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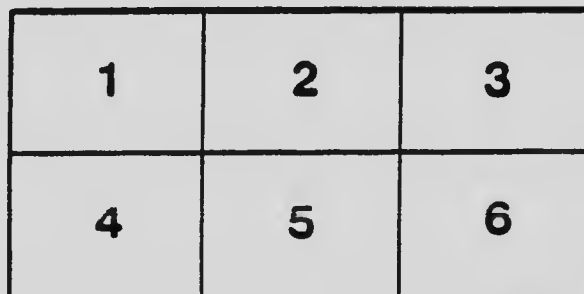
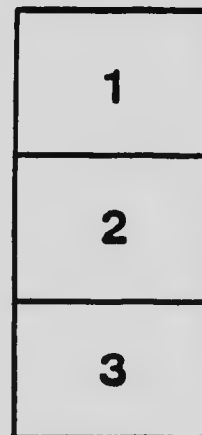
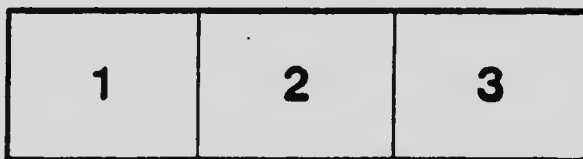
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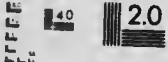
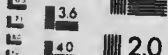
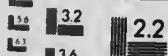
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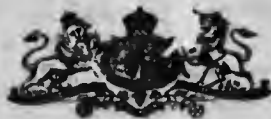
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PRODUCTION OF IRON AND STEEL
IN
CANADA

During the Calendar Year

1914

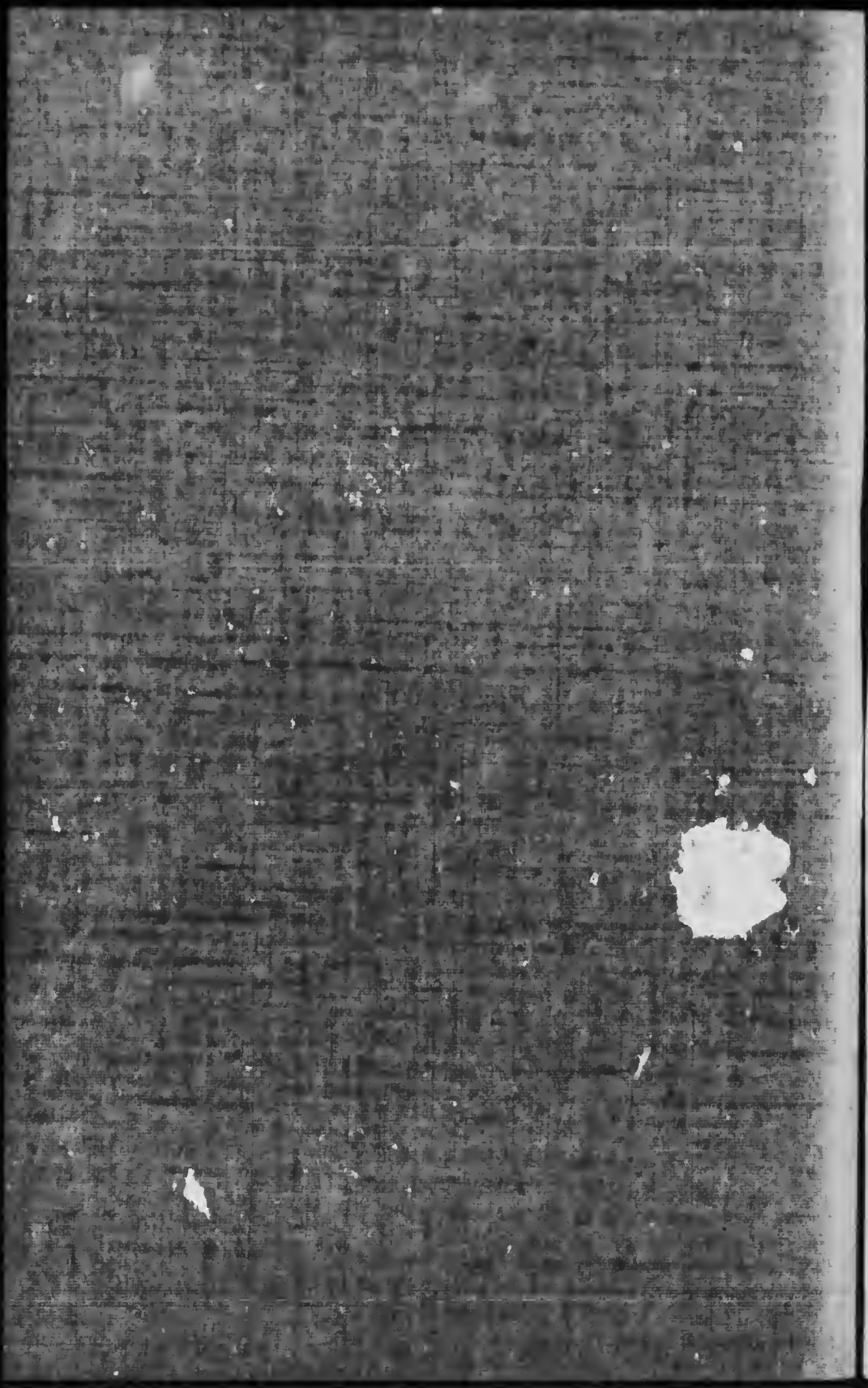
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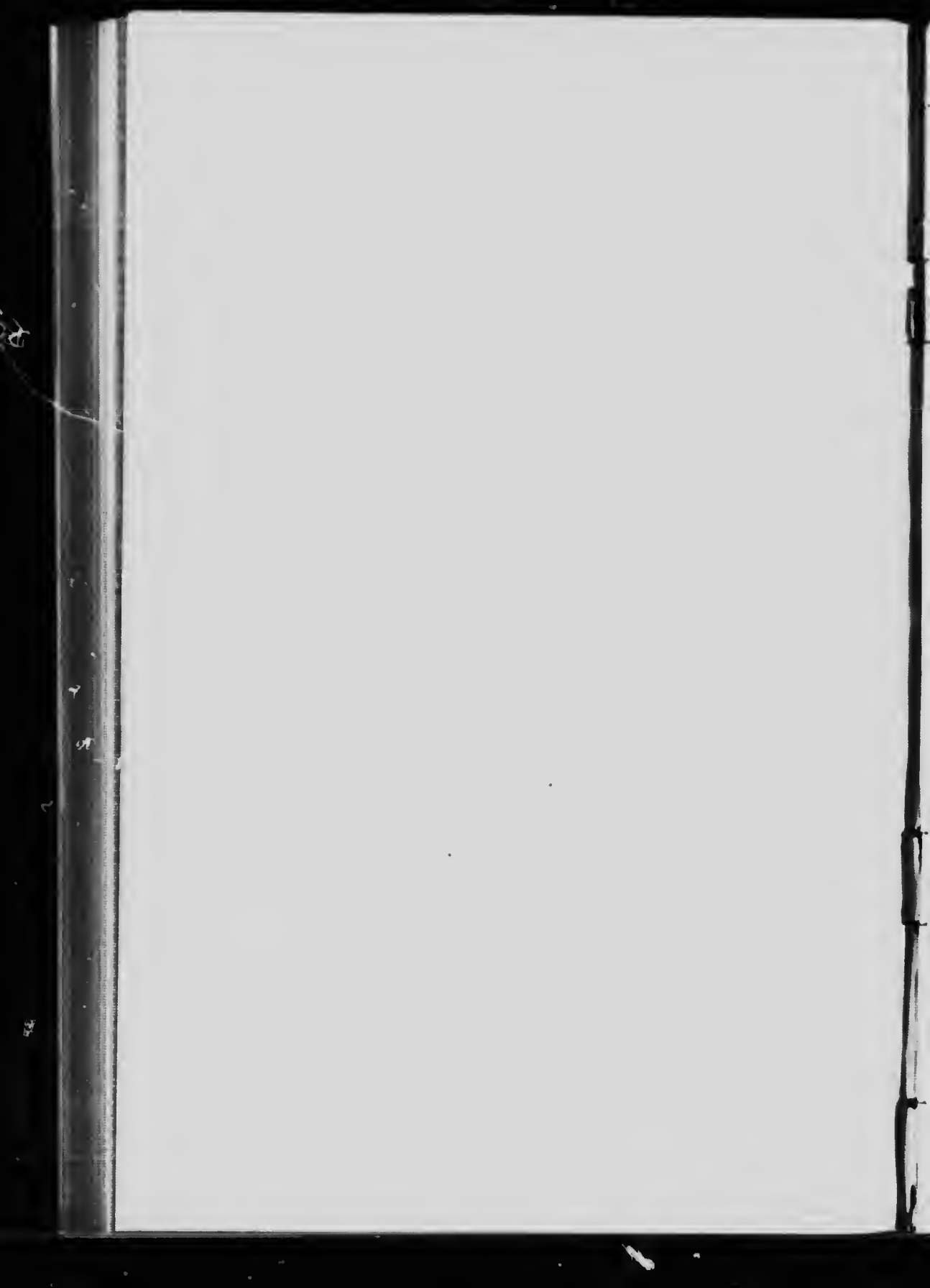
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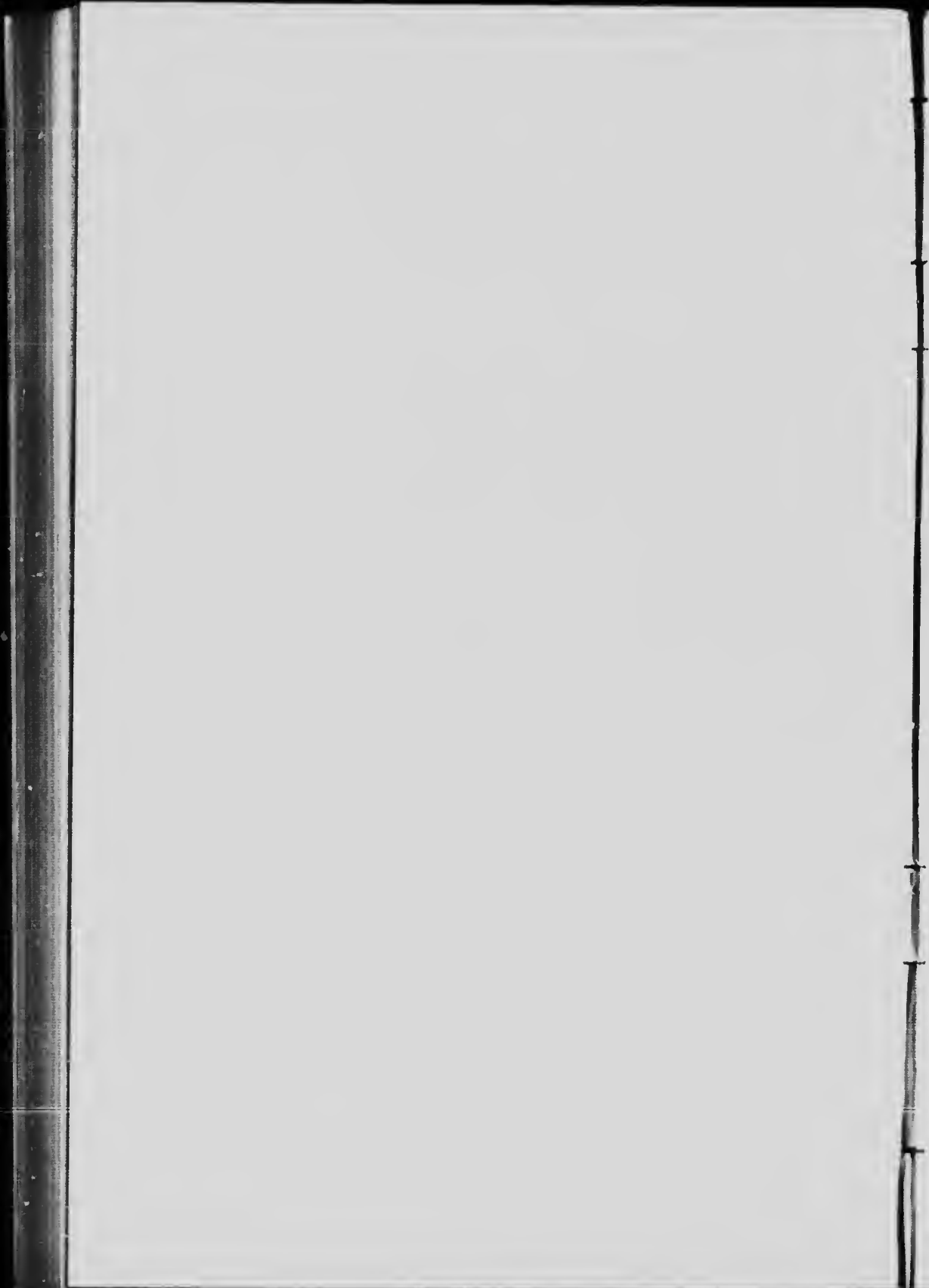
**ADVANCE CHAPTER OF THE ANNUAL REPORT ON THE
MINERAL PRODUCTION OF CANADA, DURING THE
CALENDAR YEAR 1914.**

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



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IRON AND STEEL.

INTRODUCTORY.

The iron and steel industry in Canada in 1914 was marked by a general decrease in production, which, with a large falling off in imports, showed a greatly diminished consumption.

The quantities of iron and steel annually used is a fair measure of the nation's constructional activity, and Canada had already been experiencing a period of reaction when the war in August caused an almost immediate collapse in an already declining industry. Before the close of the year, however, the demand for steel for munitions and war supplies enabled many of the steel companies to resume operations on a large scale.

Summary of Iron and Steel Statistics, 1911-14.

	1911.	1912.	1913.	1914.
	Tons.	Tons.	Tons.	Tons.
Iron ore shipped.....	210,344	215,883	307,634	244,854
Canadian iron ore charged to blast furnaces.....	67,434	71,588	139,436	182,964
Imported iron ore charged to blast furnaces.....	1,628,368	2,019,165	2,110,828	1,324,326
Iron ore charged to steel furnaces.....	42,892	43,006	55,018	34,548
Pig-iron made.....	917,535	1,014,587	1,128,967	783,164
Pig-iron and ferro-alloys, exported.....	5,870	6,976	6,326	19,063
Pig-iron imported.....	208,487	272,565	236,769	78,680
Ferro-alloys made.....	7,507	7,834	8,075	7,524
Ferro-alloys imported.....	17,226	19,810	30,355	22,147
Pig-iron consumption.....	1,144,885	1,307,820	1,397,840	872,452
Pig-iron used in steel furnaces.....	700,679	706,895	913,722	619,030
Steel ingots and castings made.....	882,396	957,681	1,168,993	814,415
Steel rails made.....	399,760	471,422	554,481	428,225
Canadian coke used in iron blast furnaces.....	543,933	609,183	710,260	330,269
Imported coke used in iron blast furnaces.....	577,388	656,815	706,888	590,902
Iron and steel imported.....	(b)1,215,936	(b)1,369,150	(c)1,890,506	(c) 882,636
Number of completed blast furnaces..... No.	18	19	22	22
Number of men employed in blast furnaces.....	1,778	1,358	1,589	1,018
Wages paid in blast furnaces..... \$	1,097,354	993,941	1,149,345	693,632
Value of pig-iron produced..... \$	12,307,125	14,550,999	16,540,012	10,002,856
Value of iron and steel goods exported. (c)..... \$	9,907,281	10,682,484	13,999,149	14,391,746
Value of iron and steel goods imported. (d)..... \$	88,179,152	105,614,450	145,226,972	79,762,262

(b) Figures cover the fiscal year ending March 31 and include all iron and steel goods for which weights are given.

(c) Figures cover the calendar year.

(d) Figures cover the fiscal year ending March 31, except for 1913 and 1914 when the calendar year is represented.

The conditions under which the iron industry has been carried on in so far as the general relationship of domestic ore supplies to furnace requirements is concerned, have remained practically the same for a number of years. Canadian furnaces are operated largely on imported ores and fuels, only about 12 per cent of the ore consumption and 36 per cent of the fuel used in 1914 being of domestic origin. The imports of iron and steel goods of all kinds has, during the past ten years, been considerably in excess of the domestic production.

Hitherto the exports of iron and steel which have been small compared with the imports, have consisted chiefly of machinery and manufactured goods. In 1914, however, there was some export of pig-iron and of steel rails. With the falling off in Canadian demand, the steel companies have sought new markets abroad, particularly for rails, while the Nova Scotia plants as a result of the war, have also developed an export trade in billets, wire rods, nails, and wire.

IRON ORE.

The total shipments of iron ore from Canadian mines in 1914 were 244,854 tons valued at \$542,041, as compared with 307,634 tons valued at \$629,843, shipped in 1913. Of the total shipments in 1914, 184,444 tons were sent to blast furnaces in Canada and 60,410 tons to the United States.

The shipments comprised 89,454 tons of hematite; 109,838 tons of roasted siderite, and 45,562 tons of magnetite (including some ores with an admixture of hematite). Shipments in 1913 included 92,386 tons of hematite and roasted siderite; 209,886 tons of magnetite, and 5,362 tons of titaniferous iron ore.

There was no active mining of iron ore in Nova Scotia, New Brunswick, or Quebec, during 1914. One shipment of 4,775 tons was made from the Bathurst mine stock.

In Ontario mining operations were confined to the Moose Mountain mines and the Magpie and Helen mines in the Michipicoten districts.

The Canada Iron Mines, Ltd., shipped from Trenton a small tonnage of concentrates averaging about 56 per cent iron. Neither the mines at Bessemer nor the concentrator at Trenton were operated during the year.

The Moose Mountain mines were operated for the first six months of the year and shipments made both of cobbled ore and briquetted ore. The cobbled ore averaged 54.45 per cent iron and the briquetted ore 63.12 per cent iron.

The Algoma Steel Corporation operated both the Helen and Magpie mines. The hematite shipped from the Helen averaged about 55 per cent, and the siderite from the Magpie, after roasting, about 50 per cent, of iron.

Production of Iron Ore by Provinces, 1912-13-14.

Provinces.	1912.		1913.		1914.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$
New Brunswick	71,520	127,716	80,416	153,820	4,775	10,841
Nova Scotia.....	30,857	168,877	20,436	21,049		
Quebec.....	1,185	4,232	5,102	26,999		
Ontario.....	112,321	222,490	195,680	427,975	240,079	531,200
	215,883	523,315	307,634	629,843	244,854	542,041

Classified Production of Iron Ore, 1913-14.

Character of ore.	1913.			1914.		
	Short tons.	Value.	Per ton.	Short tons.	Value.	Per ton.
		\$	\$ cts.		\$	\$ cts.
Magnetite	215,248	442,702	2 06	45,562	95,060	2 09
Hematite	92,386	187,141	2 03	89,454	171,480	1 92
Siderite.....				109,838		
	307,634	629,843	2 04	244,854	542,041	2 21

A record of the production by provinces in past years is shown in the accompanying tables. There was a considerable production in Ontario previous to 1886 which is not recorded.

Production of Iron Ore, by Provinces, 1886-1914.

Calendar Year.	New Brunswick.	Nova Scotia.	Quebec.	Ontario.	British Columbia.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1886		44,388		16,032	3,941	64,361
1887		43,532	13,404	16,598	2,796	76,330
1888		42,611	10,710	16,894	8,372	78,587
1889		54,161	14,533		15,487	84,181
1890		49,206	22,305			76,511
1891		53,649	14,380		950	68,979
1892		78,258	22,690		2,300	103,248
1893		102,201	22,076		1,325	125,602
1894		89,379	19,492		1,120	109,991
1895		83,792	17,783		1,222	102,797
1896		58,710	17,630	15,270	196	91,906
1897		23,400	22,436	2,770	2,099	50,705
1898		19,079	17,873	21,111	280	58,343
1899		28,000	19,420	25,126	2,071	74,617
1900		18,940	19,000	82,950	1,110	122,000
1901		18,619	15,489	272,538	7,000	313,646
1902		16,172	18,524	359,288	10,019	404,003
1903		40,335	12,035	209,634	2,790	264,294
1904		61,293	16,152	141,601		209,046
1905		84,952	12,681	193,464		291,097
1906		97,820	9,933	141,078		248,831
1907		89,839	12,748	207,769		312,856
1908		11,802	10,103	216,177	2,500	238,082
1909			4,150	263,893		268,043
1910		18,134	4,503	231,445		259,418
1911	5,336		3,616	175,586		210,344
1912	31,120	22	1,185	112,321		215,883
1913	71,520	30,857	5,102	195,680		307,634
1914	86,416	20,436		240,079		244,854
	4,775					

Production of Iron Ore in Nova Scotia, 1876-1885.

Calendar Year.	Tons.	Calendar Year.	Tons.
1876	15,274	1881	39,843
1877	16,879	1882	42,135
1878	36,600	1883	52,410
1879	29,889	1884	54,885
1880	51,193	1885	48,129

EXPORTS AND IMPORTS OF IRON ORE.

According to returns received direct from the mine operators, 60,416 tons of ore were shipped to the United States during 1914, as against shipments to destinations outside of Canada during 1913 totalling 216,614 tons, and including 196,151 tons shipped to the United States, 12,927 tons to Scotland, and 7,536 tons to Holland.

The imports of iron ore into Canada were not separately shown by the Customs Department until April, 1912. The imports during the twelve months ending December, 1914, were reported as 1,147,108 tons, valued at \$2,387,358, as compared with 1,942,325 tons valued at \$3,877,824 imported in 1913. The imports in 1914 included 749,979 tons valued at \$1,972,550 from the United States; 389,850 tons valued at \$389,850 from Newfoundland, and 7,279 tons valued at \$24,958 from other countries.

There were used in Canadian furnaces in 1914, 1,324,326 tons of imported ores as compared with 2,110,828 tons in 1913. The annual consumption of imported ores in blast furnaces which was formerly the only record of imports, is shown in tabular form and the total quantity of imported ores thus consumed since 1896 has been about 16,000,000 tons.

The imported ores have been obtained chiefly from Newfoundland and the iron ranges south of Lake Superior.

The Newfoundland deposits are operated by the two Canadian companies operating coal mines and steel plants at Sydney and Sydney Mines in Cape Breton.

The total quantity of Newfoundland ores shipped during 1914 from the Wabana Mines, was 639,430 short tons of which 422,920 tons were shipped to Sydney and 216,510 tons to the United States and Europe.

In 1913 the shipments from Wabana, Newfoundland, were 1,605,920 short tons of which 1,048,432 tons were shipped to Sydney and 557,488 tons to the United States and Europe.

According to the "United States Report of Commerce and Navigation" there were exported to Canada during the twelve months ending June 1914, 1,125,090 short tons of iron ore valued at \$3,401,146 and during the previous year 1,367,928 tons valued at \$3,684,233.

Exports of Iron Ore, Calendar Years 1893-1914.

Calendar Year.	Tons.	Value.	Average value.	Calendar Year.	Tons.	Value.	Average value.
		\$	\$			\$	\$
1893	2,419	7,590	3 14	1904*	9,828	401,738	2 38
1894		21,294		1905*	789	407,881	2 42
1895	1,571	3,909	2 49	1906	778	149,177	2 01
1896	1,033	1,911	1 85	1907	901	45,907	1 77
1897	403	811	2 01	1908	a)		
1898	182	278	1 54	1909	21,956	61,954	2 82
1899	4,145	9,538	2 30	1910	114,499	324,186	2 83
1900	5,527	13,511	2 44	1911	37,686	133,411	3 54
1901*	306,199	762,283	2 49	1912	118,129	382,005	3 23
1902*	428,901	1,065,019	2 48	1913	126,124	426,681	3 38
1903*	368,233	922,571	2 51	1914	135,451	360,974	2 67

*The export figures for the five years indicated are incorrect owing to a duplication of entries.

(a) The figures of the Trade Report for this year include ferro-products, and are, therefore, omitted.

Imports* of Iron Ore into the United States from Canada, 1893-1914.

Year ending June 30.	Short tons.	Value.		Year ending June 30.	Short tons.	Value.	
		\$	\$ cts.			\$	\$ cts.
1893	7,706	17,186	2 23	1904	126,995	283,756	2 23
1894	301	756	2 51	1905	120,241	245,623	2 04
1895	2,681	10,114	3 77	1906	113,809	220,112	1 93
1896	39	142	3 64	1907	34,731	52,765	1 52
1897	2,535	5,243	2 07	1908	32,124	55,617	1 73
1898	1,313	2,904	2 21	1909	3,490	12,660	3 63
1899	2,585	5,120	1 98	1910	36,070	97,984	2 72
1900	4,477	5,550	1 2	1911	117,393	264,452	2 25
1901	34,453	76,159	2 21	1912	45,089	89,336	1 98
1902	309,527	685,540	2 21	1913	159,146	282,434	1 77
1903	144,725	320,263	2 21	1914	168,20	360,484	2 14

*Compiled from the "Foreign Commerce and Navigation of the United States."

Exports of Iron Ore from the United States to Canada.

Year ending June 30.	Tons of 2000 lbs.	Value.		Year ending June 30.	Tons of 2000 lbs.	Value.	
		\$	\$ cts.			\$	\$ cts.
1896	1,270	4,042	3 18	1906	254,390	608,029	2 39
1897	10,942	34,168	3 12	1907	266,103	670,995	2 52
1898	12,921	34,224	2 65	1908	327,918	880,197	2 68
1899	33,598	60,497	1 80	1909	449,755	1,264,048	2 81
1900	45,237	78,542	1 74	1910	609,617	1,636,917	2 69
1901	67,994	175,689	2 58	1911	826,071	2,396,246	3 02
1902	76,457	178,107	2 45	1912	931,647	2,806,238	3 01
1903	86,258	264,755	3 07	1913	1,367,928	3,684,233	2 69
1904	92,577	252,254	2 72	1914	1,125,090	3,401,146	3 02
1905	264,214	529,454	2 60				

Annual Shipments of Iron Ore from Wabana Mines, Newfoundland.

Calendar year	To Canada.	To Europe and United States.	Total shipments.
	Short tons.	Short tons.	Short tons.
1909			
1910	697,068	412,981	1,110,049
1911	808,762	450,864	1,259,626
1912	765,184	416,279	1,181,463
1913	956,459	375,453	1,331,912
1914	1,048,432	557,488	1,605,920
	422,920	216,510	639,430

PIG-IRON AND STEEL.

The making of iron and steel in Canada, is an industry which has been built up largely on the basis of imported ores. The output has increased very rapidly from 1900 to 1913 but through lack of demand fell off very considerably in 1914.

The total production of pig-iron in 1914, not including the output of ferro-products which is separately tabulated, was 783,164 short tons (699,256 long tons) valued at approximately \$10,002,856, as compared with 1,128,967 short tons (1,008,006 long tons), valued at \$16,540,012 in 1913, and 1,014,587 short tons (905,881 long tons) valued at \$14,550,999 in 1912. A decrease of over 30 per cent is shown in the production of pig-iron in 1914, as compared with an increase of 11.3 per cent in the production of 1913 over that of 1912.

At the close of the year Canada had twenty-two completed furnaces grouped in twelve separate completed plants owned by nine companies or corporations. Of the twenty-two completed furnaces, eleven having an aggregate daily capacity of about 1,540 tons, were idle throughout the past year. The eleven furnaces operated had an aggregate daily capacity of about 2,950 tons. The capacities of the various furnaces are shown on page 11.

Of the total output of pig-iron in 1914, 9,380 tons were made with charcoal as fuel, and 773,784 tons with coke. The amount of charcoal pig-iron made in 1913 was 23,696 tons, and in 1912, 21,701 tons, while the quantity made with coke in 1913 was 1,105,271 tons, and in 1912, 992,886 tons.

The classification of the coke iron production in 1914 according to the purpose for which it was intended was as follows: Bessemer 230,817 tons; basic 346,553 tons; foundry, including miscellaneous 196,414 tons.

The classification of the coke iron production in 1913, was as follows: Bessemer 265,685 tons; basic 614,845 tons; foundry, including miscellaneous, 224,741 tons.

The total production of pig-iron in 1913 and 1914 is shown by provinces in the following table, the average value per ton also being indicated. It should be explained that the value placed upon the pig-iron production in Nova Scotia is an assumed or estimated value. A large proportion of the pig-iron made in this Province is directly converted into steel, and as a very small portion only of the metal is sold as pig-iron it is difficult to obtain a satisfactory valuation for the output. It must not be inferred, therefore, that these values represent sales values.

There has been no production of pig-iron in the Province of Quebec during the past three years. In former years this Province has had a continuous though small production of charcoal iron which commanded a high price.

Production of Pig-Iron by Provinces, 1913-14.

Provinces	1913			1914.			Percentage increase or decrease in quantity.
	Tons.	Value.	Value per ton.	Tons.	Value.	Value per ton.	
		\$	\$ cts.		\$	\$ cts.	
Nova Scotia	480,068	7,201,020	15 00	227,052	2,951,676	13 00	-52.70
Ontario.	648,899	9,338,992	14 39	556,112	7,051,180	12 68	-14.30
Total	1,128,967	16,540,012	14 65	783,164	10,002,856	12 77	-30.63

A record of the production by provinces since 1887 is shown in the following table. Formerly Nova Scotia was the largest producer but since 1909, Ontario has had the largest output. The proportions of the total contributed by the two provinces in 1914 were: Nova Scotia 30 per cent and Ontario 70 per cent.

Annual Production of Pig-Iron by Provinces, 1887-1914.

Year.	NOVA SCOTIA.		ONTARIO.		QUEBEC.		TOTAL.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.	Tons.	Value.
		\$		\$		\$		\$
1887	19,320	250,000			5,507	116,192	24,827	366,192
1888	17,556	211,403			4,243	101,832	21,799	313,235
1889	21,382	383,202			4,632	116,670	25,921	499,872
1890	18,382	262,608			3,390	69,080	21,772	331,688
1891	20,840	297,728			3,051	71,173	23,891	368,901
1892	41,393	458,556			8,050	178,865	42,443	637,421
1893	46,472	573,408			9,475	236,875	55,947	790,283
1894	41,344	449,533			8,623	196,914	49,967	646,447
1895	35,192	417,083			7,262	169,653	42,454	586,736
1896	32,351	400,829	28,302	368,942	6,615	154,358	67,268	921,129
1897	22,500	230,000	26,115	291,466	9,392	217,235	58,007	738,701
1898	21,627	221,677	48,253	530,789	7,135	159,929	77,015	912,395
1899	31,100	404,300	64,749	808,157	7,094	164,849	102,943	1,377,306
1900	28,133	421,995	62,387	938,725	6,055	140,978	96,575	1,501,698
1901	151,130	1,764,017	116,371	1,599,413	6,875	149,493	274,376	3,512,923
1902	237,244	2,477,767	112,688	1,584,273	7,970	181,501	357,902	4,243,541
1903	201,246	2,186,273	87,004	1,345,464	9,635	210,973	297,885	3,742,710
1904	161,488	1,700,130	127,845	1,746,126	11,121	241,729	303,454	3,687,945
1905	261,014	2,440,722	256,704	3,868,197	7,588	166,267	525,306	6,475,186
1906	315,008	3,439,217	275,558	4,338,275	7,845	177,644	598,411	7,955,136
1907	366,456	4,211,913	275,459	4,581,309	10,047	222,004	651,962	9,125,226
1908	352,642	3,554,540	271,484	4,385,271	6,709	171,383	630,835	8,111,194
1909	345,380	3,453,800	407,012	6,002,441	4,770	125,623	757,162	9,581,864
1910	350,287	4,203,444	447,273	6,956,923	3,237	85,255	800,797	11,245,622
1911	390,242	4,682,904	526,635	7,606,939	658	17,282	917,535	12,307,125
1912	424,994	6,374,910	589,593	8,176,080			1,014,587	14,550,999
1913	480,068	7,201,020	648,899	9,338,992			1,128,967	16,540,012
1914	227,052	2,951,676	556,112	7,051,180			783,164	10,002,856

A record of the average monthly prices per gross ton of pig-iron at Montreal during 1913 and 1914, as published by the Department of Labour, and of Bessemer pig-iron and grey forge iron at Pittsburgh for a period of ten years, as compiled by trade journals, is shown in the accompanying tables:—

Average Monthly Prices of Pig-Iron in Canada During 1913-14.

(From Report on Wholesale Prices by Department of Labour.)

	(1) Foundry No. 1, N.S. at Montreal.		(2) Summerlee No. 2 at Montreal.	
	1913	1914	1913	1914
January.....	22 00	19 50 21 00	24 00	24 00
February.....	22 00	19 50 21 00	24 00	23 00
March.....	22 00	19 50 21 00	21 00	23 00
April.....	22 00	19 60 20 50	21 00	22 50
May.....	22 00	19 00 20 50	22 50	22 50
June.....	21 00 22 00	19 00 20 00	22 50	22 50
July.....	20 00 21 00	19 00 20 00	22 50	22 50
August.....	20 00 21 00	19 00 20 00	22 50	22 50
September.....	20 00 21 00	19 00 20 00	22 50	22 50
October.....	20 00 21 00	19 00 20 00	22 50	22 75
November.....	19 50 21 00	19 00 19 75	22 50	22 75
December.....	19 50 21 00	19 00 19 75	22 50	23 00
Average.....	19 437	19 708	23 00	22 708

(1) Price per ton of 2,240 pounds, f.o.b. at Montreal, on the opening market day of each month; quotations supplied by the Dominion Iron and Steel Co., Ltd.

(2) Price per ton at Montreal, in the first week of each month, quotations furnished by Drummond, McCall & Co., Ltd.

Bessemer Pig-Iron at Pittsburgh, per Gross Ton (2,240 pounds)*.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
January.....	16 85	18 35	23 15	19 00	17 31	19 99	15 90	15 05	18 15	11 96
February.....	16 41	18 35	22 85	17 90	16 78	19 34	15 90	11 90	18 15	15 09
March.....	16 35	18 28	22 85	17 86	16 25	18 60	15 90	18 09	18 15	15 09
April.....	16 35	18 19	23 35	17 49	15 78	18 27	15 90	15 15	17 90	14 90
May.....	16 16	18 10	21 01	16 93	15 84	17 52	15 90	15 13	17 70	14 90
June.....	16 65	18 21	21 27	16 90	16 05	16 60	15 90	15 15	17 11	11 90
July.....	14 85	18 41	23 55	16 83	16 46	15 40	15 90	15 20	16 70	11 90
August.....	15 20	19 00	22 90	16 23	17 03	16 09	15 90	15 46	16 52	14 90
September.....	15 91	19 51	22 90	15 90	18 05	15 90	15 90	16 15	16 65	14 90
October.....	16 51	20 35	22 06	15 71	19 53	15 90	15 41	17 80	16 60	14 84
November.....	17 85	22 85	20 65	16 59	19 90	15 82	15 00	18 02	16 02	11 59
December.....	18 35	23 75	19 34	17 40	19 90	15 90	15 03	18 15	15 77	14 70

* From the *Iron Age*.

Grey Forge Pig-iron at Pittsburgh, per Gross Ton (2,240 pounds).

	1905.	1906	1907.	1908	1909	1910.	1911	1912	1913	1914.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
January.....	16 11	17 30	22 58	17 00	15 40	17 40	14 09	13 40	17 15	13 65
February.....	15 99	17 29	22 20	15 99	15 09	17 02	14 27	13 40	17 15	13 65
March.....	16 00	16 91	21 76	15 90	14 65	16 15	14 40	13 40	16 92	13 65
April.....	15 77	16 66	21 72	15 45	14 40	16 09	14 30	13 65	16 17	13 65
May.....	15 57	16 49	22 88	14 90	14 40	15 90	14 27	13 78	15 17	13 65
June.....	15 18	16 35	23 15	14 90	14 77	15 20	14 00	13 90	14 71	13 65
July.....	14 55	16 41	22 96	14 90	14 85	14 52	13 90	13 90	14 55	13 65
August.....	14 36	17 75	21 90	14 71	15 21	14 30	13 90	14 15	14 25	13 65
September.....	14 72	18 35	21 15	14 46	16 15	14 15	13 81	13 65	14 25	13 65
October.....	15 66	19 47	20 40	14 40	17 02	14 15	13 65	16 18	14 26	11 58
November.....	16 58	22 45	19 17	14 90	17 27	14 09	13 47	16 50	14 25	13 45
December.....	16 97	22 85	18 40	15 25	17 40	13 90	13 40	17 15	13 95	13 40

Previous to 1896, pig-iron was made entirely from Canadian ores. Since that date, however, increasing quantities of imported ore have been used, as well as imported fuels and fluxes, and in 1914 about 88 per cent of the ore charged, 64 per cent of the coke, and a large proportion of the limestone, were imported. This condition is attributed largely to questions of cost and transportation affecting the ore supplies available for each furnace. The Newfoundland ores can be cheaply and conveniently laid down at Sydney, N.S.—in fact the iron and steel industry here has been built up on the basis of these ores and by the local coal supply. During the past two years considerable quantities of limestone have also been obtained from Newfoundland. In Ontario also, large quantities of imported ores are used. In 1914 the imported ores used in Ontario amounted to 865,004 tons, and the Canadian ores 182,964 tons, the imported ores being derived from the deposits south of Lake Superior. With the exception of a small quantity of charcoal used, the fuel (coke) used in Ontario was altogether imported, as well as a portion of the limestone flux.

Iron Ore, Fuel, and Flux Charged to Blast Furnaces.

Calendar Year.	IRON ORE CHARGED.		FUEL CHARGED.			Limestone. Tons.
	Canadian.	Imported.	Charcoal.	*Coke from Canadian coal.	Imported coke.	
	Tons.	Tons.	Bushels.	Tons.	Tons.	
1887.....	60,434		940,400	31,581		17,171
1888.....	54,956		804,286	30,228		16,857
1889.....	65,670		755,800	36,333		22,122
1890.....	57,304		589,860	34,073		18,478
1891.....	60,933		441,812	32,796		11,377
1892.....	96,948		1,121,365	52,622		22,967
1893.....	124,053		1,362,720	65,332		27,797
1894.....	108,871		1,173,970	60,026		35,101
1895.....	93,208		789,561	51,629		31,585
1896.....	96,560	46,300	756,600	50,067	33,900	37,462
1897.....	53,658	55,722	1,031,800	35,800	27,810	31,273
1898.....	57,881	77,107	836,400	31,952	50,107	33,913
1899.....	66,384	120,650	1,928,025	44,844	64,648	51,826
1900.....	71,341	112,042	1,799,737	45,021	59,345	52,966
1901.....	156,613	361,010	1,83,736	207,835	115,367	169,499
1902.....	125,664	559,381	2,140,623	362,208	112,314	294,594
1903.....	82,035	485,911	2,322,030	350,190	96,540	277,452
1904.....	180,932	454,671	3,477,470	257,182	130,210	211,278
1905.....	116,974	861,847	4,404,394	365,897	243,882	369,715
1906.....	221,733	982,740	2,168,476	462,672	304,676	456,036
1907.....	244,104	1,117,260	1,682,085	521,068	327,082	488,462
1908.....	209,266	1,051,445	1,121,990	492,076	325,670	483,065
1909.....	231,994	1,235,000	1,779,258	412,016	507,255	526,075
1910.....	149,505	1,377,035	1,615,919	491,281	476,838	569,355
1911.....	67,434	1,628,368	1,960,459	543,933	577,388	625,216
1912.....	71,588	2,019,165	1,886,748	609,183	656,815	705,613
1913.....	139,436	2,110,828	2,206,191	710,260	706,888	630,119
1914.....	182,964	1,321,326	920,045	330,269	590,962	417,641

* Includes for the first ten years small quantity of coal.

IRON BLAST FURNACES IN CANADA IN 1914.

Of twenty-two completed furnaces, eleven were in blast in 1914 for varying periods of time. The total, daily capacity of the 22 furnaces is about 4,490 tons. The operating companies, with numbers and capacities of furnaces, were as follows:—

Dominion Iron & Steel Co., Sydney, C.B.: six completed furnaces of 280 tons capacity each, per day; one operated throughout 1914; one for 27^c days, and one for 241 days; three furnaces idle throughout the year.

Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.: one furnace at Sydney Mines, C.B., of 250 tons capacity; operated 128 days.

Londonderry Iron & Mining Co., Ltd. (in liquidation), Londonderry, N.S.: one furnace of 100 tons capacity; idle throughout the year.

Canada Iron Corporation, Ltd. (in liquidation), Montreal, Que.: two small furnaces of seven and eight tons capacity, at Drummondville, Que.; one furnace of 24 tons daily capacity, at Radnor Forges, Que.; two furnaces of 125 tons and 250 tons at Midland, all idle throughout the year.

Standard Iron Co. of Canada, Ltd., Deseronto, Ont.: one furnace at Deseronto with a daily capacity of 112 tons, operated for 144 days during the year 1914; one furnace of 84 tons capacity at Parry Sound idle throughout the year.

The Steel Co. of Canada, Ltd., Hamilton, Ont.: two furnaces, one of 200 tons capacity, operated for 184 days in 1914, a second furnace of 300 tons capacity, operated 211 days in 1914.

Algoma Steel Co., Ltd., Sault Ste. Marie, Ont.: three furnaces at Steelton, near Sault Ste. Marie, two of 250 tons capacity each, operated for 358 and 365 days respectively; and one of 450 tons capacity, operated 243 days.

The Atikokan Iron Co., Ltd., Port Arthur, Ont.: one furnace of 175 tons capacity, idle throughout the year.

The Canadian Furnace Co. Ltd., Port Colborne, Ont.: one furnace of 300 tons capacity, operated 262 days in 1914.

EXPORTS AND IMPORTS OF PIG-IRON.

The total exports of pig-iron, including ferro-alloys, during 1914 were 19,063 tons valued at \$486,366, or an average value per ton of \$25.51 compared with exports of 6,326 tons valued at \$51,646, or an average of \$55.59 in 1913.

The exports between 1905 and 1913 did not exceed 10,000 tons in any one year, and consisted largely, if not entirely, of ferro-alloys. During 1914, however, there was a small export of pig-iron chiefly from Sydney to Philadelphia. The exports during the first three months of the year were 4,431 tons which probably included about 4,000 tons of pig-iron. From the

first of April the exports were separately classified and during the last nine months of the year included 9,767 tons of pig-iron valued at \$118,111 or an average of \$12.09 per ton and 4,865 tons of ferro-alloys valued at \$285,221 or an average of \$58.63 per ton.

Considerable quantities of pig-iron are annually imported into Canada. During the calendar year 1914 the total imports of pig-iron, excluding ferro-products which are separately stated, were 78,680 tons valued at \$982,189, and included 69,254 tons valued at \$862,598, or an average of \$12.46 per ton, from the United States; and 9,426 tons valued at \$119,591 or an average of \$12.68 per ton, from Great Britain. The total imports in 1913 were 236,769 tons valued at \$3,247,405 or an average of \$13.71 per ton, and in 1912, 272,680 tons valued at \$3,512,969 or an average of \$12.88 per ton. These imports in 1914 included 86 tons of charcoal pig-iron valued at \$1,082, or \$12.58 per ton, as compared with 926 tons of charcoal pig-iron in 1913, valued at \$12,528 or an average of \$13.52 per ton.

The annual imports of these two classes of pig-iron since 1880 are shown herewith.

Annual Exports of Pig-Iron and Ferro-Alloys, 1896-1914.

Calendar Year.	Tons.	Value.	Average value.	Calendar Year.	Tons.	Value.	Average value.
		\$	\$ cts.			\$	\$ cts.
1896	2,187	55,448	25 35	1905	866	22,284	25 73
1897	3,099	81,381	26 26	1906	305	7,429	24 36
1898	1,278	32,645	25 54	1907	439	13,504	30 76
1899	6,981	149,190	21 37	1908	290	10,614	36 60
1900	3,514	88,052	25 06	1909	5,063	186,778	36 89
1901	57,650	594,739	10 30	1910	9,763	296,310	30 35
1902	75,195	778,619	10 35	1911	5,870	271,968	46 33
1903	4,400	78,382	17 81	1912	6,976	310,702	44 54
1904	21,016	280,363	9 53	1913	6,326	351,646	55 59
				1914	19,063	486,366	25 51

Annual Imports of Pig-Iron Since 1880.

Year.	PIG-IRON.			CHEMICAL PIG-IRON.			TOTAL.	
	Tons.	Value.	Average value.	Tons.	Value.	Average value.	Tons.	Value.
		\$	\$ cts		\$	\$ cts		\$
1880(c)	(a) 24,459	371,956	16 06				24,459	371,956
1881	(a) 44,640	715,997	16 11				44,640	715,997
1882	56,591	811,221	14 34	6,847	211,791	30 98	63,438	1,023,012
1883	75,995	1,085,755	14 12	2,498	88,994	26 84	78,493	1,174,749
1884	49,291	654,708	13 26	2,804	66,602	24 02	52,095	721,310
1885	13,279	545,126	41 00	1,119	25,333	24 44	14,398	570,459
1886	12,464	528,483	42 45	3,485	60,086	18 87	15,949	588,569
1887	16,295	584,388	41 98	3,919	77,420	19 76	20,214	661,808
1888	(b) 48,974	648,042	13 24				48,974	648,042
1889	(b) 72,115	861,752	11 99				72,115	861,752
1890	(b) 87,614	1,148,078	13 10				87,614	1,148,078
1891	(b) 81,417	1,088,929	13 35				81,417	1,088,929
1892	(b) 68,948	886,485	12 86				68,948	886,485
1893	56,849	682,209	12 00	5,944	84,458	14 19	62,793	766,667
1894	42,466	494,787	11 42	2,906	44,968	12 04	45,372	539,755
1895	41,647	347,759	10 80	2,780	41,174	11 21	44,427	388,933
1896	46,141	394,594	10 92	917	41,726	12 79	47,058	436,320
1897	25,766	294,788	11 32	2,946	45,474	12 05	28,712	340,262
1898	37,186	382,104	10 28	2,250	23,544	10 46	39,436	405,648
1899	41,264	452,911	10 24	1,955	19,124	9 78	43,219	472,035
1900	49,767	844,490	16 41	1,846	48,746	21 34	51,613	893,236
1901	35,294	548,044	15 51	490	7,121	14 54	35,784	555,165
1902	39,978	585,077	11 64	48	726	19 11	40,026	585,803
1903	91,740	1,438,574	11 59	882	16,352	18 54	92,622	1,454,926
1904	62,515	894,728	11 31				62,515	894,728
1905	74,005	857,879	12 08				74,005	857,879
1906(c)	96,797	1,401,047	11 47				96,797	1,401,047
1907(d)	150,127	2,290,860	15 19	39	675	22 34	150,166	2,291,535
1908(e)	57,444	774,615	14 46	1,022	18,818	18 44	58,466	793,433
1909	147,925	1,798,172	12 16	443	5,725	11 87	148,368	1,803,897
1910	227,734	3,122,605	14 71	16,109	212,152	15 04	243,843	3,334,757
1911	208,487	2,610,989	12 52				208,487	2,610,989
1912	272,565	3,514,599	12 88		1,470	11 91	274,035	3,516,069
1913	245,844	3,244,877	14 72	926	42,528	14 54	246,770	3,287,405
1914(c)	78,591	981,197	12 48	86	1,082	12 58	78,677	982,279

(a) Comprises pig-iron of all kinds.

(b) These figures appear in Customs reports under heading "iron in pigs, iron kettles, and cast iron."

(c) Year ending June 30.

(d) Nine months ending March.

(e) Calendar year from 1905 to date.

FERRO-PRODUCTS.

Ferro-silicon and ferro-phosphorus were produced in Canada in electric smelting plants during 1914, the latter in small quantities only. Ferro-silicon, both 50 per cent and 75 per cent, was made at Welland, Ont., by the Electro-Metals, Ltd., and ferro-phosphorus, or phosphate of iron at Buckingham, Que., by the Electric Reduction Co., Ltd.

The total production of ferro-products during 1914 was 7,524 tons valued at \$478,355 as against a production of 8,075 tons valued at \$493,018 in 1913. In 1912 the production was 7,834 short tons valued at \$465,225, and in 1911, 7,507 short tons valued at \$376,404.

The exports of ferro-products were formerly included with pig-iron but have been separately tabulated since April 1, 1914. During the nine

months ending December 1914, the exports of ferro-silicon and other ferro-products, as already stated, were 4,865 tons valued at \$285,221.

The imports of ferro-silicon, ferro-manganese, etc., during the calendar year 1914, were 22,147 tons valued at \$549,485, or an average of \$24.81 per ton, as compared with imports during the calendar year 1913, of 30,355 tons valued at \$940,443, or an average of \$30.98 per ton.

The annual imports since 1887 are shown in the following table:—

Imports of Ferro-Manganese, Ferro-Silicon, Etc.

Fiscal Year.	Tons.	Value.	Average value.	Fiscal Year.	Tons.	Value.	Average value.
		\$	\$ cts.			\$	\$ cts.
*1887	123	1,435	11 67	†1903	6,350	162,710	25 62
*1888	1,883	29,812	15 83	†1904	2,975	75,554	25 40
*1889	5,868	72,108	12 29	†1905	13,935	246,815	19 08
*1890	696	18,895	27 15	†1906	15,023	462,739	30 80
*1891	2,707	40,711	15 01	†1907 (9 mos.)	16,414	610,875	37 22
*1892	1,311	23,930	18 25	†1908	17,417	612,062	35 14
*1893	529	15,858	29 98				
*1894	284	9,885	34 81				
†1895	164	5,408	32 98	Calendar Year.			
†1896	652	12,811	19 65	†1909	17 29	411,536	23 25
†1897	426	9,233	21 67	†1910	18,900	464,741	24 59
†1898	1,418	22,516	15 88	†1911	17,226	429,465	24 93
†1899	1,160	22,539	19 43	†1912	19,810	469,884	23 72
†1900	1,149	39,064	34 00	†1913	30,355	940,443	30 98
†1901	1,512	38,954	25 76	1914	22,147	549,485	24 81
†1902	6,513	150,977	23 18				

* These amounts include: ferro-manganese, ferro-silicon, spiegel, steel bloom ends and crop ends of steel rails, for the manufacture of iron and steel.

† Ferro-silicon, spiegeleisen, and ferro-manganese.

CONSUMPTION OF PIG-IRON.

The total quantity of pig-iron ferro-alloys used in Canada in 1914, arrived at by adding to the production, the excess of imports over exports amounted in 1914 to 872,452 tons. Of this amount 639,282 tons were used in steel furnaces, leaving 233,170 tons for foundry and other uses.

Consumption of Pig-Iron and Ferro-Alloys.

Year.	Total Consumption *	Used in Steel furnaces.		Available for foundry and other uses.
		Pig-iron.	Ferro-alloys.	
	Tons.	Tons.	Tons.	Tons.
1910	1,060,970	690,913	8,143	361,914
1911	1,141,885	700,697	21,359	422,829
1912	1,307,820	735,559	21,237	548,024
1913	1,397,840	913,722	29,408	454,710
1914	872,452	639,282	20,252	233,170

* Production of pig-iron and ferro-alloys plus excess of imports over exports.

STEEL.

The production of steel ingots and castings in 1914 was 814,415 tons, as compared with 1,168,993 tons in 1913, and 957,681 tons in 1912. In 1914 the production of open-hearth ingots was reported as 622,097 tons; Bessemer ingots 175,244 tons; direct open-hearth castings 15,315 tons; and other steel castings 1,759 tons. The falling off in production compared with 1913 was 354,578 tons, or 30 per cent.

The production during the past five years is shown in the following table:—

Production of Steel, 1910-14.

	1910	1911	1912	1913	1914
	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Ingots</i> —Open-hearth (basic).....	584,932	651,676	692,236	824,818	622,097
Bessemer (acid).....	222,668	209,817	251,044	301,952	175,244
<i>Castings</i> —Open-hearth.....	18,085	20,163	31,818	39,217	15,315
Other steels.....	599	740	2,556	3,626	1,759
Total.....	822,284	882,396	957,681	1,168,993	814,415

A statistical record of the materials used in steel furnaces has been obtained during the past five years. The total quantity of pig-iron used in steel furnaces during the year 1914 was 619,030 tons, of which 610,645 tons were produced by firms reporting, and 8,385 tons purchased. The quantity of ferro-alloys used was 20,252 tons purchased. Scrap, etc., was used to the extent of 286,863 tons, being 276,596 tons produced by the firms reporting, and 10,267 tons purchased. Ores used included 723 tons of manganese ore and 34,548 tons of iron ore, while 114,859 tons of limestone, or dolomite flux, were used, and 8,845 tons of fluorspar. In Ontario, about 327 million cu. ft. of natural gas were used, while in Nova Scotia coke-oven gas was used at Sydney, of which a record of quantity was not obtained.

The total quantity of pig-iron used in steel furnaces during the year 1913 was 913,722 tons, of which 860,360 tons were produced by firms reporting, and 53,362 tons purchased. The quantity of ferro-alloys used was 29,408 tons purchased. Scrap, etc., was used to the extent of 406,403 tons, being 277,509 tons produced by the firms reporting, and 128,894 tons purchased. Ores used included 1,342 tons of manganese ore and 55,018 tons of iron ore, while 197,028 tons of limestone or dolomite flux were used, and 10,687 tons of fluorspar. In Ontario, a little over 413 million cu. ft. of natural gas were used, while in Nova Scotia coke-oven gas was used at Sydney, of which a record of quantity was not obtained.

In 1912 the total quantity of pig-iron used in steel furnaces was 735,559 tons, of which 706,895 tons were produced by firms reporting, and

28,664 tons purchased. The quantity of ferro-alloys used was 24,237 tons purchased. Scrap, etc., was used to the extent of 336,265 tons, being 223,404 tons produced by the firms reporting, and 112,861 tons purchased. Ores used included 985 tons of manganese ore, and 43,006 tons of iron ore, while 148,045 tons of limestone or dolomite flux were used, and 9,709 tons of fluorspar. In Ontario, a little over 423 million cu. ft. of natural gas were used.

Statistics of the production of steel ingots and castings since 1894 are given in the following table, the figures for 1894 to 1906 inclusive having been collected and published by the American Iron and Steel Association; those for the years 1907 to 1914 have been collected by this Department and are shown in detail in the previous table.

Annual Production of Steel Ingots and Castings, 1894-1914.

Calendar Year.	Short tons.	Calendar Year.	Short tons.	Calendar Year.	Short tons.
1894.....	28,767	1901.....	29,214	1908.....	588,763
1895.....	19,040	1902.....	203,881	1909.....	754,719
1896.....	17,920	1903.....	203,296	1910.....	822,284
1897.....	20,608	1904.....	166,700	1911.....	882,396
1898.....	24,125	1905.....	451	1912.....	957,681
1899.....	24,640	1906.....	630	1913.....	1,168,993
1900.....	26,406	1907.....	706,202	1914.....	814,415

Rolled Products:—Statistics of the production of rolled products and of manufactured steel received from the largest producers, show a production of blooms, billets, slabs, etc., of 802,658 tons, of which 773,249 tons were used by the producer for further manufacture, and 29,409 tons sold to other rolling mills.

The production of rails was 428,226 tons; of wire rods, 63,856 tons; of bars and rods (not including wire rods) 107,054 tons; and of other rolled steel products 37,450 tons. There was also a production of iron bars, etc., amounting to 31,007 tons. The production of steel rails in 1913 was returned as 554,481 tons; in 1912, 471,422 tons; and in 1911, 399,760 tons.

The production of finished rolled iron and steel in Canada from 1910 to 1914 as ascertained and published by the American Iron and Steel Association was as follows, in long tons:—

Annual Production of Rolled Iron and Steel, 1910-1914.

Products—Gross tons.	1910	1911	1912	1913	1914
Rails.....	366,465	360,547	423,885	506,709	382,344
Structural shapes and wire rods.....	80,993	76,617	64,082	68,048	59,050
Plates and sheets.....	26,642	14,833			
Nail plate, merchant bars, and all other finished rolled forms.....	365,711	333,427	373,257	392,340	218,125
Total.....	739,811	775,424	861,224	967,097	659,519

BOUNTIES.

Bounties on iron and steel made in Canada were provided for by the Dominion Government in 1897 under the authority of Chapter 6, Statutes of Canada, 1897. These bounties were continued under subsequent statutes until 1911. Bounty on pig-iron and steel made in electric furnaces was available until December 31, 1912, but no claims therefor were made during the year.

Since 1896 a total of \$16,785,827 has been paid by the Government of Canada in bounties for the production of iron and steel, the annual payments on pig-iron, puddled iron bars, steel, and manufactures of steel, being shown in the following table:—

**Total Bounties on Iron and Steel Paid by the Government of
Canada Since 1896.**

Year ended.	Pig-iron.	Puddled iron bars.	Steel.	Manufactures of steel.
	\$	\$	\$	\$
June 30, 1896.....	104,105	5,611	59,499	
" 1897.....	66,509	3,019	17,366	
" 1898.....	155,654	7,706	67,154	
" 1899.....	187,954	17,511	74,644	
" 1900.....	238,296	10,121	64,360	
" 1901.....	351,259	16,763	100,058	
" 1902.....	693,108	20,550	77,431	
" 1903.....	666,001	6,702	729,102	
" 1904.....	533,982	11,669	347,090	15,321
" 1905.....	624,667	7,895	676,318	231,324
" 1906.....	687,632	5,875	941,000	309,832
March 31, 1907 (9 months).....	385,231	312	575,259	338,099
" 1908.....	863,817		1,092,201	347,135
" 1909.....	693,423		838,100	333,091
" 1910.....	573,969		695,752	538,812
" 1911.....	261,434		350,456	526,858
" 1912.....				166,750
" 1913.....				
Total.....	7,097,041	113,674	6,766,990	2,868,122

EXPORTS AND IMPORTS OF IRON AND STEEL GOODS.

The exports of iron and steel from Canada consist chiefly of manufactured goods such as agricultural implements, automobiles, bicycles, machinery, etc. Compared with the value of imports, the total value of the exports is small, amounting to not more than 10 per cent of the former. The total value of iron and steel exported during the calendar year 1914 was \$14,391,746, as compared with a value of exports in 1913 of \$13,999,149, and in 1912 of \$10,682,484. The exports during 1914 included: pig-iron and ferro-products, etc., to the value of \$486,366; scrap iron and steel valued at \$446,337; manufactures of iron and steel \$4,260,395; agricultural implements \$5,788,899; automobiles and bicycles \$3,409,749.

The exports during 1913 in similar groupings were pig-iron and ferro-products \$351,646; scrap-iron and steel \$483,813; manufactures of iron and steel \$2,121,480; agricultural implements \$7,411,246; automobiles and bicycles \$3,630,964.

The exports during 1912 in similar groupings were: pig-iron and ferro-products, etc., \$310,702; scrap iron and steel \$145,250; manufactures of iron and steel \$2,076,493; agricultural implements, \$5,967,545; automobiles and bicycles \$2,182,494.

A detailed record of these exports during the past two years is shown in the accompanying table.

Exports of Iron and Steel Goods, the Product of Canada, during the Calendar Years 1913 and 1914.

	1913.			1914.		
	Quantity.	Value.	Average val.	Quantity.	Value.	Average value.
		\$	\$ cts.		\$	\$ cts.
Stoves.....No.	1,371	23,858	17 40	4,198	25,149	5 99
Gas buoys, parts of.....		35,462			21,009	
Casting.....		61,362			24,218	
Pig-iron.....Tons	6,326	351,646	55 59	14,198	201,145	14 17
Ferro-silicon and ferro-compounds.....				4,865	285,221	57 45
Wire and wire-nails.....				9,663	355,781	36 82
Machinery (linotype machines).....\$		9,631			5,562	
Machinery, n.e.s.....		435,333			344,689	
Sewing machines.....No.	8,122	114,438	14 09	2,109	31,392	14 88
Washing machines, e.c.....\$		15,872			33,986	
Typewriters.....						
Scrap iron and steel.....No.	3,048	201,763	66 20	3,055	200,441	65 61
Hardware, tools, etc.....Tons	45,556	483,813	10 62	35,405	446,337	12 60
Hardware, n.e.s.....\$		101,990			95,497	
Steel and manufactures of.....		70,767			190,763	
Agricultural implements—		1,051,004			2,931,908	
Mowing machines.....No.	24,041	847,253	35 24	21,457	725,831	33 83
Reapers.....	5,604	317,716	56 69	3,919	223,228	56 96
Drills.....	10,364	634,121	61 18	3,961	259,701	65 56
Harvesters.....	23,194	2,439,319	105 17	19,474	2,015,996	103 52
Ploughs.....	15,450	465,505	30 13	12,896	324,349	25 15
Harrows.....	7,300	127,482	17 46	6,252	92,556	14 80
Hay rakes.....	9,846	247,445	25 13	6,524	196,519	30 12
Seeders.....					32	
Threshing machines.....	1,928	712,270	369 43	1,965	1,810	56 56
Cultivators.....	7,795	201,758	25 88	6,030	799,307	406 77
All other.....		503,235			146,668	
Parts of.....		915,142			290,520	
Automobiles.....	5,997	3,395,382	566 18	5,621	712,411	535 73
parts of.....		210,623			3,011,327	
Bicycles.....	90	8,058	89 53	111	384,428	90 28
parts of.....		16,901			10,021	
Total.....		13,999,149			14,391,746	

Annual Exports of Iron and Steel Products since 1884.

Year.	Value.	Year.	Value.	Year.	Value.
	\$		\$		\$
1884.....	186,854	1895.....	174,778	1906.....	1,552,963
1885.....	115,158	1896.....	284,296	1907.....	1,607,368
1886.....	228,027	1897.....	592,849	1908.....	2,098,138
1887.....	251,221	1898.....	593,060	1909*.....	7,172,413
1888.....	184,214	1899.....	975,377	1910.....	7,805,489
1889.....	144,909	1900.....	1,570,013	1911.....	9,907,281
1890.....	133,724	1901.....	1,837,179	1912.....	10,682,484
1891.....	152,919	1902.....	2,751,324	1913.....	13,999,149
1892.....	155,597	1903.....	3,058,320	1914.....	14,391,746
1893.....	214,636	1904.....	1,318,482		
1894.....	167,183	1905.....	1,287,558		

* Agricultural implements, automobiles, and bicycles included in 1909 and subsequent years.

The total value of the imports of iron and steel goods during the calendar year 1914 was \$79,762,262, as compared with a value of \$145,226,972 imported during the calendar year 1913, showing a decrease of over 45 per cent. Previous to 1913 the record is shown covering the fiscal periods. During the twelve months ending March 1913, the imports were valued at \$148,579,272 as against imports valued at \$105,614,450 during the twelve months ending March 1911.

Between 1895 and 1904 the imports of iron and steel increased from about \$8,600,000 to over \$40,000,000. During the next ten years there was comparatively little change, but from 1909 to 1913 the increase was again very rapid. During the latter part of 1913 there was, however, a distinct check to imports with the heavy falling off shown in 1914. A detailed statement of the imports of iron and steel during the calendar years 1914 and 1913, is shown in the general tables of imports of iron and steel goods following.

The imports during 1914 subject to duty were valued at \$64,901,486, the imports duty free during the same period being valued at \$14,860,776. The imports during 1913, subject to duty were valued at \$125,082,378, and the imports duty free during the same period were valued at \$20,144,594. These imports include all classes of iron and steel goods manufactured as well as those of the cruder form. In many cases the values only of the imported goods are given, so that a total tonnage of imports cannot be stated. In the case of most of the cruder materials, however, the quantities are given, and a compilation of these showing the importation of the cruder forms of iron and steel since 1909 is shown in the accompanying table. Thus during the twelve months ending December, 1914, there were imported 882,636 tons of iron and steel valued at \$28,523,956, or an average value per ton of \$32.32 together with other iron and steel goods of which the quantities are not stated, valued at \$51,238,306.

During the twelve months ending December, 1913, there were imported 1,390,506 tons of iron and steel goods valued at \$59,882,222, or an

average value per ton of \$31.67, together with other iron and steel goods of which the quantities are not stated, valued at \$85,344,750.

A decrease in the imports of each class of product is shown in 1914, with the exception of wire, the imports of which increased about 10 per cent.

The imports of pig-iron in 1914 were 78,680 tons as against 236,769 tons in 1913, a decrease of 158,089 tons, or 66.77 per cent; ferro-products and chrome steel 22,271 tons in 1914 as against 30,678 tons in 1913, a falling off of 8,407 tons or 27.40 per cent; ingots, blooms, billets, etc., 13,049 tons as against 52,872 tons, a decrease of 39,823 tons, or 75.32 per cent; scrap iron and steel 27,688 tons compared with 104,747 tons, a decrease of 77,059 tons, or 73.57 per cent; plates and sheets 221,203 tons as against 365,675 tons, a decrease of 144,472 tons or 39.51 per cent; tin plates and sheets 50,791 tons as against 58,031 tons, a decrease of 7,240 tons, or 12.48 per cent, bars, rods, hoops, etc., 148,368 tons compared with 227,879 tons, a decrease of 79,511 tons, or 34.89 per cent; structural iron and steel 160,538 tons in 1914 as against 439,871 tons in 1913, a decrease of 279,333 tons or 63.50 per cent; rails and connexions 42,064 tons compared with 182,421 tons, a decrease of 140,357 tons, or 76.94 per cent; pipe and fittings 4,864 tons compared with 30,663 tons, a decrease of 25,799 tons, or 84.14 per cent; wire 77,167 tons in 1914 compared with 70,712 tons in 1913, an increase of 6,455 tons or 9.13 per cent; forgings, castings, etc., 20,339 tons as against 32,604 tons, a decrease of 12,265 tons, or 37.62 per cent.

A very large proportion of these imports is derived from the United States, and a record has been compiled from the "Commerce and Navigation of the United States" showing the exports of iron and steel goods from that country to Canada.

According to this authority there were exported to Canada from United States during the twelve months ending June 30, 1914, 1,169,349 tons of iron and steel goods, valued at \$35,921,812, together with other iron and steel goods of which the weight is not given valued at \$40,731,318 or a total value of \$76,653,130.

During the twelve months ending June 30, 1913, the corresponding exports to Canada were 1,695,916 tons of iron and steel goods valued at \$51,936,616, together with other iron and steel goods of which the weight is not given, valued at \$54,673,774 or a total value of \$106,610,390.

During the twelve months ending June 30, 1912, exports to Canada were 1,175,464 tons valued at \$36,637,305, together with other iron and steel goods valued at \$46,020,989, or a total value of \$82,658,294.

Summary of Imports of Iron and Steel, 1914.

Material.	Tons.	Value.	Average.
		\$	\$ cts.
Pig-iron.....	78,680	982,180	12 48
Ferro-products and chrome steel.....	22,271	560,686	25 18
Ingots, blooms, billets, puddled bars, etc.....	13,019	259,703	19 90
Scrap iron and scrap steel.....	27,688	337,406	12 19
Plates and sheets.....	221,204	7,576,312	31 25
Tin plates and sheets.....	50,791	3,151,385	62 05
Bars, rods, hoops, bands, etc.....	148,368	5,138,193	31 63
Structural iron and steel.....	160,538	4,211,520	26 25
Rails and connexions.....	42,064	1,116,773	26 55
Pipe and fittings (a).....	15,614	395,466	25 33
Nails and spikes.....	4,864	210,098	43 20
Wire (a).....	77,167	3,205,635	41 54
Forgings, castings, and manufactures.....	20,339	1,375,590	67 63
Total.....	882,636	28,523,956	32 32
Other iron and steel products valued at.....		51,238,306
Total value of imports of iron and steel.....		79,762,262

Summary of Imports of Iron and Steel,* 1913.

Material.	Tons.	Value.	Average.
		\$	\$ cts.
Pig-iron.....	236,769	3,217,405	13 72
Ferro-products and chrome steel.....	30,678	970,100	31 62
Ingots, blooms, billets, puddled bars, etc.....	52,372	1,212,314	22 93
Scrap iron and scrap steel.....	101,747	1,488,255	14 21
Plates and sheets.....	395,675	13,965,865	38 19
Tin plates and sheets.....	58,031	3,954,615	68 14
Bars, rods, hoops, bands, etc.....	277,879	10,195,280	36 69
Structural iron and steel.....	439,871	12,739,954	28 96
Rails and connexions.....	182,321	5,120,830	28 07
Pipe and fittings (a).....	30,663	847,922	27 65
Nails and spikes.....	7,584	360,489	47 53
Wire (a).....	70,712	3,688,660	52 16
Forgings, castings, and manufactures.....	32,604	2,090,533	64 12
Total.....	1,890,506	59,882,222	31 67
Other iron and steel products valued at.....		85,311,750
Total value of imports of iron and steel.....		145,226,972

* For details of these items see general tables following.

(a) There are additional imports of pipe and wire included under "other iron and steel products."

Summary of Tonnage of Iron and Steel Imported 1909-1913.

Material.	TWELVE MONTHS ENDING MARCH.				
	1909.	1910.	1911.	1912.	1913.
	Tons.	Tons.	Tons.	Tons.	Tons.
Pig-iron.....	58,591	159,506	270,102	201,112	291,904
Ferro-products and chrome steel.....	13,206	15,153	19,182	18,548	23,378
Ingots, blooms, billets, puddled bars, etc.....	8,887	36,819	48,395	89,190	86,745
Scrap iron and scrap steel.....	26,212	28,797	53,824	78,378	103,317
Plates and sheets.....	116,610	200,575	208,690	243,461	376,633
Tin plates and sheets.....	26,859	39,866	44,025	45,802	64,571
Bars, rods, hoops, bands, etc.....	73,261	117,159	183,865	198,130	278,878
Structural iron and steel.....	162,735	195,748	232,585	268,572	377,551
Rails and connexions.....	32,543	55,183	36,690	97,062	156,318
Pipe and fittings.....	18,309	16,795	28,831	26,627	40,987
Nails and spikes.....	1,611	3,476	3,374	7,201	11,420
Wire.....	39,375	68,211	64,850	69,597	80,846
Forgings, castings, and manufactures.....	14,394	18,093	24,523	27,668	47,195
Total.....	592,593	955,291	1,215,936	1,368,357	1,939,743

Annual Imports of Iron and Steel Products since 1895.

Year.	Value.	Year.	Value.
Twelve months ending June		Twelve months ending March	
	\$		\$
1895.....	8,684,024	1907*	44,739,403
1896.....	10,206,759	1908.....	64,257,238
1897.....	11,063,156	1909.....	42,075,797
1898.....	16,340,992	1910.....	62,356,974
1899.....	19,463,329	1911.....	88,179,152
1900.....	27,926,766	1912.....	105,614,450
1901.....	25,023,453	1913.....	148,579,272
1902.....	31,591,488	Twelve months ending December	
1903.....	39,536,867	1913.....	145,226,972
1904.....	40,449,175	1914.....	79,762,262
1905.....	40,820,233		
1906.....	42,210,305		

*Nine months.

Annual Imports of Tin Plate.

Year.	Tons.	Value.	Year.	Tons.	Value.
Fiscal Year.			Fiscal Year		
		\$			\$
1891.....	10,734	854,770	1904.....	24,820	1,461,811
1892.....	19,296	1,235,961	1905.....	30,000	1,751,507
1893.....	15,131	892,106	1906.....	30,259	1,869,060
1894.....	15,369	956,813	1907.....	22,628	1,516,777
1895.....	13,022	681,739	1908.....	34,876	2,437,540
1896.....	16,910	923,279	1909.....	26,859	1,682,366
1897.....	18,768	919,596	Calendar Year:		
1898.....	22,864	1,150,741	1909.....	36,904	2,216,089
1899.....	16,575	927,036	1910.....	39,101	2,475,010
1900.....	25,108	1,683,788	1911.....	47,096	3,172,943
1901.....	27,165	1,466,965	1912.....	60,502	3,826,735
1902.....	27,207	1,528,655	1913.....	58,031	3,954,615
1903.....	30,251	1,806,643	1914.....	50,791	3,151,385

Imports of Iron and Steel Goods Subject to Duty.

Material.	CALENDAR YEAR 1913.		CALENDAR YEAR 1914.	
	Quantity.	Value. \$	Quantity.	Value. \$
Agricultural implements, n.o.p., viz.—				
Bl. g attachments.....	No	\$		\$ cts.
Cultivators and weede.....	33,319	60,426	3,538	3,538
Drills, seed.....	7,295	241,749	48,246	48,246
Fertil. road, or field rollers.....	16,143	7,029	3,028	14 98
Forks, pronged.....	3,682	198,029	122,429	276 36
Harrows.....	3,780	337,899	5,218	0 57
Harvesters, self-binding.....	478	24,806	1,676	108 12
Hay loaders.....	9	145	181,240	50 07
Hay tedders.....	21,091	21,091	10,609	40 47
Horse rakes.....	9,052	2,431	6,775	0 28
Horse rakes.....	1,466	41,868	14,754	19 16
Knives, hay or straw.....	14,719	4,325	2,061	0 41
Knives edging.....	2,838	1,046	88	0 64
Lawn mowers.....	15,701	64,828	59,424	4 17
Mannre spreaders.....	499	34,502	66,399	63 94
Mowing machines.....	1,439	47,765	46,942	37 33
Ploughs.....	1,360,959	1,360,959	561,704	0 96
Post hole diggers.....	3,517	5,005	4,495	30 69
Potato diggers.....	1,618	54,222	41,696	0 20
Rakes, n.o.p.....	20,868	5,741	5,346	77 05
Reapers.....	679	40,402	30,434	4 89
Scythes.....	2,661	13,017	14,848	2 18
Sickles or reaping hooks.....	516	1,212	631	1 14
Spatulas.....	4	43,017	19,433	2 883
Spades and shovels of iron or steel, n.o.p.....	9,566	43,017	19,433	1 86
Spades and shovels of iron or steel, cut to shape for the same.....	1,021	595,556	201,070	198 73
Parts of agricultural implements paying 12 1/2 per cent and 1 1/4 per cent.....	\$	680,973	104,874	20,714
Parts of agricultural implements paying 12 1/2, 1 1/4, and 20 per cent.....		109,436	81,862	54,163
All other agricultural implements, n.o.p.....		99,439	54,163	65,206
Anvils and vises.....		162,557	221,513	
Cart or wagon skelns or boxes.....	217.9	15,862	190 5	198 73
Springs, n.o.p., and parts thereof, of iron or steel, for railway, tramway, or other vehicles.....		621,777	1,442,734	29 03
Axle and axle parts, n.o.p., and axle blanks and parts thereof, of iron or steel for railway, tramway, or other vehicles.....		4,381,411	92,375	
Bar iron or steel, rolled, whether in coils, bundles, rod or bars, comprising rounds, ovals, squares, and flats, n.o.p.....	139,932 6	156,849	49,693 8	
Butts and hinges, n.o.p.....				

Imports of Iron and Steel Goods Subject to Duty—Continued.

Material.	CALENDAR YEAR, 1914.			CALENDAR YEAR, 1913.		
	Quantity.	Value.	Value per unit.	Quantity.	Value.	Value per unit.
Canada plates, Russia iron, ternite plate, and rolled sheets of iron and steel coated with zinc spelter or other metal, of all widths or thicknesses, n.o.p.	Tons	\$	\$ cts.		\$	\$ cts.
Castings, iron or steel, n.o.p.	8,649.2	400,791	56.81	8,469.9	338,622	52.05
Castings, malleable iron, when imported by manufacturers of mowers, binders, harrowers and reapers for use exclusively in their own factories		1,641,991			681,523	
Cast-iron pipe of every description	Tons					
Cast scrap iron	30,662.5	817,922	27.05	15,611.1	71,812	25.33
Chains, coil chain, chain links, and chain shackles of iron or steel of $\frac{1}{4}$ " diameter, and over	49,874.6	659,319	13.22	10,162	118,299	11.64
Chains, coil chains and links, including repair links and chain shackles of iron and steel n.o.p.	3,112.8	217,175	69.77	1,012.6	82,957	81.92
Tacks, shoe						
Nails, spike	24.2	158,914		698.5	55,321	79.20
Engines, etc., spikes, and tacks of all kinds, n.o.p.	317	3,144	129.88	14.9	95,371	2,105
Locomotives for railways		44,486	140.33		35,001	141.28
Motor cars for railway and tramways	171	692,470	4,048.95	89	260,345	2,925.22
Engines, fire	109	199,945	1,834.46	23	47,967	2,085.52
Engines, gasoline	15	61,984	4,132.27	28	105,572	3,770.40
Engines, steam	25,126	3,150,313	125.58	15,392	1,950,637	127.31
Boilers, steam	47.6	547,866	11,500.98	3.86	248,820	698.93
Boilers, n.o.p.		484,726			246,691	
Fire extinguishing machines, including sprinklers for fire protection		337,390			278,262	
Fittings, iron or steel, for iron or steel pipe of every description		125,861			101,316	
Flat eye-bar blanks, not punched or drilled, for use exclusively in the manufacture of bridges or of steel structural work, or in car construction		1,165,364			780,884	
Ferro-silicon, spiegelisen, and ferro-manganese	567	46,853	29.72	3,035	209,456	68.02
Ferro-silicon, containing more than 15% silicon	30,355	940,443	30.98	5,741	182,248	26.52
Spiegelisen and ferro-manganese containing not more than 15% manganese						
Forging of iron and steel of whatever size, shape, or in whatever stage of manufacture, or hot rolled iron or steel bars or shapes, n.o.p.						
Hardware, viz., builders, cabinet-makers, upholsterers, harness-makers, saddlers, horse and carriage, hardware, including curry-combs, n.o.p.						
Horse and carriage, hardware, including curry-combs, n.o.p.						
Iron or steel billets, weighing not less than 60 pounds per lineal yard	2,442.1	93,975	108.09	1,568.6	174,742	11.14
		956,703			627,068	
	51,765.4	1,178,131	22.76	12,247	24,563	19.70
					231,234	

	654-5	19, 20	21	22	23	24	25
Iron or steel ingots, cogged ingots, blooms, slabs, puddled bars and lumps, or other forms, n.o.p., less finished than iron or steel bars, but more advanced than pig-iron except castings.....		19, 20	21	22	23	24	25
Iron or steel bridges or parts thereof, iron or steel structural work, columns, shafts or sections, drilled, punched, or in any further stage of manufacture, than as rolled or cast, n.o.p.....		19, 20	21	22	23	24	25
Iron in pig.....	971, 735	13, 72	78, 594	515, 233			
Iron in pig charcoal.....	3, 231, 877	13, 53	86	981, 107			12, 48
Locks of all kinds.....	235, 843			1, 042			12, 58
Machines, machinery, etc.....	926			254, 699			
Automobiles and motor vehicles of all kinds.....	6, 956	1, 183, 60	5, 590	5, 296, 831			9, 56, 03
Cranes and derricks.....	3, 004, 156	2, 785, 634	137	2, 785, 634			
Dental engines.....	360	2, 363, 02		448, 176			3, 090, 87
Fanning mills.....	1, 199	19, 11	783	4, 000			85, 10
Grain crushers.....	421	6, 469	366	18, 094			23, 11
Hay presses.....	210	48, 779	188	6, 593			18, 01
Windmills and complete parts thereof.....	43, 502	199, 90		31, 349			166, 75
Ore crushers and rock crushers, stamp mills, cornish and belted rolls, rock drills, air compressors, cranes, derricks, and percussion coal cutters.....	601, 531			50, 596			
Portable machines.....		601, 531		450, 531			
Fodder or feed cutters.....		19, 016	9, 26	10, 506			15, 80
Horse powers for farm purposes.....	2, 053	265	22, 09	93			31, 00
Portable engines with boilers in combination and traction engines for farm purposes.....	12						
Portable sawmills and planing mills.....	1, 864	3, 539, 078	2, 898, 65	854, 364			1, 605, 95
Steam shovels.....	31	10, 284	331, 74	3, 261			271, 75
Threshing machine separators.....	97	603, 837	6, 225, 02	215, 356			7, 426, 07
Threshing machines, parts of, including wind stackers, baggers, weighers, and self-feeders for same, and finished parts thereof for repairs, when imported separately.....	1, 820	1, 025, 296	563, 35	308, 283			507, 88
All other portable machines, n.o.p., and parts.....		499, 532		223, 999			
Concrete mixing machines.....	60, 852			119, 758			
Sewing machines.....	208		5, 29, 14	66, 121			423, 85
Shedding machines, parts of.....	18, 446		15, 667	281, 164			17, 95
Adding machines.....				73, 523			
Machines, type-casting and type-setting, and parts thereof, adapted for use in printing offices.....	1, 678	160, 52	1, 470	269, 766			183, 51
Machines specially designed for ruling, folding, binding, embossing, creasing, or cutting paper or cardboard, when for use exclusively by printers, bookbinders, and by manufacturers of articles made from paper or cardboard, including parts thereof, composed wholly or in part of iron, steel, brass or wood.....	13, 997	64, 64	9, 051	514, 831			56, 88
Lithographic presses and type-making accessories for same.....				231, 932			
Printing presses.....		363, 680		308, 907			
Type-making accessories for printing.....		610, 189					
Cement making machines.....				16, 574			
Coal handling machines.....		187, 991		49, 697			
Paper and pulp mill machines.....		479, 359		190, 500			
Rolling mill machines.....		131, 758		414, 396			
Sawmill machines.....		149, 976		147, 219			
Machinery of a class or kind not made in Canada and parts thereof adapted for carding, spinning, weaving, braiding, or knitting fibrous material, when imported by manufacturers for such purposes.....		2, 180, 924		581, 918			

Imports of Iron and Steel Goods Subject to Duty.—Continued.

Material.	CALENDAR YEAR, 1913.			CALENDAR YEAR, 1914.		
	Quantity	Value.	Value per unit.	Quantity.	Value.	Value per unit.
		\$	\$ cts.		\$	\$ cts.
All machinery composed wholly or in part of iron or steel, n.o.p., and iron or steel castings, and iron or steel integral parts of all machinery specified in tariff item 453.		17,119,296			10,327,987	
Machines, washing.	9,378	89,420	9 23	8,440		8 30
Nails and spikes, composition and sheathing nails.	293-6	17,725	60 31		70,080	51 46
Railway spikes.	292-8	9,127	45 00	261-3	4,513	36 85
Rails, wire of all kinds, n.o.p.	5,273-6	194,194	35 83	2,997-6	97,629	31 01
Pumps, hand, n.o.p.	1,413-1	91,814	62 33	1,177-9	67,806	53 39
Pumps, power and parts of iron and steel railway bars or rails of any form, punched or not, n.o.p., for railways and street railway tracks for the purposes of this item shall include all kinds of railways, street railways and tramways, even although they are used for private purposes only, and even although they are not used or intended to be used in connection with the business of common carrying of goods or passengers.	32,662	1,311,363	4 02	21,887	111,111	5 08
Iron and steel railway bars or rails of any form, punched or not, n.o.p., for railways and street railway tracks for the purposes of this item shall include all kinds of railways, street railways and tramways, even although they are not used or intended to be used in connection with the business of common carrying of goods or passengers.	1,707	577,769	162 60	2,965	437,085	143 08
Railway fish plates.						
Railway fish plates.	177,041	4,886,117	27 59	38,496	970,723	25 45
Rolled iron or steel angles, tees, beams, channels, girders and other rolled shapes or sections, not punched or drilled or further manufactured than rolled, n.o.p.	3,366	146,493	43 52	2,909	113,913	39 28
Rolled iron or steel beams, channels, angles, and other rolled shapes of iron and steel, not punched, drilled or further manufactured than rolled, n.o.p.	2,014	88,220	43 80	668	23,137	34 64
Rolled iron or steel hoops, band, scroll, or strip, 12 inches or less in width No. 13 gauge and thicker, n.o.p.	107,494-8	3,201,384	29 78	33,927-6	920,350	27 13
Rolled iron or steel hoop, band, scroll, or strip, 12 inches or less in width No. 13 gauge and thicker, n.o.p.	249,435-1	7,074,279	28 36	82,448-7	2,103,032	25 51
Rolled iron or steel hoop, hand, scroll, or strip, No. 14 gauge and thinner, galvanized or sheared or rolled grooves, n.o.p.	7,342-6	246,635	33 59	3,439-7	114,498	33 29
Rolled iron or steel sheets or plates, sheared or unaltered, and skip iron or steel, n.o.p. or steel plate, not less than 30" in width and not less than 1/8" in thickness.				40-9	1,800	44 00
Rolled iron or steel sheets, polished or not, No. 14 gauge and thinner, n.o.p.	13,985-8	651,338	46 57	10,391-9	451,814	43 48
Rolls of chilled iron or steel, coil of iron or steel not over 1/2 inch in diameter when imported by wire manufacturing firms for use in making wire in the coil in their own factories	47,444-4	1,517,344	31 98	17,264-3	501,177	29 03
Rolls of chilled iron or steel, coil of iron or steel not over 1/2 inch in diameter when imported by wire manufacturing firms for use in making wire in the coil in their own factories	65,190-6	1,939,739	29 25	27,851-3	791,976	28 43
Rolls of iron wire rods in coil of iron or steel not over 1/2 inch in diameter when imported by wire manufacturing firms for use in making wire in the coil in their own factories	51,776-5	2,545,347	49 16	28,604-4	1,260,522	44 07
Rolls of iron wire rods in coil of iron or steel not over 1/2 inch in diameter when imported by wire manufacturing firms for use in making wire in the coil in their own factories	194-5	11,457	58 90	34-1	2,802	51 79
				13,651-9	402,228	29 41

Roller round roofs in the coil of iron or steel for the manufacture of chains					
Sad or smoothing hatters and tailors' irons.....	\$	10,945	100 8	4,068	25 74
Sales, about for safes and vaults.....	\$	192,803		187,364	
Sheet, common, called wood screws n.o.p., including lag or coach screws, plain, and other screws n.o.p.....	\$	110,442		45,070	
Sheet, iron or steel, including other screws n.o.p.....	\$	178,365		101,505	
Shafting, round, steel, flat bars not exceeding 3 1/2" diameter.....	\$	161,238	36 51	69,275	45 75
Shafting, steel, turned, compressed or polished.....	\$	4,416 6		13,121	
Sheets or plates of steel, cold rolled with sheared edges over 14 gauge, and not less than 14" wide for the manufacture of mower bars, hinges, typewriters, and sewing machines.....	Tons	742 1		13,862	43 14
Sheets, flat, of galvanized iron or steel.....	Tons	19,416 7		14,466 9	77 4
Sheets, iron or steel, corrugated, galvanized.....	Tons	203 2		72 5	3,980
Sheets, iron or steel corrugated not galvanized.....	Tons	293 3		10 5	54 33
Skates, of all kinds, roller or other, and parts thereof.....	Pairs	79,972		45,328	61 52
Skip iron or steel, she-1 or roll-I in grooves, imported by manufacturers of wrought iron or steel lines, for use exclusively in the manufacture of wrought iron or steel in their own factories.....	Tons	190,963 5		2,957,887	27 65
Steel bolts, nuts, washers, and rivets.....	Tons	452 5		14,784	32 67
Stove irons of metal, and blowalls, chaplets, and hinge tubes of tin for use in the manufacture of stoves.....	\$	902,256		647 2	15,121
Switches, frogs, crossings, and interchanges for railways.....	Tons	35,748		683,371	23 37
Tubing.....	Tons	324,694		11,948	148,848
Wrought or seamless tubing, flat or galvanized, threaded and coupled or not, over 10" in diameter, n.o.p.....	Tons			185,311	
Wrought or seamless tubing, iron or steel, plain or galvanized, threaded and coupled, or not, over 4", but not exceeding 10" in diameter n.o.p.....	Tons	774,683		201,406	
Wrought or seamless tubing, iron or steel, plain or galvanized, threaded and coupled, or not, 4" and less in diameter, n.o.p.....	Tons	419,294		164,147	
Seamless steel tubing, valued at not less than 3 cents per lb.....	Tons	82,538	113 91	30,314	143 13
Roller or draw spire tubes of iron or steel, adapted for use in the manufacture of agricultural implements.....	\$	14,895		6,036	
Iron or cast-iron pipe or tubing, plain or galvanized, riveted, corrugated or otherwise.....	Tons	1,572,658		469,598	
Iron or steel pipe, not lined, including tees, joints, n.o.p.....	Tons	84		1,211	
Iron or steel pipe, lined, including tees, joints, and wire braid wooden pipe, not less than 30" internal diameter, when used exclusively in all vital gold mining.....	Tons	319,364		241,813	
Ware—Aeze, granite, or enameled iron or steel, ware exclusively in all vital gold mining.....	Tons	224,552		161,141	
Ware—Iron or steel hollow ware, plain black or coated, n.o.p., and nickel and aluminum kitchen or household household ware.....	Tons	5,733		1,446	
Wire bale twine.....	Tons	2,370 8		2,236 9	102 02
Wire bound wooden pipe, n.o.p.....	Tons	122 9		34,360	31 27
Wire cloth or woven wire, and netting of iron and steel.....	Tons	49,703		39,587	
Wire, crucible cast steel, valued at not less than 6 cents per lb.....	\$	938		74,182	78 47
Wire buckhorn strip fencing, woven wire fencing, and wire fencing, of iron and steel, n.o.p., not to include woven wire or netting made from wire, smaller than No. 11 gauge, not to include fencing or wire larger than No. 9 gauge.....	Tons	1,069,921		401,800	
Wire, including cable, covered with cotton, linen, silk, rubber, or other material, including cable, n.o.p.....	Tons	332,419		198,464	52 08
Wire rope, strand 31 or twisted wire clothes lines, no tire or other twisted wire, and wire cable, n.o.p.....	Tons	4,339 3		432,090	161 81
Iron or steel nuts, rivets, or bolts with or without threads, nut bolts, and large blank, and T and strap hinges of all kinds, n.o.p.....	Tons	3,792 2		169,929	79 12

Imports of Iron and Steel Goods Subject to Duty—Continued.

CALENDAR YEAR, 1913. CALENDAR YEAR, 1914.

Material.

	Quantity.	Value.	Value per unit.	Quantity.	Value.	Value per unit.
		\$	\$ cts.		\$	\$ cts.
Iron or steel scrao, wrought, being waste or refuse, including punchings, cuttings, and clippings of iron or steel plates or sheets having been in actual use; crop ends of tin plate bars, blooms, and rails the same not having been in actual use.....Tons	54,869.3	828,860	15 10	17,446.3	248,553	12 53
Knives, jack-knives, and pocket knives of all kinds.....Tons		104,792			51,715	
At other cutlery, n.o.p.....Tons		342,946			210,268	
Gun revolvers, including air guns and air rifles (not being toys), muskets, cannons, pistols, Bayonets, saws, fencing tools, and masks.....Tons		875,316			539,548	
Steel, chrome steel.....Tons		887,236			718,211	
Steel, universal mill or rolled edge plates of steel over 12" wide, imported by manufacturers of bridges or of structural work, or for use in car construction.....Tons		7,453			8,612	
Steel in bars or sheets to be used exclusively in the manufacture of shafts when imported by the manufacturer of shafts.....Tons	3.23	140,685	91 82	123 9	117,408	90 40
Rolled iron or steel, or cast steel in bars, bands, hoops, scrolls, or strip, sheet, or plate of any size, thickness, or width, galvanized or coated with any material or not, and steel blanks for the manufacture of mill cutters, when of greater value than 3 cents per pound.....Tons	62,513.6	1,812,399	28 98	29,277.8	785,230	26 82
Flat steel, cold rolled, not over 3/8" thick, for the manufacture of cups and cones for ball bearings.....Tons	2,985.8	88,421	29 61	653.7	17,082	26 13
Steel wool.....Tons	9,907.0	1,197,321	120 84	6,172.4	779,716	126 32
Tools and implements—Adzed implements.....Tons	26.8	27,134	82 91		19,747	
Track tools, picks, mattocks and eyes and poles for the same.....Tons		2,222			172	
Saws.....Doz.		4,995			4,739	
Files and rasps, n.o.p.....Doz.		91,339			47,608	
Tools, hand or machine, of all kinds, n.o.p.....Doz.	11,402	66,088	5 75	4,048	26,195	6 47
Knife blades or blanks, and table forks of iron and steel, in the rough, not handled, filed, ground, or otherwise manufactured.....Tons		155,005			83,110	
Manufactures, articles or wares of iron and steel, or of which iron and steel (or either) are the component materials of chief value, n.o.p.....Tons		149,962			101,699	
		985,772			621,039	
		278			87	
	11,206.350			7,542.806		
		125,082,378			64,901,486	

Imports of Iron and Steel Goods Free of Duty.

CALENDAR YEAR, 1914.

CALENDAR YEAR, 1913.

Material.

	CALENDAR YEAR, 1914.		CALENDAR YEAR, 1913.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
				cts.
Anchor for vessels.				
Chain coil, coil chain links including repair links and chain shackles of iron and steel 1 1/2" in diameter and over	330 4	27,282	82 57	72 72
Chain, malleable sprocket or link belting				
Cream separators, and steel bowls for	263 1	403,463		75 48
Cream separators—materials which enter into the construction and form part of when imported by manufacturers of cream separators to be used in the manufacture thereof		429,741		
Ferro-manganese and spiegelisen containing over 15 per cent manganese.		277,660		
Gas buoys—The following articles and materials, when imported by manufacturers of automatic gas buoys and automatic gas beacons, for use in the manufacture of such buoys and beacons for the Government of Canada or for export, viz., iron or steel tubes 6 1/2" in diameter, flanged and dished steel heads made from boiler plate, cast iron or steel flanges, cast iron or steel heads 3" in diameter, acetylene gas lanterns and gas lanterns of tin and tin bronze in bars or rods.				
Gun barrels, in single tubes, forged, rough, bored		7,035		21,288
Iron or steel rods over 3/4" in diameter for manufacturing of chain	1,093 2	30,777	28 15	1,041
Iron or steel, rolled round wire rods, in the coil, not over 1/2" in diameter, when imported by wire manufacturers for use in making wire in the coil in their own factories	79,608 4	1,962,235	24 65	51,201 2
Boiler plate of iron or steel not less than 30" in width, and not less than 3/8" in thickness, for use exclusively in the manufacture of boilers	24,318 2	804,582	33 04	7,528 8
Flat galvanized iron or steel sheets	34,768 4	2,145,558	61 42	23,203 8
Rolled iron and steel, and cast steel in bars, band, hoop, scroll or strip, sheet or plate of any size, thickness, or width: galvanized or coated with any material or not, and steel blanks for the manufacture of milling cutters, when of greater value than 3/4 cts. per lb	4,813 8	798,539	165 80	2,452 3
Rolled iron or steel sheets in strips, polished or not, 14 gauge and thinner, n.o.p	15,969 3	771,694	48 80	8,756 4
Rolled iron or steel, hoop, scroll, or strip, No. 14 gauge or thinner, galvanized or iron tubing, lapped, metal or not, n.o.p	865 5	36,165	41 70	23,254
Iron tubing, lapped, metal or not, n.o.p, over 2" in diameter, and brass trimmings, when imported by manufacturers of iron or brass bedsteads, for use exclusively for the manufacture of such articles in their own factories		285,798		147,961
Iron tubing, brass covered, not over 2" in diameter, in the rough where imported by manufacturers for use only in their own factories, in the manufacture of towel bars, bath tub rails and clothes carriers		408		512
Iron tubing, lacquered or brass covered, not over 2" in diameter, brass covered rods and brass trimmings, when imported by manufacturers of carriage rails, for use exclusively in the manufacture of such articles in their own factories		1,813		1,813

Imports of Iron and Steel Goods Free of Duty.—Continued.

Material.	CALENDAR YEAR, 1913.		CALENDAR YEAR, 1914.	
	Quantity.	Value.	Quantity.	Value.
Iron tubing for manufacture of extension rods for windows.		\$		\$
Iron chains for wooden, iron, steel, or composite ships or vessels.		5,285		3,761
Iron and steel bands, strips or sheets, No. 14 gauge or thinner, coated, polished or not.	20,397.6	651,892	14,844.3	405,908
Iron plates, angles, knees, masts or parts thereof and cable.				
Iron and rolled-iron or steel sections, No. 14 gauge or thinner, coated, polished or not.		31 96		27 27
Iron when imported by manufacturer of machinery, hardware and hames, for use exclusively in the manufacture of such articles in their own factories.				
Locomotive and car wheel tires of steel in the form of their own factories.				
Manufactured articles of iron or steel or brass, which, at the time of their importation, are of a class or kind not manufactured in Canada, imported for use in the construction or equipment of ships or vessels.	11,801.5	625,636	6,713.0	11,835
Scrap iron or steel, old, and fit only to be remanufactured, being part of or recovered from any vessel wrecked in waters subject to the jurisdiction of Canada.		245,208		316,904
Steel iron or steel, sheared or rolled in grooves, not over 4½" wide, for the manufacture of rolled iron tubes not over 1½" in diameter.	3.7	76	80.2	554
Machinery:—	849.1	22,959	414.9	10,910
Articles of metals as follows when for use exclusively in mining or metallurgical operations, viz: coal cutting machines, except percussion coal cutters, coal heading machines; coal hoists; rotary coal drills; core drills; miners safety lamps and parts thereof; also, accessories for cleaning, filling, and testing such lamps; electric or magnetic machines for separating or concentrating iron ores; furnaces for the smelting of copper, zinc, and nickel ores; apparatus for metallurgical processes in which, in the chlorination or cyanide process, amalgam safes; automatic ore samplers; the chlorination or cyanide machinery for extraction of precious metals; automatic feeders; retorts, mercury pumps, pyrometers; bullion furnaces; automatic cleaners; blast furnace blowing engines; wrought iron tubing, butt or lap welded; threaded, or in the form of pipe, of iron or steel for use in the smelting of ores, or in the construction, separation, or refining of metals; rotary kilns; rotary furnace slag trucks; blast slag pots of a class or kind not made in Canada; ladles; vanners, and slime tables adapted for use in gold nining.				
Diamond drills, not to include those used in gold nining.	1,033.571			629,593
Appliances of iron and steel, of a class or kind not made in Canada, and elevators and machinery of floating dredges, when for use exclusively in alluvial gold mining.	70,549			48,617
Well-drilling, and apparatus of a class or kind not made in Canada for drilling for water, natural gas or oil, and for prospecting for minerals, not to include motive power.	259,722			186,695
	22,934			222,958

	No.	\$	No.	\$	No.	\$
Brquette making machines		3,708		3,966		
Newspaper presses, of not less value by retail than \$1,500 each, of a class or kind not made in Canada	122	513,348	4,207 77	71	402,310	5,066 34
Machinery or tools not manufactured in Canada up to the required standard necessary for any factory to be established in Canada for the manufacture of rifles for the Government of Canada		25,329		131,900		
All materials, or parts in the rough, unfinished, and screws, nuts, bands, and springs to be used in rifles to be manufactured at any such factory for the Government of Canada		60,656		211,273		
Machines, typesetting and typesetting and parts thereof, adapted for use in printing offices		504,837		482,272		
Machinery of every kind, and structural iron and steel for use in the construction and equipment of factories for the manufacture of sugar from beet root		19,449		8,681		
Machinery of a class or kind not made in Canada and parts thereof, for the manufacture of twine cordage, or linen, or for the preparation of flax fibre		56,265		43,020		
Machinery of every kind, adapted for the drainage on farms	138	51,681	396 34	32	77,904	2,437 28
Mould boards or shares, or more than \$1,000 each, valued at retail not more than \$1,000 each						
Mould boards or shares, land slides, or other plates for agricultural implements, when cut to shape from rolled plates of steel, but not moulded, punched, polished, or otherwise manufactured						
Sewing machine attachments		290,215	58 47	2,033 2	116,335	57 32
Steel for manufacturing ball bearings	4,963 61	39,689			31,413	
Steel balls adapted for use on bearings on machinery and vehicles		1,996			3,269	
Steel, rolled, for saws and straw cutters, not tempered, or ground, nor further manufactured than cut to shape without indented edges	1,309 9	187,929	143 46	887 3	132,809	149 78
Steel strips, and flat steel wire when imported into Canada by manufacturers of buckhorn and plain strip fencing for use exclusively in their own factories in the manufacture thereof	0 9	92	102 22			
Steel wire, Bessemer soft drawn spring of Nos. 10, 12, and 13 gauge, respectively, and homo steel spring wire of Nos. 11 and 12 gauge, respectively, when imported by manufacturers of such articles, to be used exclusively in their own factories in the manufacture of such articles	1,032	48,042	46 55	569 5	27,672	48 59
Steel crucible sheet, 11 to 16 gauge, 2½" to 18" wide for the manufacture of mower and reaper knives when imported by manufacturers thereof for use exclusively in the manufacture of such articles in their own factories	503 8	46,491	78 29	501 0	37,895	75 64
Steel No. 20 gauge and thinner, but not thinner than 30 gauge, for the manufacture of corset steels, clock springs, and shoe shanks, imported by manufacturers of such articles for exclusive use in the manufacture of such articles in their own factories	48 9	6,891	140 92	43 2	4,134	93 53
Steel wire, flat, of 16 gauge or thinner, imported by the manufacturers of crinoline, and corset wires and dress stays, for use exclusively in the manufacture of such articles in their own factories	377 4	50,227	133 09	347 5	55,215	158 80
Steel No. 12 gauge and thinner, but not thinner than No. 30 gauge, for the manufacture of buckle clasps, bed fasts, furniture casters, and ice-creepers, imported by manufacturers of such articles, for use exclusively in the manufacture of such articles in their own factories	179 6	10,084	56 15	104 2	5,159	49 51
Steel No. 24 and 27 gauge sheets 63" long and from 18" to 32" wide, when imported by the manufacturers of tubular bow sockets for use exclusively in the manufacture of such articles in their own factories	88 5	3,566	40 29	58 7	3,098	52 78
Steel springs for the manufacture of surgical trusses, when imported by manufacturers of surgical trusses for use exclusively in the manufacture thereof in their own factories	0 61	264	440 00	0 3	197	656 67
Swedish rolled iron, and Swedish rolled steel nail rods, under half an inch in diameter, for the manufacture of horseshoe nails	4,419 7	119,225	26 98	1,575 3	72,841	46 24
Tin plates and sheets	58,031	3,954,615		50,791	3,151,385	
Steel seamless tubing valued at not less than 3½ cents per pound	114 5	21,092	184 21	49	7,438	190 72

Imports of Iron and Steel Goods Free of Duty.—Concluded.

Material.	CALENDAR YEAR, 1913.		CALENDAR YEAR, 1914.	
	Quantity.	Value.	Quantity.	Value.
	\$	\$ cts.	\$ cts.	\$ cts.
Steel roller or drawn square tubing adapted for use in the manufacture of agricultural implements.....		33,921		37,256
Steel or iron tubes, 1 1/2 in. diameter, n.o.p.		1,048,288		706,675
Seamless steel, or wrought iron boiler tubes, including flues and corrugated tubes for boiler tubes.....		566,670		662,814
Wire crutch steel, valued at not less than 6 cents per pound.....	13,451.7		17,001.3	
Wire, curved for use exclusively for rigging of ships and vessels.....	6.5	1,947	35,347.9	3,142
Wire, steel, valued at not less than 24 cents per pound when imported by manufacturers of rope for use exclusively in the manufacture of rope.....	19.7	13,226	39.5	4,616
Total.....	3,296.6	258,399	3,026.1	237,299
		20,144,594		14,860,776

Imports of Iron and Steel into Canada from the United States.*

Material.	TWELVE MONTHS ENDING JUNE, 1912.			TWELVE MONTHS ENDING JUNE, 1913.			TWELVE MONTHS ENDING JUNE, 1914.		
	Quantity.	Value.	Average.	Quantity.	Value.	Average.	Quantity.	Value.	Average.
		\$	\$ cts.		\$	\$ cts.		\$	\$ cts.
Bar iron, short tons	9,591.9	308,745	32	11,773.8	429,581	36.45	6,544.2	308,248	47.10
Bars, rods of steel			19						
Wire rods	53,582.9	1,412,910	26.37	82,474.3	2,134,108	25.88	63,108.3	1,617,939	25.64
All other	95,215.9	2,849,441	30.05	129,171.1	3,991,771	31.33	122,431.8	3,087,274	25.34
Billets, ingots, and blooms of steel	60,068.5	1,260,710	20.01	87,968.2	1,885,420	21.65	2,233.8	46,072	20.92
Bolts, nuts, rivets and washers	(a)		39.13	3,240.2	218,800	67.65	2,603.4	181,072	69.55
Hoop, band and scroll	7,206.2	281,946	39.13	9,436.3	376,861	39.93	9,157.1	376,999	41.12
Horseshoes	(a)		29.38	271.1	24,894	91.83	238.8	22,941	92.21
Nails and spikes			29.38						
Cut	5,419.6	159,215	29.38	8.3	488	58.80	21.3	932	43.76
Railroad spikes	(a)		42.14	6,218.4	234,193	36.05	3,543.2	121,999	34.43
Wire	1,245.9	52,498	42.14	2,262.4	106,693	47.16	1,342.3	62,046	46.22
All other, including tacks	3,113.1	176,371	56.65	628.0	48,063	76.53	398.2	31,164	85.80
Pipe-iron	157,480.9	1,979,355	12.57	248,846.1	3,124,550	12.56	140,510.7	1,782,862	12.69
Pipes and fittings	76,248.5	3,578,892	5.04	78,618.7	4,175,057	5.31	52,674.8	2,742,573	51.88
Radiators and cast-iron heating boilers	3,819.9	250,552	65.59	8,989.5	653,182	72.66	5,222.7	401,980	70.23
Rails for railways	132,973.1	3,369,894	25.34	155,051.7	3,980,657	25.67	129,545.9	3,445,167	26.36
Scrap and did not only for remanufacture	64,365.3	737,167	11.45	84,523.0	1,032,971	12.22	49,570.0	574,917	11.66
Sheets and plates			46.37						
Iron, galvanized	43,790.6	2,030,648	46.37	41,505.6	2,428,687	58.51	26,827.5	1,595,093	59.45
Iron, all other	(a)		35.65	15,508.7	402,433	44.38	9,763.2	241,523	44.51
Steel plates	209,207.2	7,457,232	35.65	220,598.7	6,706,433	30.41	141,846.2	4,245,736	29.93
Steel, sheets	144,721.9	5,150,453	35.59	120,309.0	3,916,764	32.56	97,516.2	3,014,796	30.93
Structural iron and steel	42,336.8	2,985,065	70.51	58,289.2	4,065,672	69.75	36,582.3	2,513,867	68.72
Thin plates, turn plates, and taggers tin	21,497.9	895,725	41.67	16,094.8	656,185	40.77	12,688.9	508,337	40.06
Wire and manufactures of—	43,638.2	1,750,586	40.12	49,318.8	1,912,069	38.77	37,436.5	1,476,297	39.43
Wire, barbed			31.17						
All other	1,175,464.3	36,637,305	31.17	1,695,916.0	51,936,616	30.62	1,169,349.3	35,921,812	30.72
Builders' hardware and tools									
Locks		1,762,066			479,985			303,601	
Hinges, and other builders' hardware					1,712,768			1,365,987	
Car wheels	3,749	36,021	9.61	14,640	107,300	7.33	11,696	108,174	9.25
Caskets, not elsewhere specified		1,312,729			1,656,680			1,626,211	

Imports of Iron and Steel into Canada from the United States.—Continued.

	TWELVE MONTHS ENDING JUNE 1912.			TWELVE MONTHS ENDING JUNE 1913.			TWELVE MONTHS ENDING JUNE 1914.		
	Quantity.	Value. \$	Average. \$ cts.	Quantity.	Value. \$	Average. \$ cts.	Quantity.	Value. \$	Average. \$ cts.
Cutlery—									
Razors.....									
Table.....		(a) 27,831			46,062			39,099	
All other.....		175,666			24,409			31,870	
Enamelled ware—					132,981			162,870	
Baths.....		(a).....							
Lavatories and sinks.....	No.	(a).....		2,058	38,415	18.67	1,718	35,090	13.60
All other.....	No.	(a).....			156,987			158,889	
Firearms.....		503,710			163,394			140,634	
Machinery, machines and parts of—					679,784			529,528	
Adding machines.....	No.	288,617		1,551	331,477	213.72	2,472	405,125	163.89
Air-compressing machinery.....		112,627			333,448			221,275	
Brewers machinery.....		81,234	79.18	1,804	311,038	65.54	838	189,068	106.30
Cash registers.....	1,026			8,980	344,424	38.35	7,518	287,242	38.21
Cream separators.....		1,869,761			423,725			468,800	
Electrical machinery.....		167,735			232,726			119,401	
Elevators and elevator machinery.....					51,379			49,902	
Laundry machinery.....									
Metal working machinery (including metal working machine tools).....		1,362,326			2,326,270			1,499,356	
Milling machinery (flour and grist).....		(a).....			423,227			407,629	
Mining machinery.....		1,224,011			2,223,659			1,217,029	
Paper-mill machinery.....		(a).....			930,196			317,317	
Printing presses.....		1,265,687			920,522			770,317	
Pumps and pumping machinery.....		701,144			878,431			723,447	
Refrigerating machinery, ice-making machinery, etc.....		170,564			289,777			199,540	
Sewing machines and parts of.....		484,687			527,736			412,422	
Shoe machinery.....		274,388			360,356			192,035	
Steam and other power engines and parts of—									
Electric locomotives.....	No.	46,745	5,843.13	21	146,458	6,974.19	12	27,623	2,301.92
Gas stationary.....	766	119,713	174.64	691	149,648	151.01	1,067	143,546	130.85
Gasoline, automobile.....		769,195	112.39	8,906	753,702	84.63	3,513	71,070	201.33
Marine.....		305,842	1,660.04	1,771	385,134	217.47	1,737	302,391	173.99
Stationary.....		753,570	1,887.07	9,699	1,269,428	130.88	9,885	1,097,443	102.12
Traction.....	1,710	3,166,507	1,851.76	2,013	3,675,691	1,825.98	382	637,162	1,667.96

Material.

1,021 1/2
1,667 '96
382
1,825 98
3,635,691
1,825 98
1,667 '96

Steam, locomotives	107	472,046	4,411 64	160	1,182,993	7,303 71	502,253	5,840 15
marine	3	18,000	6,000 00	70	26,838	339 72	100,857	2,881 63
stationary	245	237,729	1,011 11	360	260,042	722 34	189,786	804 18
traction	259	478,326	1,847 59	540	1,058,600	1,960 37	388,477	1,703 85
Engines, all other		(a)		1,430	871,371	600 05	444,255	332 53
All other engines and parts of		1,910,140			1,436,820		988,745	
Subsidiary machinery		21,431			35,761		186,567	
Textile machinery	\$	(a)			838,568		670,799	
Typing machines, linotype and others	"	943,600			304,635		506,459	
Typewriting machines and parts of	"	71,044			934,664		692,792	
Windmills and parts of	"				59,720		72,099	
Woodworking machinery, sawmill machinery	"	382,752			439,173		221,283	
All other	"	375,446			477,345		511,400	
Railway track material (except rails and spikes) such as switches, frogs, fish-plates, splice-bars, etc.	No.	10,627,184			10,872,249		10,095,534	
Safes	No.	(a)	50 43	3,403	732,617	61 29	793,144	44 17
Scales and balances	\$	217,860			208,277		135,612	
Stores, ranges and parts of	\$	159,551			158,349		134,191	
Tools not elsewhere specified—		1,041,935			1,314,725		975,460	
Axe	No.	(a)		83,122	44,526	51	38,493	55
Hammers and hatchets	"	(a)			74,887		38,979	
Saws	"	(a)			32,887		234,721	
Shovels and spades	"	(a)			33,009		14,892	
All other	"	1,686,924			1,866,713		1,171,832	
Wire manufactures—woven wire fencing	"	(a)			114,395		93,370	
Wire manufactures—all others	"	(a)			430,288		465,327	
All other manufactures of steel	"	10,100,655			7,877,122		7,375,163	
Total value		46,020,989			54,673,774		49,731,318	
		82,658,294			106,610,390		76,653,130	

*Compiled from Commerce and Navigation of the United States, Washington, D.C.

