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CANADA  
DEPARTMENT OF MINES  
MINES BRANCH

HON. W. TEMPLEMAN, MINISTER; A. P. LOW, LL.D., DEPUTY MINISTER;  
EUGENE HAANEL, PH.D., DIRECTOR.

THE  
PRODUCTION OF COAL AND COKE

IN

CANADA

During the Calendar Year

1910

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**ADVANCE CHAPTER OF THE ANNUAL REPORT ON THE MINERAL  
PRODUCTION OF CANADA, DURING THE CALENDAR YEAR 1910.**

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

**COAL.**

The total production of all classes of coal, including lignite, bituminous, and anthracite, in Canada during 1910, was, according to returns received by this Branch, 12,909,152 tons, as compared with a production in 1909 of 10,501,475 tons, showing an increase of 2,407,677 tons or nearly 23 per cent. The total approximate selling value of the coal at the mines in 1910 was \$30,909,779 or \$2.39 per ton, as compared with a total value in 1909 of \$24,781,236 or an average of \$2.36 per ton.

The large increase in production may be ascribed in part to the more complete resumption of mining operations in Nova Scotia following the settlement of the strike at Sydney, but chiefly to the great development of the coal mining industry in the western provinces, particularly in Alberta and British Columbia. The production of coal in Nova Scotia in 1909 showed a decrease of 1,000,450 tons as compared with 1908, so that while the production of this Province in 1910 shows an increase of 779,053 tons the output was still less than that of 1908. In British Columbia, on the other hand, the production of coal in 1909 showed an increase of 272,419 tons or nearly 12 per cent over 1908, and the year 1910 shows a further increase of 724,618 tons or nearly 28 per cent. So, also in Alberta the year 1909 shows an increase of 309,080 tons or 18 per cent, and the year 1910 a further increase of 899,728 tons or 45 per cent.

Bituminous coal forms by far the largest proportion of the total output, being mined exclusively in the Maritime Provinces, British Columbia, and the Crowsnest Pass region of southwestern Alberta. There is but one anthracite mine in Canada, at Bankhead near Banff, Alberta, operated by the Bankhead Mines Limited. This mine possesses the only briquetting plant in operation in the country.

Statistics of the production by provinces during the past three years are shown in Table 1, and Table 2 shows the increases and decreases in each year as compared with the previous year.

It may be explained that the term production in these tables applies to the amount of coal actually sold or used by the producers, in contradistinction to output, which applies to the coal extracted from the mine and which in some cases includes coal lost or unsaleable or coal carried into stock on hand at the end of the year.

It will be observed that in 1910 an increased production is reported for every province with the exception of Saskatchewan, in which a falling off of

10,969 tons is shown. But as one or two small mines in this Province neglected to furnish returns, it is quite possible that a complete record would have shown the output at least as large as in 1909.

COAL.—TABLE 1.

## Production by Provinces, 1908-9-10, in tons of 2,000 lbs.

Province.	1908.		1909.		1910.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
Nova Scotia.....	6,652,539	\$13,364,476	5,652,089	\$11,354,643	6,431,142	\$12,919,705
British Columbia....	2,333,708	7,292,838	2,606,127	8,144,147	3,330,745	10,408,580
Alberta.....	1,685,661	4,127,311	1,994,741	4,838,109	2,894,469	7,065,736
Saskatchewan.....	150,556	253,790	192,125	296,339	181,156	293,923
New Brunswick.....	60,000	135,000	49,029	98,496	55,455	119,910
Yukon Territory....	3,847	21,158	7,364	49,502	16,185	110,925
Totals.....	10,886,311	25,194,573	10,501,475	24,781,236	12,909,152	30,909,779

COAL.—TABLE 2.

## Comparison of Production 1908 with 1909, and 1909 with 1910.

Province.	(i) INCREASE OR (d) DECREASE.			
	Years 1908 and 1909.		Years 1909 and 1910.	
	Tons.	Per cent.	Tons.	Per cent.
Nova Scotia.....	(d) 1,000,450	15.04	(i) 779,053	13.78
British Columbia....	(i) 272,419	11.67	(i) 724,618	27.80
Alberta.....	(i) 309,080	18.34	(i) 899,728	45.11
Saskatchewan.....	(i) 41,569	27.61	(d) 10,969	5.71
New Brunswick.....	(d) 10,971	18.29	(i) 6,426	13.11
Yukon Territory.....	(i) 3,517	91.42	(i) 8,821	119.79
Totals for Canada.....	(d) 384,836	3.535	(i) 2,407,677	22.93

The relative importance of the different provinces as coal producers is indicated in the next table, in which is shown the proportional contributions of each province to the total coal production of Canada in 1874, 1890, and yearly since 1900. The western provinces in 1910 produced practically the same tonnage as Nova Scotia and New Brunswick. Alberta's production has been increasing very rapidly and is now very close to that of British Columbia, having contributed 22.4 per cent of the total in 1910 as compared with 25.8 per cent by British Columbia. In 1905 this Province produced 10.8 per cent of the total and in 1890 only 4 per cent.

Province.	1874.	1890.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
	%	%	%	%	%	%	%	%	%	%	%	%	%
Nova Scotia.....	91	71	62.9	64.4	69.4	71.3	68.0	65.5	64.07	60.79	61.40	54.29	50.25
New Brunswick.....													
Saskatchewan*.....			0.7	0.7	0.9	1.5	1.5	1.2	1.11	1.44	1.37	1.83	1.40
Alberta*.....		4	5.4	5.2	5.4	6.2	8.0	10.8	12.77	15.14	15.42	18.99	22.42
British Columbia.....	8	25	31.0	29.6	24.2	21.0	22.5	22.4	21.98	22.50	21.77	24.82	25.80
Yukon Territory.....				0.1	0.1			0.1	0.07	0.13	0.04	0.07	0.13

\*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.

Of the total coal production in Canada during the past year 8,956,450 tons were reported as sold for consumption in Canada, 1,847,943 tons sold for export to the United States, and 291,273 tons sold for export to other countries, or total sales of 11,095,666 tons; 759,703 tons were used by colliery operators in making coke and 1,053,783 tons were used for colliery purposes and by workmen. In addition to the coal thus disposed of, 63,647 tons were mined and added to stock at the end of the year and 243,716 tons reported as waste; these two items are not included as 'Production,' but bring the total output up to 13,216,515 tons.

Thus of the total output about 83.9 per cent was placed directly in the market, 5.7 per cent made into coke by the mine operators, 7.9 per cent used in colliery consumption and for workmen, 1.8 per cent reported as waste. The quantities entered as loss due to washing, breakage, etc., do not necessarily include all the losses due to these causes since many companies do not make any returns under this heading. Also the quantity entered as sold for consumption in Canada probably includes a small quantity which is ultimately exported.

Notwithstanding Canada's large coal resources, the total domestic production (including that exported) was equivalent in 1910 to only about 50 per cent of the total consumption, there having been imported for home consumption during 1910, 10,597,982 tons. The total consumption of coal as shown in subsequent tables was 20,970,226 tons, or an average of about 2.800 tons per capita, while the production averaged about 1.723 tons per capita of population. The principal coal-fields are located on the extreme east and in the far west, while the central Provinces of Ontario and Quebec which contain the great bulk of the population are without coal deposits. Nova Scotia coal is largely consumed within the Province and also finds a considerable market in Quebec. About 9.02 per cent of the coal production of this Province was reported as sold for export in 1910. The market in Ontario is almost altogether supplied, and that of Quebec province to a lesser degree, by coal imported from the nearer fields of the adjacent states of the United States. There are no anthracite coals in eastern Canada, and our requirements of this fuel have to be met entirely by imports from Pennsylvania. Manitoba is also supplied largely by importations from the United States.

The Saskatchewan production finds a local market within the Province and also in Manitoba.

Of the Alberta production about 84.8 per cent in 1910 was used by collieries and sold for consumption in Canada, chiefly within the Province; 8.4 per cent sold for export to the United States, and 6.8 per cent used for making coke which was marketed in British Columbia and in the United States. British Columbia is the largest producer of coal for export. In 1910 about 49.1 per cent of the production in this Province was used by the collieries and sold for home consumption; 39.5 per cent was sold for export, and 11.4 per cent used in making coke.

The output by provinces showing the distribution of coal mined in 1909 and 1910 is given in the next two tables:—

### Coal Output in Canada 1910.

	Nova Scotia.	New Brunswick.	Saskatchewan.	Alberta.	Yukon.	British Columbia	Total.
Sales in Canada.....	5,003,933	53,455	173,084	2,309,438	16,135	1,400,405	8,956,450
Sales for export to U.S.....	356,089			243,371		1,248,483	1,847,943
Sales for export to other countries.....	223,748					67,525	291,273
Total sales.....	5,583,770	53,455	173,084	2,552,809	16,135	2,716,413	11,095,666
Used by producers in making coke.....	183,560			196,250		379,893	759,703
Used by producers for colliery consumption and workmen.....	663,812	2,000	8,072	145,410	50	234,439	1,053,783
Stock on hand Jan. 1..	149,953			10,074		39,987	200,019
“ Dec. 31..	175,333			8,957		79,376	263,666
Difference.....	+ 25,375			- 1,117		+ 30,389	+ 63,647
Losses due to breakage or other causes..	58,645		10,010	14,724		160,337	243,716
Total output*...	6,515,162	55,455	191,166	2,908,076	16,185	3,530,471	13,216,515

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

## Coal Output in Canada, 1909.

	Nova Scotia.	New Brunswick.	Saskatchewan.	Alberta.	Yukon.	British Columbia	Total.
Sales in Canada.....	4,406,688	45,000	183,878	1,639,515	6,864	1,096,935	7,468,880
Sales for export to U. S.....	300,134			114,101		759,537	1,173,772
Sales for export to other countries.....	100,258					71,130	171,388
Total sales.....	4,897,080	45,000	183,878	1,753,616	6,864	1,927,602	8,814,040
Used by producers in making coke.....	169,832			143,854		439,200	752,976
Used by producers for colliery consumption and workmen.....	585,177	4,029	8,247	97,271	500	239,235	934,459
Stock on hand Jan. 1.	150,455			4,646		47,331	202,432
“ “ Dec. 31	154,832			12,150		52,587	219,569
Difference.....	+ 4,377			+ 7,504		+ 5,256	+ 17,137
Losses due to breakage or other causes.	62,405		10,788	17,573		63,396	154,162
Total output*...	5,718,871	49,029	202,913	2,019,818	7,364	2,674,779	10,672,774

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

## Distribution of Coal mined in Canada during the Years 1907-8.

	1907.	1908.
Sales in Canada.....	7,358,135	7,715,203
Sales for export to United States.....	1,514,182	1,218,656
“ “ other countries.....	129,957	297,291
Total sales.....	9,002,274	9,231,150
Used by producers for the manufacture of coke.....	751,967	708,674
“ “ colliery consumption and workmen.....	757,185	946,487
Stock on hand January 1.....	212,559	133,443
“ “ December 31.....	190,224	230,335
Difference.....	- 22,335	+ 46,892
Loss due to washing, breakage, or other causes.....	351,783	157,610
Total output.....	10,840,874	11,090,813

Statistics of the annual production of coal in Canada since 1874 are shown in Table 3. The total production from 1785 to 1910 has been 172,158,538 tons: of which 115,758,195 tons or 63.7 per cent are to be credited to Nova Scotia and 40,049,214 tons or 23.3 per cent to British Columbia.

Looking back over the production of the last 40 years in decimal periods we find that the production during the years 1871-1880 was 11,380,416 tons; during the next period, 1881-1890, the production was 22,001,394 tons. The next ten years, 1891-1900, showed a production of 40,381,708 tons, and during the last period, 1901-1910, the production reached a total of 80,497,726 tons.

COAL.—TABLE 3.

Annual Production showing the Increase or Decrease each year.

Year.	Tons.	Value.	Average Value per Ton.	Increase (i) or Decrease (d) in Tonnage.	Increase (i) or Decrease (d) per cent.
		\$	\$		
1785 to 1873.....	*8,534,455				
1874.....	1,063,742	1,763,423	1 66		
1875.....	1,039,974	1,747,016	1 68	(d) 23,768	(d) 2.2
1876.....	994,762	1,729,546	1 74	(d) 45,212	(d) 4.3
1877.....	1,036,670	1,794,415	1 73	(i) 41,908	(i) 4.2
1878.....	1,089,744	1,941,285	1 78	(i) 53,074	(i) 5.1
1879.....	1,126,497	2,050,639	1 82	(i) 36,753	(i) 3.4
1880.....	1,482,714	2,657,194	1 79	(i) 356,217	(i) 31.6
1881.....	1,537,106	2,688,621	1 75	(i) 54,392	(i) 3.7
1882.....	1,848,148	3,248,446	1 76	(i) 311,042	(i) 20.2
1883.....	1,818,684	3,109,635	1 71	(d) 29,464	(d) 1.6
1884.....	1,984,959	3,593,831	1 81	(i) 166,275	(i) 9.1
1885.....	1,920,977	3,417,807	1 78	(d) 63,982	(d) 3.2
1886.....	2,116,653	3,739,840	1 77	(i) 195,676	(i) 10.2
1887.....	2,429,330	4,388,206	1 81	(i) 312,677	(i) 14.8
1888.....	2,602,552	4,674,140	1 80	(i) 173,222	(i) 7.1
1889.....	2,658,303	4,894,287	1 84	(i) 55,751	(i) 2.1
1890.....	3,084,682	5,676,247	1 84	(i) 426,379	(i) 16.0
1891.....	3,577,749	7,019,425	1 96	(i) 493,067	(i) 16.0
1892.....	3,287,745	6,363,757	1 94	(d) 290,004	(d) 8.1
1893.....	3,783,499	7,359,080	1 95	(i) 495,754	(i) 15.1
1894.....	3,847,070	7,429,468	1 93	(i) 63,571	(i) 1.7
1895.....	3,478,344	6,739,153	1 94	(d) 368,726	(d) 9.6
1896.....	3,745,716	7,226,462	1 93	(i) 267,372	(i) 7.7
1897.....	3,786,107	7,303,597	1 93	(i) 40,391	(i) 1.1
1898.....	4,173,108	8,224,288	1 97	(i) 387,001	(i) 10.2
1899.....	4,925,051	10,283,497	2 09	(i) 751,943	(i) 18.0
1900.....	5,777,319	13,742,178	2 38	(i) 852,268	(i) 17.3
1901.....	6,486,325	12,699,243	1 96	(i) 709,006	(i) 12.3
1902.....	7,466,681	15,210,877	2 04	(i) 780,356	(i) 15.1
1903.....	7,960,364	15,942,833	2 00	(i) 493,683	(i) 6.6
1904.....	8,254,595	16,592,231	2 01	(i) 294,231	(i) 3.7
1905.....	8,667,948	17,520,263	2 02	(i) 413,353	(i) 5.0
1906.....	9,762,601	19,732,019	2 02	(i) 1,004,653	(i) 12.6
1907.....	10,511,426	24,381,842	2 32	(i) 748,825	(i) 7.7
1908.....	10,886,311	25,194,573	2 32	(i) 374,885	(i) 3.5
1909.....	10,501,475	25,781,236	2 36	(d) 384,836	(d) 3.5
1910.....	12,909,152	30,909,779	2 39	(i) 2,407,677	(i) 22.93

\*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)..... 480,785 " 2,000 "

## EXPORTS AND IMPORTS.

The statistics of exports and imports of coal as given in tables following have been compiled from the reports of the Department of Customs. The total exports during 1910 were 2,377,049 tons valued at \$6,077,350, or \$2.56 per ton, as compared with exports in 1909 of 1,588,099 tons valued at \$4,456,342, or \$2.81 per ton. An increase in exports is, therefore, shown in 1910 of 788,950 tons, or about 49.7 per cent.

The total imports during 1910 were 10,597,982 tons valued at \$28,450,001, as compared with imports in 1909 of 9,872,924 tons valued at \$26,831,859, showing an increase in imports of 725,058 tons or 7.3 per cent.

Statistics of exports during 1908-9-10 showing the principal countries of destination are given in Table 4, and annual exports since 1873 in Table 5.

COAL.—TABLE 4.

## Exports of Coal produced in Canada during 1908-9-10.

Exported to	1908.		1909.		1910.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$
Great Britain.....	5,557	18,065	10,671	36,403	5,872	18,901
United States.....	1,385,223	3,564,390	1,240,519	3,357,111	1,947,287	4,583,626
Newfoundland.....	194,034	532,121	175,801	493,040	203,626	574,157
Other countries.....	145,019	546,801	161,108	569,788	220,264	900,666
Totals.....	1,729,833	4,661,377	1,588,099	4,456,342	2,377,049	6,077,350

The United States is the principal market for Canadian coal exported, that country having taken about 81.9 per cent of the total exports in 1910. There were exported to Newfoundland 203,626 tons or 8.6 per cent of the total. Exports to other countries of 220,264 tons include 41,270 tons to Mexico and 29,108 tons to Australia. Considerable tonnages are also exported to Bermuda, St. Pierre, Cuba, Japan, and many other points.

COAL.—TABLE 5.

## Exports.

Calendar Year.	Produce of Canada.	Not the Produce of Canada.	Calendar Year.	Produce of Canada.	Not the Produce of Canada.
	Tons.	Tons.		Tons.	Tons.
1873.....	420,633	5,403	1892.....	823,733	93,988
1874.....	310,988	12,859	1893.....	960,312	102,827
1875.....	250,348	14,026	1894.....	1,103,694	89,786
1876.....	248,638	4,995	1895.....	1,011,235	96,836
1877.....	301,317	4,829	1896.....	1,106,661	116,774
1878.....	327,959	5,468	1897.....	986,130	101,843
1879.....	306,648	8,468	1898.....	1,150,029	99,189
1880.....	432,188	14,217	1899.....	1,293,169	101,004
1881.....	395,332	14,245	1900.....	1,787,777	62,776
1882.....	412,682	37,576	1901.....	1,573,661	53,894
1883.....	486,811	44,888	1902.....	2,090,268	23,453
1884.....	474,405	62,665	1903.....	1,954,629	27,138
1885.....	427,937	71,003	1904.....	1,557,412	27,308
1886.....	520,703	78,443	1905.....	1,635,287	86,792
1887.....	580,965	89,098	1906.....	1,835,041	44,758
1888.....	588,627	84,316	1907.....	1,894,074	101,773
1889.....	665,315	89,294	1908.....	1,729,833	102,071
1890.....	724,486	82,534	1909.....	1,588,099	161,098
1891.....	971,259	77,827	1910.....	2,377,049	159,859



Coal imported is subdivided into three classes: anthracite, including anthracite dust; bituminous round and run of mine; and bituminous slack such as will pass through a  $\frac{3}{4}$ " screen. The imports of anthracite in 1910 were 3,266,235 tons valued at \$14,735,062, an average of \$4.51 per ton, thus showing an increase of 248,391 tons over the 1909 imports. The imports of bituminous round and run of mine in 1910 were 5,966,466 tons valued at \$11,919,341, an average of \$1.99 per ton; showing an increase of 341,403 tons or 6.1 per cent over the 1909 imports. The imports of bituminous slack in 1910 were 1,365,281 tons valued at \$1,795,598 or an average of \$1.32 per ton, showing an increase of 135,264 tons or about 11 per cent over the 1909 imports.

COAL.—TABLE 6.  
Imports of Coal into Canada.

Fiscal Year.	BITUMINOUS COAL.		ANTHRACITE COAL AND ANTHRACITE DUST.		BITUMINOUS COAL DUST.	
	Tons.	Value	Tons.	Value.	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	2,060,356	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	1,218,027	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	3,209,025	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	2,004,137	12,093,371	650,261	345,456
1906.....	4,495,550	8,360,348	2,200,863	10,304,308	747,251	489,180
Calendar Year.	Bituminous round and run of mine.				Bituminous slack such as will pass through a $\frac{3}{4}$ " screen.	
1907.....	6,370,152	13,232,445	3,141,873	14,506,129	1,139,256	1,121,949
1908.....	6,025,574	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.....	a 5,966,466	b 11,919,341	b 3,266,235	14,735,062	c 1,365,281	1,795,598

(a). Duty, 53c. per ton. (b) Coal, anthracite, and anthracite coal dust; duty free. (c). Duty 14c. 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 50c. 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.

The total consumption of coal in Canada during 1910, deduced from the records of production, exports and imports, was 20,970,226 tons, as compared with 18,625,202 tons in 1909; an increase of 2,345,024 tons or 12.6 per cent. Of the total consumption during the past year 10,532,103 tons or 50.2 per cent was domestic coal and 10,438,123 imported coal.

The per capita consumption in 1910, based on an estimate of the population made by the Census Office, was approximately 2.800 tons. This is larger than the per capita consumption during 1909, but less than the per capita consumption during the two preceding years. The consumption in Canada is still small when compared with that of the United States, where the production has reached a total of about 5 tons per capita.

#### Consumption of Coal in Canada, 1909-10.

	1909.		1910.	
	Tons.	Tons.	Tons.	Tons.
Production, Table 3.....	10,501,475		12,909,152	
Exports of Canada, Table 4.....	1,588,099		2,377,049	
Home consumption of Canadian coal.....		8,913,376		10,532,103
Imports, Table 6.....	9,872,924		10,537,982	
Exports not produce of Canada, Table 4.....	161,098		159,859	
Canadian consumption of imported coal.....		9,711,826		10,438,123
Total consumption of coal in Canada.....		18,625,202		20,970,226

#### COAL.—TABLE 7.

#### Consumption of Coal in Canada, 1886-1910.

Calendar Year.	Canadian.	Imported.	Total.	Percentage Canadian.	Percentage Imported.	Consumption per capita.
	Tons.	Tons.	Tons.			Tons.
1886.....	1,595,950	1,884,161	3,480,111	45.9	54.1	0.758
1887.....	1,848,365	2,192,260	4,040,625	45.7	54.3	0.871
1888.....	2,013,925	3,314,353	5,328,278	37.8	62.2	1.137
1889.....	1,992,988	2,400,931	4,483,919	44.4	55.6	0.946
1890.....	2,360,196	2,581,187	4,941,383	47.8	52.2	1.031
1891.....	2,606,490	2,980,222	5,586,712	46.7	53.3	1.153
1892.....	2,464,012	3,082,429	5,546,441	44.4	55.6	1.133
1893.....	2,823,187	3,110,462	5,933,649	47.6	52.4	1.198
1894.....	2,743,376	2,917,818	5,661,194	48.5	51.5	1.130
1895.....	2,467,109	2,933,752	5,400,861	45.7	54.3	1.066
1896.....	2,639,055	3,206,456	5,845,511	45.1	54.9	1.140
1897.....	2,799,977	3,124,485	5,924,462	47.3	52.7	1.143
1898.....	3,023,079	3,274,981	6,298,060	48.0	52.0	1.200
1899.....	3,631,882	4,092,361	7,724,243	47.0	53.0	1.454
1900.....	3,989,542	4,361,563	8,351,105	47.8	52.2	1.561
1901.....	4,912,664	4,810,213	9,722,877	50.5	49.5	1.810
1902.....	5,376,413	5,165,938	10,542,351	51.0	49.0	1.927
1903.....	6,005,735	5,491,870	11,507,605	52.2	47.8	2.055
1904.....	6,697,183	6,909,651	13,606,834	49.2	50.8	2.346
1905.....	7,032,661	7,343,880	14,376,541	48.9	51.1	2.396
1906.....	7,927,560	7,398,906	15,326,466	51.7	48.3	2.425
1907.....	8,617,352	10,549,503	19,166,855	45.0	55.0	2.946
1908.....	9,156,478	10,195,424	19,351,902	47.3	52.7	2.826
1909.....	8,913,376	9,711,826	18,625,202	47.9	52.1	2.599
1910.....	10,532,103	10,438,123	20,970,226	50.2	49.8	2.800

### Nova Scotia.

The production of coal in Nova Scotia during 1910 was reported as 6,431,142 tons as compared with a production of 5,652,089 tons in 1909, showing an increase of 779,053 tons or about 14 per cent. This increase, however, was not sufficient to place the production as high as that recorded for 1908, when the production was 6,652,539 tons. The falling off of 1,000,450 tons in 1909 was probably due in part to the coal miners strike at Sydney, Inverness, and Cumberland which took place in July and August of that year and continued through the first few months of 1910. During the first five months of 1909, however, the demand for coal was apparently much less than during the corresponding period of 1908, as evidenced by the falling off in shipments from nearly all collieries during that period.

The yearly production of coal in this Province has not shown any great change during the past five years with the exception of that just noted for 1909. The average yearly production during this period was 6,262,081 tons.

Of the production in 1910 the quantity sold for consumption in Canada was reported as 5,003,933 tons, while 356,089 tons were reported as sold for export to the United States and 223,748 tons sold for export to other countries; 663,812 tons were used by colliery consumption and by workmen, and 183,560 tons were used by colliery operators in making coke. Some of the coal sold for consumption in Canada was also used in making coke, the total tonnage used for coke making being 756,003 tons.

Annual statistics of the output, sales, colliery consumption, and production since 1872 are shown in Table 8, the figures being given in both long and short tons; the production by counties during the past five years is shown in Table 9. The record in each case covers the calendar year. Of the total output in 1910 about 77.3 per cent was mined in Cape Breton county, 11 per cent in Pictou county, 5.4 per cent in Cumberland county, and 6.3 per cent in Inverness and other counties.

The Provincial Department of Mines in this Province collects and publishes statistics of coal production covering the fiscal year ending September 30.

The details of colliery output during the year ending September 30, 1910, as published in the Provincial Mines Report, are shown below; while the colliery output during the last three fiscal years is shown in Table 10 and the distribution of coal sold during the same periods in Table 11.

COAL.—TABLE 8.

## Nova Scotia: Output, Sales, Colliery Consumption, and Production.

Calendar Year.	Output, Tons, 2,240 lbs.	Sold or used, Tons, 2,240 lbs.	Colliery Consump- tion, Tons, 2,240 lbs.	Production,* Tons, 2,240 lbs.	Output, Tons, 2,000 lbs.	Sold or used, Tons, 2,000 lbs.	Colliery Consump- tion, Tons, 2,000 lbs.	Production,* Tons, 2,000 lbs.	Price per Ton, 2,240 lbs.	Value of Production.
									\$	\$
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	735,906	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	1,069,218	108,451	1,777,669	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	2,658,152
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	2,508,570	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	2,403,554	1 75	3,806,170
1898.....	2,262,656	2,121,136	187,428	2,288,554	2,584,175	2,375,661	187,519	2,563,180	1 75	4,004,970
1899.....	2,365,443	2,633,939	177,460	2,811,449	3,209,296	2,950,067	138,775	3,148,322	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

\*This production is obtained by adding sales and colliery consumption.  
Table continued on page 14.

COAL.—TABLE 8—Continued.

Nova Scotia: Output, Sales, Colliery Consumption, and Production.

Calendar Year.	Output, Tons, 2,240 lbs.	Sold or used, Tons, 2,240 lbs.	Colliery Consump- tion, Tons, 2,240 lbs.	Production,* Tons, 2,240 lbs.	Output, Tons, 2,000 lbs.	Sold or used, Tons, 2,000 lbs.	Colliery Consump- tion, Tons, 2,000 lbs.	Production,* Tons, 2,000 lbs.	Price per Ton, 2,240 lbs.	Value of Production.
1902.....	4,725,480	4,229,120	379,198	4,608,318	5,292,538	4,736,614	424,702	5,161,316	\$ cts. 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
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	522,479	5,046,508	5,718,871	5,066,912	585,177	5,652,039	2 25	11,354,643
1910.....	5,817,109	5,149,402	592,689	5,742,091	6,515,162	5,767,330	663,812	6,431,142	2 25	12,919,705

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

COAL.—TABLE 9.

## Nova Scotia: Coal trade by Counties, Calendar Years 1906-7-8-9-10.

Calendar Year.	CUMBERLAND.		PICTOU.		CAPE BRETON.		OTHER COUNTIES.		TOTAL.	
	Raised.	Sales.*	Raised.	Sales.*	Raised.	Sales.*	Raised.	Sales.*	Raised.	Sales.*
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

\*Includes coal used for making coke.







## New Brunswick.

The coal production in New Brunswick is derived from the Grand Lake coal-field, in Queens county, where a comparatively large number of small mines are intermittently operated. Only about 50 per cent of the production has been directly reported by the producers.

The actual shipments during 1910 are estimated by the provincial Department of Works at 53,455 tons. Adding 2,000 tons for colliery consumption, workmen, etc., the production is placed at 55,455 tons, a slight increase over the production of 1909.

COAL.—TABLE 12.

## New Brunswick: Production.

Calendar Year.	Tons.	Value.	Value per ton.	Calendar Year.	Tons.	Value.	Value per ton.
		\$	\$ cts.			\$	\$ cts.
1887.....	10,040	23,607	2 35	1899.....	10,528	15,792	1 50
1888.....	5,730	11,050	1 93	1900.....	10,000	15,000	1 50
1889.....	5,673	11,733	2 07	1901.....	17,630	51,857	2 94
1890.....	7,110	13,850	1 95	1902.....	13,795	39,680	2 11
1891.....	5,422	11,030	2 03	1903.....	16,000	40,000	2 50
1892.....	6,768	9,375	1 39	1904.....	9,112	18,224	2 00
1893.....	6,200	9,837	1 59	1905.....	29,400	58,800	2 00
1894.....	6,469	10,264	1 59	1906.....	34,076	68,152	2 00
1895.....	9,500	14,250	1 50	1907.....	34,584	77,814	2 25
1896.....	7,500	11,250	1 50	1908.....	60,000	135,000	2 25
1897.....	6,000	9,000	1 50	1909.....	49,029	98,496	2 25
1898.....	6,160	9,240	1 50	1910.....	55,455	110,910	2 00

## Saskatchewan.

Returns were recorded from 12 separate collieries in this Province during 1910, showing a total production of 181,156 tons valued at \$293,923; a slight decrease from the production reported for 1909.

Of the 1910 production 173,084 tons were sold for consumption in Canada and 8,072 tons used by the producers for colliery consumption and workmen.

The output is obtained entirely from the Estevan and Souris fields in the southern portion of the Province and is used mainly for domestic purposes in Saskatchewan and Manitoba.

Statistics of production since 1890 are given in Table 13:—

## COAL—TABLE 13.

## Saskatchewan: Annual Production.

Calendar Year.	Tons.	Value.	Average value per ton.	Calendar Year.	Tons.	Value.	Average value p. r ton.
		\$	\$ cts.			\$	\$ cts.
1890.....	200	200	1 00	1901.....	45,000	72,000	1 60
1891.....				1902.....	70,400	112,640	1 52
1892.....	5,400	9,325	1 73	1903.....	116,703	169,618	1 45
1893.....	8,325	12,485	1 50	1904.....	124,885	187,021	1 50
1894.....	†15,051	15,153	1 01	1905.....	107,596	152,334	1 42
1895.....	15,769	31,533	2 00	1906.....	108,398	164,146	1 51
1896.....	16,706	25,059	1 50	1907.....	151,232	252,437	1 67
1897.....	25,000	37,500	1 50	1908.....	150,556	253,790	1 69
1898.....	25,000	37,500	1 50	1909.....	192,125	296,339	1 54
1899.....	25,000	37,500	1 50	1910.....	181,156	293,923	1 62
1900.....	40,500	60,750	1 50				

† Including a small quantity from the Turtle Mountain district, Manitoba.

## Alberta.

The production of marketable coal in Alberta in 1910, according to direct returns received from the operators, supplemented in several instances by information kindly furnished by the Provincial Inspector of Mines, was 2,894,469 tons valued at \$7,065,736, an average of \$2.44 per ton; showing an increase of 899,728 tons or 45 per cent over the 1909 production. Of the total production in 1910, 2,309,438 tons were sold for consumption in Canada; 243,371 tons for export to the United States. The producers used 145,410 tons for colliery consumption and for workmen and 196,250 tons were used in making coke. The railways use a very large portion of the coal production in this Province, having taken in 1909 upwards of 45.7 per cent of the total sold for consumption in Canada. In 1910 the Canadian Pacific railway alone took for the Company's use over 46 per cent of the total Alberta tonnage sold for consumption in Canada.

## COAL.—TABLE 14.

## Alberta: Annual Production.

Calendar Year.	Tons	Value.		Average value per ton.	Calendar Year.	Tons.	Value.		Average value per ton.
		\$	\$ cts.				\$	\$ cts.	
1887.....	74,152	157,577	2 13		1899.....	309,600	774,000	2 50	
1888.....	115,124	183,354	1 59		1900.....	311,450	778,625	2 50	
1889.....	97,364	179,640	1 85		1901.....	340,275	850,687	2 50	
1890.....	128,753	198,293	1 54		1902.....	402,819	960,601	2 38	
1891.....	174,131	437,243	2 51		1903.....	495,893	1,117,541	2 25	
1892.....	178,970	460,605	2 57		1904.....	661,732	1,404,524	2 12	
1893.....	230,070	536,260	2 55		1905.....	931,917	1,993,915	2 14	
1894.....	184,940	473,827	2 56		1906.....	1,246,360	2,614,762	2 10	
1895.....	169,885	382,526	2 25		1907.....	1,591,579	3,836,286	2 41	
1896.....	209,162	581,832	2 78		1908.....	1,685,661	4,127,311	2 45	
1897.....	242,163	630,408	2 60		1909.....	1,994,741	4,838,109	2 43	
1898.....	315,088	788,720	2 50		1910.....	2,894,469	7,065,736	2 44	

About 8 per cent of the production in Alberta is anthracite coal, the balance being bituminous and lignite. The only operating anthracite mine at present is the Bankhead mine at Banff.

The anthracite is very carefully prepared and sized for the market and in its preparation much dust is produced; a part of this dust is manufactured into briquettes which find a ready market for domestic use.

The statistics of production of coal in Alberta as collected by the Provincial Inspector of Mines show a somewhat larger output than that given above. According to this authority the total coal output in 1910 was 3,036,757 tons. The distribution of coal sold and used was as follows:—

**Classification and Distribution of Coal Output of Alberta during the Year 1910.**

Class.	SOLD FOR CONSUMPTION IN			Used for making coke	Used under colliery boilers.	Total sold or used.
	Alberta.	Other Provinces.	United States.			
Bituminous.....	1,291,721	124,274	215,976	196,249	170,465	2,975,595
Lignite.....	438,781	317,959	27,397			
Anthracite.....	40,091	43,110	758			
Briquettes.....	89,383	19,387	44			
	1,859,976	504,730	244,175	196,249	170,465	2,975,595

The annual production of anthracite since 1901 according to the published records of the Provincial Inspector of Mines has been as follows:—

#### Production of Anthracite in Alberta.

1901.....	14,742 Tons.	1906.....	235,597 Tons.
1902.....	16,587 "	1907.....	256,115 "
1903.....	5,185 "	1908.....	249,095 "
1904.....	23,363 "	1909.....	213,257 "
1905.....	43,653 "		

#### British Columbia.

The total production of coal in British Columbia during 1910, including only marketable coal sold or used, was 3,330,745 tons valued at \$10,408,580, as compared with a production of 2,606,127 tons valued at \$8,144,147 produced in 1909; showing an increase of 724,618 tons, or nearly 28 per cent.

Of the total production in 1910, 1,400,405 tons or 42 per cent were sold for consumption in Canada, as compared with 1,096,935 tons or 42.1 per cent similarly disposed of in 1909; 1,248,483 tons or 37.5 per cent were sold for export to the United States in 1910, as against 759,537 tons or 29.1 per cent in 1909; and 67,525 tons were sold for export to other countries, as against 71,130 tons in 1909. The quantity used by producers in making coke in 1910 was 379,893 tons or 11.4 per cent of the production, as against 439,290 tons or 16.9 per cent in 1909; and the quantity used by producers under colliery boilers and for workmen in 1910 was 234,439 tons, as against 239,235 tons in the previous year.

There were also mined in 1910, but not included as production, 39,389 tons of coal added to stock at the close of the year and 160,337 tons of 'waste' coal lost chiefly in washing.

The collieries of the Crow's Nest Pass Coal Company in East Kootenay, the Western Fuel Company and The Canadian Collieries (Dunsmuir) Ltd., formerly the Wellington Colliery Co.—on Vancouver island, contributed about 70.6 per cent of the total production, which was almost equally divided between the Vancouver Island collieries and those of the Crowsnest pass and the central portion of the Province. The production of the island and mainland collieries is separately shown in the following table:—

Coal.	1909.			1910.		
	Coast.	Crowsnest and Nicola valley.	Total.	Coast.	Crowsnest and Nicola valley.	Total.
		Short Tons			Short Tons	
Sold for consumption in Canada.....	874,918	222,016	1,096,934	1,015,821	384,584	1,400,405
Sold for export to United States.....	363,696	395,842	759,538	403,370	845,113	1,248,483
Sold for export to other countries.....	71,130	.....	71,130	67,525	.....	67,525
Total Sales.....	1,309,744	617,858	1,927,602	1,486,716	1,229,697	2,716,413
Used for making coke.....	29,971	409,319	439,290	5,230	374,662	379,892
Used for colliery consump- tion.....	79,100	160,135	239,235	135,864	98,576	234,440
Production.....	1,418,815	1,187,312	2,606,127	1,627,810	1,702,935	3,330,745

In Table 15 the statistics of coal production in British Columbia since 1836 are given. The total production to the end of 1910 has been 40,106,909 tons (2,000 lbs.) of which 21,994,327 tons or 54.8 per cent have been produced during the past ten years.

## COAL.—TABLE 15.

## British Columbia: Production.

Calendar Year.	Output, Tons, 2,240 lbs.	Home Consumption, Tons, 2,240 lbs.	Sold for Export, 2,240 lbs.	PRODUCTION.*		Price per ton, 2,240 lbs.	Value.
				Tons, 2,240 lbs.	Tons, 2,000 lbs.		
						\$ cts.	\$
1836-52.....	10,000				11,200	4 00	40,000
1852-59.....	25,308				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.....	21,845				23,906	4 00	85,330
1864.....	23,632				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	164,632	190,848	213,750	3 00	572,544
1879.....	241,801	40,294	192,096	232,390	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	64,736	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	1,005,576
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	563,249	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	944,633	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	635,667	914,184	1,599,851	1,791,833	3 00	4,799,553
1901.....	1,691,557	799,666	914,163	1,713,329	1,919,488	3 00	5,141,487
1902.....	1,641,626	837,871	776,809	1,614,630	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	2,364,893	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.....	2,388,166	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	10,408,580

\*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.

Complete statistics of the production of each colliery have been published by the British Columbia Bureau of Mines, from which the following has been compiled:—

Coal Production by Collieries in British Columbia in 1910, in tons of 2,240 lbs.

Colliery.	SALES.				Used in Making Coke.	Used under Colliery Boilers, etc.	Lost in Washing.	Stocks.		Output.
	In Canada.	To United States.	To Other Countries.	Total.				First of Year.	Last of Year.	
1. Protection.....	187,923	133,360	10,583	331,866		31,439		8,327	9,711	364,689
Northfield.....	36,035	77,776	6,535	120,346		28,495		2,605	1,945	148,181
2. Extension.....	251,208	72,920		324,128		12,467	43,812	1,906	1,981	380,482
Union.....	308,266	48,623	25,873	382,762	4,670	37,355	79,790	6,986	20,335	518,426
3. Fiddick.....	92,701	27,473	17,299	137,473		10,305	11,602	13,238	25,829	171,971
Suquash.....	766			766		1,000		1,050	2,123	2,839
4. New East Wellington.....	29,542			29,542				200	100	29,442
5. Middlesboro.....	138,681			138,681		2,987		440	259	141,487
6. Princeton.....	6,278	3,570		9,848		300			†1,720	11,868
7. Coal Creek.....	41,110	431,772		472,882	118,432	29,756		36	1,530	622,564
Michel.....	77,290	204,525		281,815	147,134	28,500		27	159	457,581
Carbonado.....	*	*	*	*	*	*		*	*	*
8. Hosmer.....	54,098			54,098	68,953	22,086	11,073	1,475	3,388	158,123
9. Corbin.....	10,080	114,790		124,870		1,981				126,581
10. Diamond Vale.....	2,261			2,261		100			70	2,431
11. Coal Hill.....	2,200			2,200		100				2,300
	1,238,439	1,114,809	60,290	2,413,538	339,189	206,871	146,277	36,290	69,650	3,139,235

\*Not in operation. †Development coal not marketed.

1. The Western Fuel Co.
2. The Canadian Collieries (Dunsmuir), Ltd.
3. Pacific Coast Coal Mines, Ltd.
4. The Vancouver-Nanaimo Coal Mining Co., Ltd.
5. Nicola Valley Coal and Coke Co., Ltd.
6. Princeton Coal and Land Co., Ltd.

7. Crow's Nest Pass Coal Co., Ltd.
8. Hosmer Mines, Ltd.
9. Corbin Coal and Coke Co., Ltd.
10. Diamond Vale Collieries, Ltd.
11. Coal Hill Syndicate.

## Yukon.

The coal production in the Yukon in 1910 was reported as 16,185 tons valued at the mine at \$110,925, as compared with a production of 7,364 tons valued at \$49,502 in 1909. Active mining operations were carried on only by the Five Fingers Coal Co. at Tantalus, in the southern Yukon, and by the Northern Light, Power, and Coal Co., Ltd., operating the Sourdough mine on Coal creek, 40 miles northwest of Dawson.

Statistics of production from 1901 are shown in Table 16 following:—

COAL.—TABLE 16.

## Yukon Territory: Annual Production.

Calendar Year.	Tons.	Value.	Average value per ton.
		\$	\$ cts.
1901.....	15,864	86,230	14 70
1902.....	4,910	37,230	7 59
1903.....	1,849	29,584	16 00
1904.....			
1905.....	7,000	21,000	3 00
1906.....	7,000	23,000	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

†Part of this production was mined in 1900.



## COKE.

The statistics of coke production given herewith do not include coke made as a by-product in the manufacture of illuminating gas but are restricted to the record of the output of 'oven coke' produced chiefly for metallurgical purposes.

The total output of coke in 1910 was 901,269 tons produced from 1,373,793 tons of coal: of which 875,310 tons were produced from domestic coal and 25,959 tons from imported coal.

In 1909 the total production was 871,727 tons produced from 1,327,150 tons of coal.

The quantity of coke sold or used by the producers in 1910 was 902,715 tons, as compared with 862,011 tons in 1909.

The consumption of coke in Canada is much in excess of the domestic production, there being a considerable importation of coke chiefly into Ontario and Quebec for use in the metallurgical industries.

The imports of coke during the calendar year 1910 were 737,088 tons and the exports 57,971. These figures taken in conjunction with the production of 902,715 tons (sold or used), would indicate a consumption of 1,581,832 tons. Similarly estimated the consumption in 1909 was 1,449,369 tons and in 1908 1,285,228 tons.

The production by provinces in 1909 and 1910 and the distribution of coke sold or used in 1910 are shown in the next three tables.

### Coke Production, 1909.

Province.	Coal charged to Ovens.	Output of Coke.	STOCK ON HAND.		Coke sold or used.	Value of Sales, etc.
			Jan. 1.	Dec. 31.		
			Tons.	Tons.		
Nova Scotia.....	756,719	493,184	209	401	492,992	1,608,092
Alberta.....	131,142	87,812	750	1,329	87,233	366,734
British Columbia.....	439,289	290,731	10,170	19,115	281,786	1,509,567
Totals.....	1,327,150	871,727	11,129	20,845	862,011	3,484,393

### Coke Production, 1910.

Nova Scotia.....	756,003	508,025	417	384	508,058	1,655,775
Ontario.....	42,208	25,959	.....	1,274	24,685	148,110
Alberta.....	196,250	123,093	40	1,555	121,578	486,312
British Columbia.....	379,332	244,192	18,759	14,557	243,334	1,172,675
Totals.....	1,373,793	901,269	19,216	17,770	902,715	3,462,872

## Distribution of Coke Production, 1910.

	Nova Scotia.	Ontario.	Alberta.	British Columbia.	Total.
Sold in Canada.....	8,341		70,434	229,541	308,316
Sold for export.....			51,144	9,778	60,922
Total sales.....	8,341		121,578	239,319	369,238
Used by maker in blast furnace or otherwise.....	499,717	24,685		9,075	533,477
Total sold or used.....	508,058	24,685	121,578	248,394	902,715
Number of ovens in operation December 31.....	654	96	266	662	1,678
Number of ovens idle December 31.....	174	4		908	1,086
Number of ovens building December 31.....	120	110			230

The annual production of coke since 1886 is shown in Table 1 and the annual production by provinces since 1897, in Table 2.

COKE.—TABLE 1.

## Annual Production, 1886-1910.

Calendar Year.	Tons.	Value.	Value per ton.	Calendar Year.	Tons.	Value.	Value per ton.
		\$	\$ cts.			\$	\$ cts.
1886.....	35,396	101,940	2 88	1899.....	100,820	350,022	3 47
1887.....	40,428	135,951	3 36	1900.....	157,134	649,140	4 13
1888.....	45,373	134,181	2 90	1901.....	365,531	1,228,225	3 36
1889.....	54,539	155,043	2 84	1902.....	502,043	1,519,185	3 03
1890.....	56,450	166,298	2 95	1903.....	561,318	1,734,404	3 09
1891.....	57,084	175,592	3 08	1904.....	554,033	2,032,043	3 66
1892.....	56,135	160,249	2 85	1905.....	700,488	2,436,211	3 48
1893.....	61,078	161,790	2 65	1906.....	782,055	2,863,503	3 66
1894.....	58,044	148,551	2 56	1907.....	842,003	3,533,463	4 26
1895.....	53,356	143,047	2 68	1908.....	858,257	3,449,361	4 02
1896.....	49,619	110,257	2 22	1909.....	862,011	3,484,393	4 04
1897.....	60,686	176,457	2 91	1910.....	902,715	3,462,872	3 84
1898.....	87,600	286,000	3 26				

## COKE.—TABLE 2.

## Production of Coke by Provinces, 1897-1910.

Calendar Year.	NOVA SCOTIA.		ONTARIO.		BRITISH COLUMBIA		ALBERTA.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.	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			189,573	846,310		
1904.....	275,927	803,022			257,172	1,148,090	20,984	78,936
1905.....	386,366	1,054,712			269,256	1,202,035	44,866	179,464
1906.....	476,364	1,540,976			236,205	1,054,485	69,486	268,042
1907.....	524,110	1,688,070			241,572	1,049,432	76,321	297,595
1908.....	505,929	1,658,151			270,683	1,482,191	75,645	309,019
1909.....	492,992	1,603,092			281,786	1,509,567	87,233	366,734
1910.....	508,058	1,655,775	24,685	148,110	248,394	1,172,675	121,578	486,312

Coke is made in Nova Scotia principally at Sydney and Sydney Mines, but also at Westville, Stellarton, and Londonderry. This Province in 1910 produced about 56 per cent of the total for Canada and the output is used almost entirely in the manufacture of iron. In Ontario coke is made by the Atikokan Iron Company at Port Arthur for use in the Company's blast furnace. By-product ovens are also being erected by the Algoma Steel Co., at Sault Ste. Marie, to supply fuel for the Company's blast furnaces. For both these plants coal is imported from the United States. In Alberta coke ovens are operated at Coleman and Lille near Blairmore, and in British Columbia at Fernie, Michel, Carbonado, and Hosmer in the Crownsnest pass, and at Union bay, Vancouver island. The coke output of these Provinces is used chiefly by the copper and lead smelters; finding a market in the United States as well as in British Columbia.

The total number of ovens in active operation on December 31 was 1,678; while 1,086 were reported idle on the same date and 230 in course of construction. In Nova Scotia the Dominion Iron & Steel Company at Sydney has 500 finished ovens and 120 in course of construction, all of the Otto Hoffman by-product type. The by-products from these ovens include tar and ammonia. The tar is sold to the Dominion Tar and Chemical Company, whose works are contiguous to the coke oven plant, and this product is further treated for the manufacture of refined tar, pitch of various grades, benzole, creosote, carbolic acid, etc. The production of tar in 1910 was 3,963,591 gallons and ammonia liquor containing 3,491 tons of sulphate of ammonia. In 1909 the production of tar was 4,016,824 gallons and of sulphate of ammonia 3,351 tons; and in 1908, tar 4,450,166 gallons and sulphate of ammonia 2,984 tons. The Nova Scotia Steel and Coal Company

has 30 ovens of the Bauer type and 120 Bernard ovens; the latter are situated near the blast furnace and the surplus gas is used for the production of steam for the electric power plant. The surplus gas from the Bauer ovens is used in generating steam for general colliery use. The other ovens in this Province number 178 and are all of the beehive type. The Atikokan Iron Co., Ltd., has 100 beehive ovens at Port Arthur, Ontario, and the Algoma Steel Company is erecting 110 Koppers by-product regenerative coke ovens at Sault Ste. Marie. The Company has acquired and is operating coal lands in West Virginia for its supply of coal.

In Alberta the West Canadian Collieries, Ltd., at Lille, has 50 ovens of the Bernard or Belgian type. The ovens of the International Coal and Coke Company at Coleman, 216 in number, are the ordinary beehive as are also the ovens in British Columbia, comprising 1,420 in the Crowsnest district and 150 on Vancouver island.

Statistics of exports and imports of coke, as published by the Customs Department, are shown in Tables 3 and 4 following. The exports are almost altogether from British Columbia, and recently from Alberta, and the imports are from the United States, chiefly for consumption in the iron and steel and smelting industries of Ontario and Quebec.

COKE.—TABLE 3.

## Exports of Coke to the United States, 1897-1910.

Calendar Year.	Tons.	Value.	Calendar Year.	Tons.	Value.
		\$			\$
1897.....	2,987	6,078	1904.....	102,463	345,031
1898.....	3,774	8,394	1905.....	116,071	509,908
1899.....	5,557	18,726	1906.....	37,003	168,571
1900.....	41,529	131,278	1907.....	70,617	320,357
1901.....	57,505	176,990	1908.....	58,708	248,759
1902.....	62,568	180,920	1909.....	74,067	329,051
1903.....	32,608	135,957	1910.....	57,971	250,715

COKE.—TABLE 4.

## Imports of Oven Coke, 1880-1910.

Fiscal Year.	Tons.	Value.	Fiscal Year.	Tons.	Value.
		\$			\$
1880.....	3,837	19,353	1895.....	43,235	149,434
1881.....	5,492	26,123	1896.....	61,612	203,826
1882.....	8,157	36,670	1897.....	83,330	267,540
1883.....	8,943	38,588	1898.....	135,060	347,040
1884.....	11,207	44,518	1899.....	141,234	362,826
1885.....	11,564	41,391	1900.....	187,878	506,839
1886.....	11,858	39,756	1901.....	308,786	680,138
1887.....	15,110	56,222	1902.....	267,142	842,815
1888.....	25,487	102,334	1903.....	256,723	1,222,756
1889.....	29,557	91,902	1904.....	221,050	765,123
1890.....	36,564	133,344	1905.....	371,593	807,842
1891.....	38,533	177,605	1906.....	480,222	1,311,375
1892.....	43,499	194,429	1907*.....	400,536	1,132,680
1893.....	41,821	156,277	1908.....	619,269	2,166,036
1894.....	42,864	176,996	1909.....	466,292	1,136,624
			1910†.....	702,053	1,695,603

\*For nine months only. †Duty free.

Coke is manufactured from coal mined in five of the coal basins in Canada, viz.: the Sydney field, the Pictou field, both in Nova Scotia; the Frank-Blairmore field in southwestern Alberta; the Crowsnest field in East Kootenay, and the Comox field on Vancouver island, both of the latter in British Columbia.

The following table shows the proportionate yield in coke from the coals in the various fields charged into the ovens. These percentages of coke produced relatively to the coal charged have been compiled from the returns of the last six years:—

Year.	Sydney Field.	Pictou Field.	Frank-Blairmore Field.	Crowsnest Field.	Comox Field, Vancouver Island.
1905.....	62.90	50.22	65.14	64.38	49.61
1906.....	63.65	53.41	66.74	62.29	38.90
1907.....	64.22	54.81	65.36	63.97	49.10
1908.....	66.42	55.81	58.92	65.08	49.73
1909.....	65.24	59.17	66.96	67.67	58.26
1910.....	67.32	60.36	62.72	65.39	60.68
Average*.....	65.08	53.35	64.01	64.79	54.20

\*The average has been computed from the total coal charged during the six years, and the total coke output resulting.

In the Sydney field the ovens used are all by-product ovens, whereas the coal of the Pictou field is made into coke in beehive ovens. We may here mention that a certain amount of Springhill coal, Cumberland field, is mixed with this coal, which it has not been possible to separate to calculate the yield in coke.

In the Blairmore field both Belgian ovens and beehive ovens are used. On Vancouver island the coke is made in beehive ovens.

It may be interesting to point out that in this last field, only the fine screenings are used in the manufacture of coke. This coal is thoroughly washed before being charged into the ovens, and the refuse resulting from this treatment often amounts to 50 per cent. This refuse is rejected, and only the washed coal is charged into the ovens. The yield is computed from the quantity of washed coal.