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THE PRODUCTION OF IRON AND STEEL IN CANADA

During the Calendar Year

1914

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OTTAWA
GOVERNMENT PRINTING BUREAU
1915

No. 349.

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 cobbed ore and briquetted ore. The cobbed 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	86,416	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	275,501	2 51
	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	.....	58,810	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	2,290	264,294
1904	.....	61,293	16,152	141,601	.....	219,046
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	2,500	312,856
1908	.....	11,802	10,103	216,177	.....	238,082
1909	.....	.....	4,150	263,893	.....	268,043
1910	5,336	18,134	4,503	231,445	.....	259,418
1911	31,120	22	3,616	175,586	.....	210,344
1912	71,520	30,857	1,185	112,321	.....	215,883
1913	86,416	20,436	5,102	195,680	.....	307,634
1914	4,775	.....	.....	240,079	.....	244,854

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, 60,410 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*.....	168,828	401,738	2 38
1894.....	.....	21,294	.....	1905*.....	168,289	407,881	2 42
1895.....	1,571	3,909	2 49	1906.....	74,778	149,177	2 01
1896.....	1,033	1,911	1 85	1907.....	25,901	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.	Average value.	Year ending June 30.	Short tons.	Value.	Average 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 24	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	168,203	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.	Average value.	Year ending June 30.	Tons of 2000 lbs.	Value.	Average value.
		$	$ cts.			$	$ cts.
1896	1,270	4,042	3 18	1906	254,399	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	2,496,246	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 00				

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	697,068	412,981	1,110,049
1910	808,762	450,864	1,259,626
1911	765,184	416,279	1,181,463
1912	956,459	375,453	1,331,912
1913	1,048,432	557,488	1,605,920
1914	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	21,289	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	34,393	458,556	.....	.....	8,050	178,865	42,443	637,421
1893	46,472	553,408	.....	.....	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	924,129
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	164,488	1,700,130	127,845	1,746,126	11,121	241,729	303,454	3,687,985
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	232,004	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	8,176,089	.....	.....	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	23·00
February	22·00	19·50–21·00	24·00	23·00
March	22·00	19·50–21·00	24·00	23·00
April	22·00	19·00–20·50	24·00	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 34	19 90	15 90	15 05	18 15	14 96
February	16 41	18 35	22 85	17 90	16 78	19 34	15 90	14 90	18 15	15 09
March	16 35	18 28	22 85	17 86	16 25	18 60	15 90	15 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	24 01	16 93	15 84	17 52	15 90	15 13	17 70	14 90
June	16 65	18 23	24 27	16 90	16 05	16 60	15 90	15 15	17 14	14 90
July	14 85	18 41	23 55	16 83	16 46	16 40	15 90	15 20	16 70	14 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 54	22 90	15 90	18 05	15 90	15 90	16 15	16 65	14 90
October	16 54	20 35	22 00	15 71	19 53	15 90	15 44	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	14 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 40	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 84	14 65	14 25	13 65
October	15 66	19 47	20 40	14 40	17 02	14 15	13 65	16 18	14 26	13 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.
	Canadian.	Imported.	Charcoal.	*Coke from Canadian coal.	Imported coke.	
	Tons.	Tons.	Bushels.	Tons.	Tons.	Tons.
1887	60,434	.....	940,400	33,581	.....	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	.....	1,302,720	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	33,990	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	50,407	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	1,835,736	207,835	115,367	169,399
1902	125,664	559,381	2,146,623	362,208	112,314	293,594
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	526,076
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	1,324,326	920,045	330,269	590,902	447,641

* 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 225 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, Ont., 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 $351,646, 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	3,513	88,052	25 06	1909	5,063	186,778	36 89
1901	57,650	593,739	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	200,363	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.			Charcoal pig-iron.			Total.	
	Tons.	Value.	Average value.	Tons.	Value.	Average value.	Tons.	Value.
		$	$ cts.		$	$ cts.		$
1880(c)	(a) 23,159	371,956	16 06	.....	.....	.....	23,159	371,956
1881	(a) 43,630	715,997	16 41	.....	.....	.....	43,630	715,997
1882	56,594	811,221	14 33	6,837	211,791	30 98	63,431	1,023,012
1883	75,295	1,085,755	14 42	2,198	58,994	26 84	77,493	1,144,749
1884	49,291	653,708	13 26	2,893	66,602	23 02	52,184	723,010
1885	42,279	545,426	12 90	1,119	27,333	24 43	43,398	572,759
1886	42,463	528,483	12 45	3,185	60,086	18 87	45,648	588,569
1887	46,295	554,388	11 98	3,919	77,420	19 76	50,214	631,808
1888	(b) 48,973	648,012	13 23	.....	.....	.....	48,973	648,012
1889	(b) 72,115	864,752	11 99	.....	.....	.....	72,115	864,752
1890	(b) 87,613	1,148,078	13 10	.....	.....	.....	87,613	1,148,078
1891	(b) 81,317	1,085,929	13 35	.....	.....	.....	81,317	1,085,929
1892	(b) 68,918	886,485	12 86	.....	.....	.....	68,918	886,485
1893	56,849	682,209	12 00	5,944	84,358	14 19	62,793	766,567
1894	42,376	483,787	11 42	2,906	34,968	12 03	45,282	518,755
1895	31,637	341,259	10 80	2,780	31,171	11 21	34,417	372,430
1896	36,131	394,591	10 92	917	11,726	12 79	37,048	406,317
1897	25,766	291,788	11 32	2,936	35,373	12 05	28,702	327,161
1898	37,186	382,103	10 28	2,250	23,533	10 46	39,436	405,636
1899	44,261	452,911	10 23	1,955	19,123	9 78	46,216	472,034
1900	49,767	811,490	16 31	1,816	38,736	21 33	51,583	850,226
1901	35,293	548,033	15 53	490	7,121	14 53	35,783	555,154
1902	39,978	585,077	14 64	38	726	19 11	40,016	585,803
1903	91,730	1,338,574	14 59	882	16,352	18 54	92,612	1,354,926
1904	62,515	894,728	14 31	.....	.....	.....	62,515	894,728
1905	71,005	857,879	12 08	.....	.....	.....	71,005	857,879
1906(c)	96,797	1,401,047	14 47	.....	.....	.....	96,797	1,401,047
1907(d)	150,127	2,280,860	15 19	30	675	22 33	150,157	2,281,535
1908(e)	57,343	771,615	13 46	1,022	18,818	18 41	58,365	790,433
1909	147,925	1,798,172	12 16	413	5,727	13 87	148,338	1,803,899
1910	227,753	3,122,695	13 71	16,106	242,152	15 03	243,859	3,364,847
1911	208,487	2,610,989	12 52	.....	.....	.....	208,487	2,610,989
1912	272,565	3,511,599	12 88	115	1,370	11 91	272,680	3,512,969
1913	235,843	3,234,877	13 72	926	12,528	13 53	236,769	3,247,405
1914(e)	78,594	981,107	12 48	86	1,082	12 58	78,680	982,189

(a) Comprises pig-iron of all kinds.
(b) These figures appear in Customs reports under heading "iron in pigs, iron kentledge, and cast iron."
(c) Year ending June 30.
(d) Nine months ending March 31.
(e) Calendar year from 1908 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.

	Tons.	Value.	Average. value.		Tons.	Value.	Average. value.
Fiscal Year.		$	$ cts.	Fiscal Year.		$	$ 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	12,935	246,815	19 08
*1890	696	18,895	27 15	†1906	15,023	462,739	30 80
*1891	2,707	40,711	15 04	†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	Calendar Year.			
†1895	164	5,408	32 98				
†1896	652	12,811	19 65	†1909	17,699	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	990,443	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	1,144,885	700,697	21,359	422,829
1912	1,307,820	735,559	24,237	548,024
1913	1,397,840	913,722	29,408	454,710
1914	872,452	619,030	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.
Ingots—Open-hearth (basic)	580,932	651,676	692,236	824,818	622,097
Bessemer (acid)	222,668	209,817	231,044	301,932	175,244
Castings—Open-hearth	18,085	20,163	31,845	39,217	15,315
Other steels	599	740	2,556	3,026	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	166,381	1911	882,396
1898	24,125	1905	451,863	1912	957,681
1899	24,640	1906	639,396	1913	1,168,993
1900	26,406	1907	706,982	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	373,257	392,340	218,125
Nail plate, merchant bars, and all other finished rolled forms	265,711	323,427			
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	165,654	7,706	67,454	.....
" 1899	187,954	17,511	74,644	.....
" 1900	238,296	10,121	64,360	.....
" 1901	351,259	16,703	100,058	.....
" 1902	693,108	20,550	77,431	.....
" 1903	666,001	6,702	729,102	.....
" 1904	533,982	11,669	347,990	15,321
" 1905	624,667	7,895	676,318	231,324
" 1906	687,632	5,875	941,000	369,832
March 31, 1907 (9 months)	385,231	312	575,259	338,999
" 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	6,706,990	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 value.	Quantity.	Value.	Average. value.
		$	$ cts.		$	$ cts.
Stoves.....No.	1,371	23,858	17 40	4,198	25,149	5 99
Gas buoys and parts of..... "	.....	35,462	.....	.....	21,009	.....
Castings, n.e.s..... "	.....	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, etc..... $	.....	15,872	.....	.....	33,986	.....
Typewriters ..... No.	3,048	201,763	66 20	3,055	200,441	65 61
Scrap iron and steel.....Tons	45,556	483,813	10 62	35,405	446,337	12 60
Hardware, tools, etc..... $	.....	101,990	.....	.....	95,497	.....
Hardware, n.e.s..... "	.....	70,767	.....	.....	190,763	.....
Steel and manufactures of..... "	.....	1,051,004	.....	.....	2,931,908	.....
Agricultural implements—						
Mowing machines.....No.	24,044	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	1,810	56 56
Threshing machines..... "	1,928	712,270	369 43	1,965	799,307	406 77
Cultivators..... "	7,795	201,758	25 88	6,030	146,668	24 32
All other..... "	.....	503,235	.....	.....	290,520	.....
Parts of..... "	.....	915,142	.....	.....	712,414	.....
Automobiles "	5,997	3,395,382	566 18	5,621	3,011,327	535 73
" parts of..... "	.....	210,623	.....	.....	384,428	.....
Bicyles "	90	8,058	89 53	111	10,021	90 28
" parts of..... "	.....	16,901	.....	.....	3,973	.....
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	7,895,489
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 five 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 1,890,506 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	982,189	12 48
Ferro-products and chrome steel	22,271	560,686	25 18
Ingots, blooms, billets, puddled bars, etc	13,049	259,703	19 90
Scrap iron and scrap steel	27,688	337,406	12 19
Plates and sheets	221,203	7,576,312	34 25
Tin plates and sheets	50,791	3,151,385	62 05
Bars, rods, hoops, bands, etc	148,368	5,138,193	34 63
Structural iron and steel	160,538	4,214,520	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	3,247,405	13 72
Ferro-products and chrome steel	30,678	970,100	31 62
Ingots, blooms, billets, puddled bars, etc	52,872	1,212,314	22 93
Scrap iron and scrap steel	104,747	1,488 255	14 21
Plates and sheets	365,675	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	182,421	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		85,344,750	
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	205,690	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	195,139	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	16,705	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	1,869,000
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	47,006	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.	Value per unit.	Quantity.	Value.	Value per unit.
			$	$ cts.		$	$ cts.
Agricultural implements, n.o.p. viz.—							
Binding attachments	$	.....	33,319	.....	.....	3,548	.....
Cultivators and weeders	No.	.....	60,426	.....	.....	48,246	.....
Drills, seed	"	7,295	241,749	33 14	3,928	58,886	14 98
Farm, road, or field rollers	"	617	129,269	209 51	443	122,429	276 36
Forks, pronged	"	16,143	7,929	0 49	9,168	5,218	0 57
Harrows	"	3,642	198,020	54 37	.....	79,107	.....
Harvesters, self-binding	"	3,796	337,849	89 00	1,676	181,210	108 12
Hay loaders	"	478	24,206	50 64	219	10,966	50 07
Hay tedders	"	6	126	21 00	15	607	40 47
Hoes	"	9,052	2,344	0 26	9,950	2,775	0 28
Horse rakes	"	1,466	41,868	28 56	770	14,754	19 16
Knives, hay or straw	"	14,719	4,325	0 29	4,835	2,061	0 43
Knives edging	"	2,838	1,646	0 58	138	88	0 64
Lawn mowers	"	15,701	64,828	4 13	14,258	59,424	4 17
Manure spreaders	"	499	33,502	67 14	1,037	66,309	63 94
Mowing machines	"	1,439	47,765	33 19	1,260	46,042	37 33
Ploughs	"	.....	1,366,959	.....	.....	501,704	.....
Post hole diggers	"	3,517	5,005	1 42	4,691	4,495	0 96
Potato diggers	"	1,618	54,222	33 51	1,435	44,036	30 69
Rakes, n.o.p.	"	20,868	5,744	0 28	26,552	5,346	0 20
Reapers	"	679	40,402	59 50	395	30,434	77 05
Scythes	Doz.	2,661	13,037	4 90	3,029	14,805	4 89
Sickles or reaping hooks	"	516	1,212	2 35	289	631	2 18
Snaths	"	3	17	5 67	10	17	1 70
Spades and shovels of iron or steel, n.o.p.	"	9,566	42,910	4 49	4,694	19,438	4 14
Spade and shovel blanks, and iron or steel cut to shape for the same	"	1,021	2,259	2 21	1,549	2,883	1 86
Parts of agricultural implements paying 12½ per cent and 17½ per cent	$	.....	590,256	.....	.....	191,070	.....
Parts of agricultural implements paying 12½, 17½, and 20 per cent	"	.....	680,973	.....	.....	204,874	.....
All other agricultural implements, n.o.p.	"	.....	106,736	.....	.....	81,867	.....
Anvils and vises	"	.....	99,339	.....	.....	54,163	.....
Cart or wagon skeins or boxes	Tons	217·9	15,862	72 79	190·5	20,714	108 73
Springs, n.o.p., and parts thereof, of iron or steel, for railway, tramway, or other vehicles	"	.....	162,557	.....	.....	65,206	.....
Axle and axle parts, n.o.p., and axle blanks and parts thereof, of iron or steel for railway, tramway, or other vehicles	"	.....	621,777	.....	.....	221,513	.....
Bar iron or steel, rolled, whether in coils, bundles, rod or bars, comprising rounds, ovals, squares, and flats, n.o.p.	"	139,932·6	4,381,341	31 31	49,693·8	1,442,734	29 03
Butts and hinges, n.o.p.	"	.....	156,840	.....	.....	92,375	.....

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.
Canada plates, Russia iron, terne plate, and rolled sheets of iron and steel coated with zinc spelter or other metal, of all widths or thicknesses, n.o.p. Tons	8,639·2	490,791	56 81	8,369·9	435,622	52 05
Castings, iron or steel, n.o.p. $	.....	1,644,991	.....	.....	681,523	.....
Castings, malleable iron, when imported by manufacturers of mowers, binders, harvesters and reapers for use exclusively in their own factories "	.....	.....	.....	.....	71,812	.....
Cast-iron pipe of every description Tons	30,662·5	847,922	27 65	15,614·1	395,466	25 33
Cast scrap iron "	49,874·0	659,319	13 22	10,162	118,299	11 64
Chains, coil chain, chain links, and chain shackles of iron or steel of $\frac{1}{8}$" diameter, and over "	3,112·8	217,175	69 77	1,012·6	82,957	81 92
Chains, coil chains and links, including repair links and chain shackles of iron and steel n.o.p. "	.....	.....	.....	698·5	55,321	79 20
Chains, n.o.p. $	.....	158,914	.....	.....	95,421	.....
Tacks, shoe Tons	24·2	3,143	129 88	14·9	2,105	141 28
Nails, brads, spikes, and tacks of all kinds, n.o.p. "	317	44,486	140 33	324·4	38,001	117 14
Engines, etc.:—						
Locomotives for railways No.	171	692,370	4,048,95	89	260,345	2,925 22
Locomotive parts $	.....	144,309	.....	.....	76,444	.....
Motor cars for railway and tramways No.	109	199,945	1,834 36	23	47,967	2,085 52
Engines, fire "	15	61,984	4,132 27	28	105,572	3,770 40
Engines, gasoline "	25,126	3,150,314	125 38	15,392	1,959,637	127 31
Engines, steam "	476	547,866	1,150 98	356	248,820	698 93
Boilers, steam "	.....	454,726	.....	.....	236,691	.....
Boilers, n.o.p. "	.....	337,390	.....	.....	278,262	.....
Fire extinguishing machines, including sprinklers for fire protection $	.....	125,861	.....	.....	103,316	.....
Fittings, iron or steel, for iron or steel pipe of every description Tons	.....	1,165,364	.....	.....	780,884	.....
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 "	567	16,853	29 72	3,035	206,456	68 02
Ferro-silicon, spiegeleisen, and ferro-manganese "	30,355	940,443	30 98	5,741	152,245	26 52
Ferro-silicon, containing more than 15 % silicon "	.....	.....	.....	1	88	88 00
Spiegeleisen and ferro-manganese containing not more than 15% manganese "	.....	.....	.....	2,375	68,445	28 82
Forging of iron and steel of whatever size, shape, or in whatever stage of manufacture, n.o.p., and steel shafting turned, compressed or polished and hammered, drawn or cold rolled iron or steel bars or shapes, n.o.p. "	2,442·1	263,975	108 09	1,568·6	174,742	11 14
Hardware, viz., builders, cabinet-makers, upholsterers, harness-makers, saddlers, and carriage hardware, including curry-combs, n.o.p. " $	.....	956,703	.....	.....	627,968	.....
Horse, mule, and ox shoes "	.....	39,362	.....	.....	24,563	.....
Iron or steel billets, weighing not less than 60 pounds per lineal yard Tons	51,765·4	1,178,151	22 76	12,247	241,234	19 70

Iron or steel ingots, cogged ingots, blooms, slabs, puddled bars and loops, or other forms, n.o.p., less finished than iron or steel bars, but more advanced than pig-iron except castings	"	654·5	19,379	29 61	154·6	3,348	21 65
Iron or steel bridges or parts thereof, iron or steel structural work, columns, shapes or sections, drilled, punched, or in any further stage of manufacture, than as rolled or cast, n.o.p.	$		971,735			515,223	
Iron in pig	Tons	235,843	3,234,877	13 72	78,594	981,107	12 48
Iron in pig charcoal	"	926	12,528	13 53	86	1,082	12 58
Locks of all kinds	$		568,263			254,699	
Machines, machinery, etc.—							
Automobiles and motor vehicles of all kinds	No.	6,956	8,233,529	1,183 66	5,599	5,296,831	946 03
Automobiles and motor vehicles, parts of	$		3,004,156			2,785,634	
Cranes and derricks	No.	360	850,686	2,363 02	145	448,176	3,090 87
Dental engines	"				47	4,000	85 10
Fanning mills	"	1,199	22,915	19 11	783	18,094	23 11
Grain crushers	"	421	6,469	15 37	366	6,593	18 01
Hay presses	"	219	43,779	199 90	188	31,349	166 75
Windmills and complete parts thereof	"		43,562			50,596	
Ore crushers and rock crushers, stamp mills, cornish and belted rolls, rock drills, air compressors, cranes, derricks, and percussion coal cutters	$		601,531			459,531	
Portable machines:—							
Fodder or feed cutters	No.	2,053	19,016	9 26	665	10,506	15 80
Horse powers for farm purposes	"	12	265	22 09	3	93	31 00
Portable engines with boilers in combination and traction engines for farm purposes	"	1,864	3,539,078	1,898 65	532	854,364	1,605 95
Portable sawmills and planing mills	"	31	10,284	331 74	12	3,261	271 75
Steam shovels	"	97	603,827	6,225 02	29	215,356	7,426 07
Threshing machine separators	"	1,820	1,025,296	563 35	607	308,283	507 88
Threshing machine separators, parts of, including wind-stackers, baggers, weighers and self-feeders for same, and finished parts thereof for repairs, when imported separately	$		499,832			223,009	
All other portable machines, n.o.p., and parts	"		60,552			119,758	
Concrete mixing machines	No.	208	110,059	529 13	156	66,121	423 85
Sewing machines	"	18,446	364,265	19 75	15,667	281,164	17 95
Sewing machines, parts of	$		119,061			73,424	
Adding machines	No.	1,678	269,358	160 52	1,470	269,766	183 51
Machines, typewriting	"	13,997	848,834	60 64	9,051	514,831	56 88
Machines, type-casting and type-setting, and parts thereof, adapted for use in printing offices	"		150,975				
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	"		363,600			231,832	
Lithographic presses and type-making accessories for same	$		610,189			308,907	
Printing presses	"						
Type-making accessories for printing	"					16,574	
Cement making machines	"		187,991			49,097	
Coal handling machines	"		120,359			190,500	
Paper and pulp mill machines	"		417,898			414,396	
Rolling mill machines	"		123,758			147,219	
Sawmill machines	"		189,976			140,699	
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	"		2,180,923			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	$	.....	17,118,296	.....	.....	10,327,957	.....
Machines, washing	No.	9,578	88,420	9 23	8,440	70,030	8 30
Nails and spikes, composition and sheathing nails	Tons	293·9	17,725	60 31	87·7	4,513	51 46
Nails and spikes, cut (ordinary builders)	"	202·8	9,127	45 00	261·3	9,629	36 85
Railway spikes	"	5,272·6	194,194	36 83	2,997·6	92,966	31 01
Nails, wire of all kinds, n.o.p.	"	1,473·1	91,814	62 33	1,177·9	62,884	53 39
Pumps, hand, n.o.p.	No.	32,662	131,463	4 02	21,887	111,113	5 08
Pumps, power and parts of	"	1,707	277,709	162 69	2,985	427,085	143 08
Iron and steel railway bars or rails of any form, punched or not, n.o.p., for railways which term 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 connexion with the business of common carrying of goods or passengers	Tons	177,041	4,886,117	27 59	38,496	979,723	25 45
Railway fish plates	"	3,366	146,493	43 52	2,900	113,913	39 28
Railway tie-plates	"	2,014	88,220	43 80	668	23,137	34 64
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.	"	107,494·8	3,201,384	29 78	33,927·6	920,350	27 13
Rolled iron or steel beams, channels, angles, and other rolled shapes of iron and steel, not punched, drilled or further manufactured than rolled, weighing not less than 35 pounds per lineal yard, not being square, flat, oval, or round shapes, and not being railway bars or rails	"	249,435·1	7,074,279	28 36	82,448·7	2,103,032	25 51
Rolled iron or steel hoop, band, scroll, or strip, 12 inches or less in width, No. 13 gauge and thicker, n.o.p.	"	7,342·6	246,635	33 59	3,439·7	114,498	33 29
Rolled hoop iron or hoop steel galvanized, No. 12 and 13 gauge	"	.....	.....	.....	40·9	1,800	44 00
Rolled iron or steel, hoop, band, scroll, or strip, No. 14 gauge and thinner, galvanized or coated with other metal or not, n.o.p.	"	13,985·8	651,338	46 57	10,391·9	451,814	43 48
Rolled iron or steel sheets or plates, sheared or unsheared, and skelp iron or steel, sheared or rolled grooves, n.o.p.	"	47,444·4	1,517,344	31 98	17,264·3	501,177	29 03
Rolled iron or steel plates not less than 30" in width and not less than ¼" in thickness, n.o.p.	"	65,190·6	1,939,739	29 75	27,856·3	791,976	28 43
Rolled iron or steel sheets, polished or not, No. 14 gauge and thinner, n.o.p.	"	51,776·5	2,545,347	49 16	28,600·4	1,260,522	44 07
Rolls of chilled iron or steel	"	194·5	11,457	58 90	54·1	2,802	51 79
Rolled iron wire rods in the coil of iron or steel not over ½ inch in diameter when imported by wire manufacturers for use in making wire in the coil in their own factories	"	.....	.....	.....	13,851·8	302,228	21 82

Rolled round rods in the coil of iron or steel for the manufacture of chains	"	.....	.....	.....	196·8	4,968	25 24
Sad or smoothing hatters' and tailors' irons	$	.....	10,945	.....	.....	3,583	.....
Safes, doors for safes and vaults	"	.....	192,803	.....	.....	187,364	.....
Screws, iron and steel, commonly called wood screws n.o.p., including lag or coach screws, plated or not, and machine or other screws n.o.p.	Gross	.....	110,442	.....	.....	45,970	.....
Scales, balances, weighing beams, and strength-testing machines of all kinds	$	.....	178,365	.....	.....	101,505	.....
Shafting, round, steel, in bars not exceeding 2½" diameter	Tons	4,416·6	161,238	36 51	1,937·3	69,275	35 76
Shafting, steel, turned compressed or polished	$	.....	15,074	.....	.....	13,121	.....
Sheets or plates of steel, cold rolled with sheared edges over 14 gauge, and not less than 1½" wide for the manufacture of mower bars, hinges, typewriters, and sewing machines	Tons	742·1	30,294	40 82	321	13,862	43 18
Sheets, flat, of galvanized iron or steel	"	19,416·7	1,193,044	61 44	14,406·9	774,558	53 76
Sheets, iron or steel, corrugated, galvanized	"	203·2	14,975	73 70	72·5	3,939	54 33
Sheets, iron or steel corrugated not galvanized	"	293·3	13,895	47 37	10·5	646	61 52
Skates, of all kinds, roller or other, and parts thereof	Pairs	.....	79,972	.....	.....	45,328	.....
Skelp iron or steel, sheared or rolled in grooves, imported by manufacturers of wrought iron or steel pipe, for use exclusively in the manufacture of wrought iron or steel pipe in their own factories	Tons	106,963·5	2,957,887	27 65	91,073·1	2,077,213	22 81
Steel billets, n.o.p.	"	452·5	14,784	32 67	647·2	15,121	23 37
Stoves, of all kinds, for coal, wood, oil, spirits or gas	$	.....	902,256	.....	.....	563,371	.....
Stove urns of metal, and dovetails, chaplets, and hinge tubes of tin for use in the manufacture of stoves	"	.....	25,748	.....	.....	11,948	.....
Switches, frogs, crossings, and intersections for railways	Tons	.....	324,694	.....	.....	148,848	.....
Tubing:—							
Wrought or seamless tubing, plain or galvanized, threaded and coupled or not, over 10" in diameter, n.o.p.	$	.....	.....	.....	.....	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.	"	.....	774,683	.....	.....	201,408	.....
Wrought or seamless tubing, iron or steel, plain or galvanized, threaded and coupled, or not, 4" and less in diameter, n.o.p.	"	.....	419,294	.....	.....	164,147	.....
Seamless steel tubing, valued at not less than 3½ cents per lb	Tons	724·6	82,538	113 91	211·8	30,314	143 13
Rolled or drawn square tubing of iron or steel, adapted for use in the manufacture of agricultural implements	$	.....	14,895	.....	.....	6,036	.....
Iron or steel pipe or tubing, plain or galvanized, riveted, corrugated or otherwise specially manufactured, including lockjoint pipe, n.o.p.	"	.....	1,572,658	.....	.....	469,598	.....
Iron or steel pipe, not butt or lap welded, and wire bound wooden pipe, not less than 30" internal diameter when for use exclusively in alluvial gold mining	"	.....	84	.....	.....	1,211	.....
Ware—Agate, granite, or enamelled iron or steel ware	"	.....	349,564	.....	.....	241,813	.....
Ware—Iron or steel hollow ware, plain black or coated, n.o.p., and nickel and aluminium kitchen or household hollow ware	"	.....	224,552	.....	.....	161,443	.....
Wire bale ties	Bundles of 250 ties	.....	5,943	.....	.....	8,436	.....
Wire bound wooden pipe, n.o.p.	$	.....	723	.....	.....	1,624	.....
Wire cloth or woven wire and netting of iron and steel	Tons	2,370·8	260,186	109 75	2,236·9	243,885	109 02
Wire, crucible cast steel, valued at not less than 6 cents per lb	"	122·9	38,687	314 79	10,996·9	34,390	31 27
Wire screens, doors, and windows	$	.....	49,703	.....	.....	39,587	.....
Wire buckthorn 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. 14 gauge, not to include fencing or wire larger than No. 9 gauge	Tons	938·9	74,774	79 64	945·4	74,182	78 47
Wire, single or several, covered with cotton, linen, silk, rubber, or other material, including cable so covered	"	.....	1,099,921	.....	.....	401,590	.....
Wire of iron and steel all kinds, n.o.p.	"	6,105·3	332,419	54 44	3,810·5	198,464	52 08
Wire rope, stranded or twisted wire clothes lines, picture or other twisted wire, and wire cables, n.o.p.	"	4,339·3	642,905	148 16	2,670·3	432,099	161 81
Iron or steel nuts, rivets, or bolts with or without threads, nut bolt, and hinge blank, and T and strap hinges of all kinds, n.o.p.	"	3,792·2	324,320	85 52	2,147·8	169,929	79 12

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.
Iron or steel scrap, 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	218,553	12 53
Penknives, jack-knives, and pocket knives of all kinds	$	.....	103,792	.....	.....	81,715	.....
Knives and forks of steel, plated or not, n.o.p	"	.....	342,946	.....	.....	210,260	.....
All other cutlery, n.o.p	"	.....	875,316	.....	.....	539,548	.....
Guns, rifles, including air guns and air rifles (not being toys), muskets, cannons, pistols, revolvers, or other firearms	"	.....	887,236	.....	.....	718,211	.....
Bayonets, swords, fencing foils, and masks	"	.....	7,453	.....	.....	8,612	.....
Needles of any material or kind, n.o.p	"	.....	140,685	.....	.....	117,408	.....
Steel, chrome steel	Tons	323	29,657	91 82	123·9	11,201	90 40
Steel plate, 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	"	62,543·6	1,812,399	28 98	29,277·8	785,230	26 82
Steel in bars or sheets to be used exclusively in the manufacture of shovels when imported by the manufacturers of shovels	"	2,985·8	88,421	29 61	653·7	17,082	26 13
Rolled iron or steel, or cast steel in bars, bands, hoops, 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 3½ cents per pound	"	9,907·9	1,197,321	120 84	6,172·4	779,716	126 32
Steel balls adapted for use in bearings of machinery and vehicles	$	.....	27,134	.....	.....	19,747	.....
Flat steel, cold rolled, not over ¼" thick, for the manufacture of cups and cones for ball bearings	Tons	26·8	2,222	82 91	.....	172	61 43
Steel wool	"	.....	4,995	.....	.....	4,729	.....
Tools and implements—							
Adzes, cleavers, hatchets, wedges, sledges, hammers, crowbars, cant-dogs and track tools, picks, mattocks and eyes and poles for the same	$	.....	91,339	.....	.....	47,608	.....
Axes	Doz.	11,492	66,088	5 75	4,048	26,195	6 47
Saws	$	.....	155,005	.....	.....	83,110	.....
Files and rasps, n.o.p	"	.....	149,962	.....	.....	101,699	.....
Tools, hand or machine, of all kinds, n.o.p	"	.....	985,772	.....	.....	621,039	.....
Knife blades or blanks, and table forks of iron and steel, in the rough, not handled, filed, ground, or otherwise manufactured	"	.....	278	.....	.....	87	.....
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	"	.....	11,206,350	.....	.....	7,542,806	.....
			125,082,378	.....	.....	64,901,486	.....

Imports of Iron and Steel Goods Free of Duty.

Material.		Calendar Year, 1913.			Calendar Year, 1914.		
		Quantity.	Value.	Value per unit.	Quantity.	Value.	Value. per unit.
			$	$ cts.		$	$ cts.
Anchors for vessels	Tons	330·4	27,282	82 57	425·5	30,943	72 72
Chain coil, coil chain links including repair links and chain shackles of iron and steel 1⅛″ in diameter and over	"	.....	.....	.....	263·1	19,722	75 48
Chain, malleable sprocket or link belting	$	.....	303,463	.....	.....	139,663	.....
Cream separators, and steel bowls for	"	.....	429,741	.....	.....	455,337	.....
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	"	.....	277,660	.....	.....	236,958	.....
Ferro-manganese and spiegeleisen containing over 15 per cent manganese	"	.....	.....	.....	14,030	328,707	23 43
Gas buoys—The following articles and materials, when imported by manufacturers of automatic gas buoys and auomatic 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 over 16″ in diameter; flanged and dished steel heads made from boiler plate, over 5 feet in diameter; hardened steel balls, not less than 3″ in diameter; acetylene gas lanterns and parts thereof, and tobin bronze in bars or rods	"	.....	7,035	.....	.....	21,288	.....
Gun barrels, in single tubes, forged, rough bored	"	.....	.....	.....	.....	.....	.....
Iron or steel rods over 5/16″ in diameter for manufacturing of chain	Tons	1,093·2	30,777	28 15	46·7	1,041	22 29
Iron or steel, rolled round wire rods, in the coil, not over ⅜″ 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	1,165,401	22 76
Boiler plate of iron or steel not less than 30″ in width, and not less than ¼″ in thickness, for use exclusively in the manufacture of boilers	"	24,348·2	804,582	33 04	7,528·8	212,669	28 25
Flat galvanized iron or steel sheets	"	34,768·4	2,135,558	61 42	23,203·8	1,372,577	59 15
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 3½ cts. per lb	"	4,813·8	798,549	165 89	2,452·3	408,754	166 68
Rolled iron or steel sheets in strips, polished or not, 14 gauge and thinner, n.o.p.	"	15,909·3	771,694	48 50	8,756·4	369,144	42 16
Rolled iron or steel, hoop, band, scroll, or strip, No. 14 gauge or thinner, galvanized or coated with other metal or not, n.o.p.	"	865·5	36,165	41 79	549·0	23,254	42 35
Iron tubing, lacquered or brass covered, not 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	"	.....	7,015	.....	.....	1,813	.....

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

Material.		Calendar Year, 1913.			Calendar Year, 1914.		
		Quantity.	Value.	Value per unit.	Quantity.	Value.	Value per unit.
			$	$ cts.		$	$ cts.
Iron tubing for manufacture of extension rods for windows	$	.....	5,285	.....	.....	3,761	.....
Iron or steel, beams, sheets or plates, ankles, knees, masts or parts thereof and cable chains for wooden, iron, steel or composite ships or vessels	Tons	20,397·6	651,892	31 96	14,884·3	405,908	27 27
Iron and steel bands, strips or sheets, No. 14 gauge or thinner, coated, polished or not, and rolled iron or steel sections, not being ordinary square, flat or round bars, when imported by manufacturers of saddlery, hardware and hames, for use exclusively in the manufacture of such articles in their own factories	"	.....	.....	.....	.....	11,835	.....
Locomotive and car wheel tires of steel in the rough	"	11,801·5	625,636	53 01	6,713·0	316,904	47 21
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	$	.....	245,208	.....	.....	101,590	.....
Scrap iron and scrap 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	Tons	3·7	76	20 54	80·2	554	6 91
Skelp iron or steel, sheared or rolled in grooves, not over 4¼" wide, for the manufacture of rolled iron tubes not over 1½" in diameter	"	849·1	22,959	27 04	414·9	10,910	26 30
Machinery:—							
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 augers; 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; converting apparatus for metallurgical processes in metals; copper plates, plated or not, machinery for extraction of precious metals by the chlorination or cyanide process; amalgam safes; automatic ore samplers; automatic feeders; retorts, mercury pumps, pyrometers; bullion furnaces; amalgam cleaners; blast furnace blowing engines; wrought iron tubing, butt or lap welded; threaded, or coupled or not, over 4" in diameter; and integral parts of all machinery mentioned in this item; blowers of iron or steel for use in the smelting of ores, or in the reduction, separation, or refining of metals, rotary kilns, revolving roasters, and furnaces of metal designed for roasting ore, mineral rock or clay; furnace slag trucks, and slag pots of a class or kind not made in Canada, buddles, vanners, and slime tables adapted for use in gold mining	$	.....	1,033,571	.....	.....	629,593	.....
Diamond drills, not to include motive power	"	.....	70,549	.....	.....	48,617	.....
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	"	.....	259,722	.....	.....	186,695	.....
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	"	.....	22,934	.....	.....	222,958	.....

Briquette making machines	$	.....	3,708	.....	.....	3,946	.....
Newspaper printing presses, of not less value by retail than $1,500 each, of a class or kind not made in Canada	No.	122	513,348	4,207 77	71	402,310	5,666 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, typecasting and typesetting and parts thereof, adapted for use in printing offices	"	.....	504,837	.....	.....	582,272	.....
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	.....	.....	8,641	.....
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	.....
Machines, traction ditching (not being ploughs) adapted for tile drainage on farms, valued at retail at not more than $3,000 each	No.	138	54,681	396 24	32	77,993	2,437 28
Mould boards or shares, or plough plates, land sides, or other plates for agricultural implements, when cut to shape from rolled plates of steel, but not moulded, punched, polished, or otherwise manufactured	Tons	4,963·6	290,245	58 47	2,033·2	116,335	57 22
Sewing machine attachments	$	.....	39,789	.....	.....	31,413	.....
Steel for manufacturing ball bearings	Tons	.....	.....	.....	.....	.....	.....
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	Tons	1,309·9	187,929	143 46	887·3	132,899	149 78
Steel strips, and flat steel wire when imported into Canada by manufacturers of buckthorn 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 guage, respectively, when imported by manufacturers of wire mattresses, 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	"	593·8	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	44·2	4,134	93 53
Steel wire, flat, ot 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 89
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 the 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 17 gauge, in the 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	"	0·6	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	39	7,438	190 72

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

Material.		Calendar Year, 1913.			Calendar Year, 1914.		
		Quantity.	Value.	Value per unit.	Quantity.	Value.	Value per unit.
			$	$ cts.			$ cts.
Steel rolled or drawn square tubing adapted for use in the manufacture of agricultural implements	$	.....	.....	.....	.....	.....	.....
Steel or iron tubes, rolled, not joined or welded, not more than 1¼" in diameter, n.o.p.	"	.....	33,921	.....	.....	37,256	.....
Seamless steel, or wrought iron boiler tubes, including flues and corrugated tubes for marine boilers	"	.....	1,048,288	.....	.....	706,675	.....
Barbed fencing wire of iron or steel	Tons	13,451·7	566,670	42 13	17,001·3	662,814	38 99
Wire crucible cast steel, valued at not less than 6 cents per pound	"	6·5	1,947	299 54	12	3,142	261 83
Wire, curved or not, galvanized iron or steel, Nos. 9, 12, and 13 gauge	"	38,282·8	1,387,528	36 24	35,347·9	1,223,600	34 62
Wire rope for use exclusively for rigging of ships and vessels	"	119·2	13,226	110 95	39·5	4,616	116 86
Wire, steel, valued at not less than 2½ cents per pound when imported by manufacturers of rope for use exclusively in the manufacture of rope	"	3,296·6	258,399	78 38	3,026·1	237,299	78 42
Total		.....	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.
	Short		$	$ cts.		$	$ cts.		$	$ cts.
Bar iron	Tons	9,591·9	308,745	32 19	11,773·8	429,181	36 45	6,544·2	308,248	47 10
Bars or rods of steel—										
Wire rods	"	53,582·9	1,412,910	26 37	82,474·3	2,134,198	25 88	63,108·3	1,617,939	25 64
All other	"	95,215·9	2,859,441	30 03	124,761·6	3,921,471	31 43	92,791·8	3,019,274	32 54
Billets, ingots, and blooms of steel	"	60,008·5	1,200,710	20 01	87,968·2	1,865,120	21 20	24,243·5	487,089	20 09
Bolts, nuts, rivets and washers	"	(a)			3,220·2	218,805	67 95	2,603·4	181,072	69 55
Hoop, band and scroll	"	7,206·2	281,946	39 13	9,436·3	376,561	39 91	9,157·1	376,999	41 17
Horseshoes	"	(a)			271·1	24,894	91 83	248·8	22,941	92 21
Nails and spikes—										
Cut	"	5,419·6	159,215	29 38	8·3	488	58 80	21·3	932	43 76
Railroad spikes	"	(a)			6,218·4	224,193	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	34,164	85 80
Pig-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	46 94	78,618·7	4,175,057	53 11	52,674·8	2,732,573	51 88
Radiators and cast-iron heating boilers	"	3,819·9	250,552	65 59	8,989·5	653,182	72 66	5,722·7	401,980	70 24
Rails for railways	"	132,973·1	3,369,894	25 34	155,051·7	3,980,657	25 67	129,545·9	3,415,167	26 36
Scrap and old, fit only for remanufacture	"	64,365·3	737,167	11 45	84,523·0	1,032,971	12 22	49,570·0	577,917	11 66
Sheets and plates—										
Iron, galvanized	"	43,790·6	2,030,648	46 37	41,505·6	2,428,687	58 51	26,827·5	1,595,003	59 45
Iron, all other	"				15,568·1	692,434	44 48	9,763·2	434,525	44 51
Steel, plates	"	209,207·2	7,457,232	35·65	220,528·7	6,706,433	30 41	141,842·1	4,245,763	29 93
Steel, sheets	"				120,309·0	3,916,764	32 56	97,516·2	3,014,796	30 92
Structural iron and steel	"	144,721·9	5,150,353	35 59	269,250·2	9,242,288	34 33	224,666·4	6,990,022	31 01
Tin plates, terne plates, and taggers tin	"	42,336·8	2,985,065	70 51	58,289·2	4,065,672	69 75	36,582·3	2,513,867	68 72
Wire and manufactures of—										
Wire, barbed	"	21,497·9	895,725	41 67	16,094·8	656,185	40 77	12,688·9	508,337	40 06
" all other	"	43,638·2	1,750,586	40 12	49,318·8	1,912,069	38 77	37,436·5	1,476,297	39 43
		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	No.	3,749	36,021	9 61	14,640	107,300	7 33	11,696	108,174	9 25
Castings, not elsewhere specified	$	.....	1,312,729	.....	.....	1,656,680	.....	.....	1,626,211	.....

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

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.
Cutlery—										
Razors	$		(a)			46,962			39,099	
Table	"		27,841			24,409			31,870	
All other	"		175,666			132,951			102,870	
Enamelware—										
Baths, tubs	No.		(a)		2,058	38,415	18 67	1,718	25,090	14 60
Lavatories and sinks	$		(a)			156,987			158,889	
All other	"		(a)			163,394			140,664	
Firearms	"		503,710			679,784			529,528	
Machinery, machines and parts of—										
Adding machines	No.		288,617		1,551	331,477	213 72	2,472	405,125	163 89
Air-compressing machinery	"		(a)			333,448			224,275	
Brewers machinery	"		112,627			311,638			189,008	
Cash registers	"	1,026	81,234	79 18	1,894	124,133	65 54	848	90,145	106 30
Cream separators	"		(a)		8,980	344,424	38 35	7,518	287,242	38 21
Electrical machinery	$		1,869,761							
Elevators and elevator machinery	"		(a)			423,725			468,800	
Laundry machinery	"		167,735			232,726			119,491	
Lawn mowers	"		(a)			51,379			49,902	
Metal working machinery (including metal working machine tools)	"		1,362,326			2,326,270			1,199,356	
Milling machinery (flour and grist)	"		(a)			423,227			197,029	
Mining machinery	"		1,224,011			2,223,659			1,210,884	
Paper-mill machinery	"		(a)			930,196			317,317	
Printing presses and parts of	"		1,265,657			920,522			770,417	
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			527,726			412,422	
Shoe machinery	"		274,388			300,356			192,035	
Steam and other power engines and parts of—										
Electric locomotives	No.	8	46,745	5,843 13	21	146,458	6,974 19	12	27,623	2,301 92
Gas, stationary	"	766	130,713	174 64	991	149,648	151 01	1,097	143,546	130 85
Gasoline, automobile	"	6,844	769,195	112 39	8,906	753,702	84 63	353	71,070	201 33
" marine	"	1,842	305,842	166 04	1,771	385,134	217 47	1,747	302,391	173 09
" stationary	"	5,096	754,570	148,07	9,699	1,269,428	130 88	9,885	1,009,443	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

Steam, locomotives	"	107	472,046	4,411 64	160	1,182,993	7,393 71	86	502,253	5,840 15	
" marine	"	3	18,000	6,000 00	79	26,838	339 72	35	100,857	2,881 63	
" stationary	"	245	247,729	1,011 14	360	260,042	722 34	236	189,786	804 18	
" traction	"	259	478,526	1,847 59	540	1,058,600	1,960 37	228	388,477	1,703 85	
Engines, all other	"	.....	(a)	.....	1,450	871,371	600 95	1,336	444,255	332 53	
All other engines and parts of	"	.....	1,910,440	.....	.....	1,436,820	.....	.....	988,735	.....	
Sugar-mill machinery	"	.....	24,431	.....	.....	35,761	.....	.....	186 567	.....	
Textile machinery	$	.....	(a)	.....	.....	858,568	.....	.....	670,799	.....	
Typesetting machines, linotype and others	"	.....	(a)	.....	.....	394,635	.....	.....	506,459	.....	
Typewriting machines and parts of	"	.....	944,600	.....	.....	954,904	.....	.....	602,792	.....	
Windmills and parts of	"	.....	71,044	.....	.....	59,720	.....	.....	72,099	.....	
Woodworking machinery, sawmill machinery	"	.....	382,752	.....	.....	439,173	.....	.....	221 283	.....	
Woodworking machinery, all other	"	.....	375,446	.....	.....	477,345	.....	.....	511 400	.....	
All other	"	.....	10,627,184	.....	.....	10,872,249	.....	.....	10,095,534	.....	
Railway track material (except rails and spikes) such as switches, frogs, fish-plates, splice-bars, etc.	"	.....	(a)	.....	.....	732,617	.....	.....	793,134	.....	
Safes	No.	4,320	217,860	50 43	3,403	208,277	61 20	3,070	135,612	44 17	
Scales, and balances	$	.....	159,851	.....	.....	158,349	.....	.....	134,191	.....	
Stoves, ranges and parts of	"	.....	1,041,935	.....	.....	1,314,725	.....	.....	975,460	.....	
Tools not elsewhere specified—											
Axes	No.	.....	(a)		83,122	44,526	54	70,548	38,493	55	
Hammers and hatchets	$	.....	(a)	.....	.....	74,947	.....	.....	38,979	.....	
Saws	"	.....	267,810	.....	.....	346,887	.....	.....	234,721	.....	
Shovels and spades	"	.....	(a)	.....	.....	23,099	.....	.....	14,087	.....	
All other	"	.....	1,686,924	.....	.....	1,866,713	.....	.....	1,371,832	.....	
Wire manufactures—woven wire fencing	"	.....	(a)	.....	.....	114,395	.....	.....	93,370	.....	
Wire manufactures—all others		.....	(a)	.....	.....	430,288	.....	.....	365,327	.....	
All other manufactures of steel		.....	10,100,055	.....	.....	7,877,122	.....	.....	7,375,163	.....	
		.....	46,020,989	.....	.....	54,673,774	.....	.....	40,731,318	.....	
Total value		.....	82,658,294	.....	.....	106,610,390	.....	.....	76,653,130	.....	

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

(a) Not separately stated in 1912.