608
1907.....	4,424,615	1,738	1914.....	5,714,172	8,572
			1915.....	7,365,931	10,448

