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DEPARTMENT OF RAILWAYS AND CANALS

CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1914 ✓

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY J. DE L. TACHÉ, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY

1915

1870

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*To Field Marshal, His Royal Highness PRINCE ARTHUR WILLIAM PATRICK ALBERT
Duke of Connaught and of Strathearn, K.G., K.T., K.P., etc., etc., etc.,
Governor General and Commander in Chief of the Dominion of Canada.*

MAY IT PLEASE YOUR ROYAL HIGHNESS,—

The undersigned has the honour to present to your Royal Highness, Canal Statistics for the year ended December 31, 1914.

All of which is respectfully submitted.

F. COCHRANE,
Minister of Railways and Canals.

To the Honourable F. COCHRANE,
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Comptroller of Statistics in relation to the operations of the Canals of the Dominion for the year ended December 31, 1914.

I have the honour to be, sir,

Your obedient servant,

A. W. CAMPBELL,
Deputy Minister of Railways and Canals.

OFFICE OF THE COMPTROLLER OF STATISTICS,
OTTAWA, February 10, 1915.

A. W. CAMPBELL, Esq., C. E.,
Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit herewith Canal Statistics for the year ended December 31, 1914.

The volume of traffic through all the canals of Canada during the year was 37,023,237 tons, as against 52,053,913 tons in 1913. There was therefore a decrease of 15,030,676 tons.

Following was the distribution of traffic, by canals, during the year 1914, with the increases and decreases:—

	Tons.	Increase.	Decrease.
		Tons.	Tons.
Sault Ste. Marie.....	27,549,184		15,100,140
Welland.....	3,860,969	290,255	
St. Lawrence.....	4,391,493	89,066	
Chambly.....	436,905		118,697
St. Peters.....	54,180		17,334
Murray.....	83,907		96,669
Ottawa.....	335,132		30,306
Rideau.....	151,739		19,484
Trent.....	67,715	11,915	
St. Andrews.....	42,013		39,282
Total.....	37,023,237	391,236	15,421,912

It will be observed that the unprecedented falling-off in traffic during the year 1914 occurred almost wholly at Sault Ste Marie. Of the total decrease of 15,030,676 tons, 1,748,669 was in Canadian and 13,282,007 in American waterborne commerce. As will appear later, the decline in American traffic was very largely in the movement of iron ore from the head of lake Superior to ports on lake Erie.

It must be understood, however, that the foregoing tonnage represents the aggregate of traffic which passed through all the canals of Canada. That is to say, it is gross traffic, and necessarily includes duplication and to some extent triplication. The net tonnage, as made up by an analysis of the returns, was approximately 29,786,186 tons, of which 5,521,228 were Canadian and 24,264,958 American.

The gross traffic through the canals since 1905 was as follows:—

	Tons.
1905.....	9,371,744
1906.....	10,523,185
1907.....	20,543,639
1908.....	17,502,820
1909.....	33,720,748
1910.....	42,990,608
1911.....	38,030,353
1912.....	47,587,245
1913.....	52,053,913
1914.....	37,023,237

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For the first time, an analysis has been made of traffic by months. The facts for the past four years, as respects all canals, are shown in the following table:—

	1911.	1912.	1913.	1914.
	Tons.	Tons.	Tons.	Tons.
January.....	254	181	397	494
April.....	722,311	77,871	875,226	554,111
May.....	5,170,587	6,134,122	7,260,227	5,307,123
June.....	5,451,549	6,851,248	7,647,189	6,136,657
July.....	5,798,169	7,054,060	8,137,169	6,339,831
August.....	5,778,187	7,159,871	7,625,782	6,261,380
September.....	5,466,054	6,983,913	7,531,379	6,069,946
October.....	5,514,042	7,321,846	7,350,914	4,660,484
November.....	3,657,824	5,369,493	4,891,143	1,470,471
December.....	471,376	634,640	734,487	222,740
Total.....	38,030,353	47,587,245	52,053,913	37,023,237

It will be instructive to observe the movement of freight by months, through each of the ten Canadian canals. The facts in that regard for 1914 and the preceding year are as follows:—

	Sault Ste. Marie.	Welland.	St. Lawrence.	Chambly.	Ottawa.	Rideau.	St. Peters.	Murray.	Trent.	St. Andrews.	Total.
1914.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
April.....	437,182	77,805	33,947	.....	2,081	.....	494	2,865	.....	.....	554,605
May.....	3,939,578	569,909	655,929	33,517	60,860	27,823	6,785	5,726	4,277	2,930	5,307,123
June.....	4,653,580	581,388	673,678	74,959	73,030	30,090	6,724	15,945	10,069	16,194	6,136,637
July.....	4,749,845	618,038	764,625	74,834	62,902	28,537	6,017	11,540	11,160	13,335	6,339,831
August.....	4,799,387	583,441	681,136	84,919	54,515	24,210	3,565	11,370	13,004	5,833	6,261,380
September.....	4,669,372	593,822	635,327	80,400	36,475	16,944	3,490	18,071	13,684	2,361	6,099,916
October.....	3,355,305	537,729	626,996	58,830	31,137	16,633	10,605	8,315	13,574	1,360	4,660,484
November.....	815,235	270,337	311,281	29,448	14,132	7,502	12,034	8,575	1,927	.....	1,470,471
December.....	179,700	28,500	8,574	.....	.....	.....	4,466	1,500	.....	.....	222,740
Total.....	27,599,184	3,860,969	4,391,493	436,905	335,132	151,739	54,180	83,907	67,715	42,013	37,023,237
1913.											
April.....	702,618	103,048	52,955	571	5,220	.....	3,332	7,761	118	.....	875,623
May.....	6,029,539	482,844	573,032	50,729	54,007	25,518	9,116	26,364	3,134	5,944	7,260,227
June.....	6,276,817	487,173	642,803	87,402	56,554	26,946	8,988	31,632	9,834	19,038	7,647,189
July.....	6,656,867	565,296	659,900	100,961	53,552	26,497	8,261	37,254	7,310	21,271	8,137,169
August.....	6,124,104	570,838	689,712	95,779	57,069	27,491	9,132	31,427	7,185	13,045	7,625,782
September.....	6,220,171	492,369	611,969	87,035	47,588	23,132	8,251	16,832	12,520	11,512	7,531,379
October.....	5,995,098	507,991	633,469	88,493	56,540	24,553	8,307	15,949	10,029	10,485	7,350,914
November.....	4,017,393	336,425	412,023	44,632	34,908	17,086	9,721	13,357	5,598	.....	4,891,143
December.....	676,715	24,730	26,564	.....	.....	.....	6,406	.....	72	.....	734,487
Total.....	42,699,324	3,570,714	4,302,427	555,602	365,438	171,223	71,514	180,576	55,800	81,295	52,053,913

The following table will show the fluctuations of traffic through the various canals during the past five years:—

	1910.	1911.	1912.	1913.	1914.
Sault Ste. Marie.....	36,395,687	30,951,709	39,669,655	42,699,324	27,599,184
Welland.....	2,326,290	2,537,629	2,851,915	3,570,714	3,860,969
St. Lawrence.....	2,760,752	3,105,708	3,477,188	4,302,427	4,391,493
Chambly.....	669,299	599,829	618,415	555,602	436,905
St. Peters.....	85,951	75,298	74,809	71,514	54,180
Murray.....	177,941	163,457	170,081	180,576	83,907
Ottawa.....	385,261	320,071	392,350	365,438	335,132
Rideau.....	134,881	172,227	160,133	171,223	151,739
Trent.....	46,263	57,290	77,150	55,800	67,715
St. Andrews.....	8,283	47,135	95,549	81,295	42,013

Although tables showing the composition of traffic in detail appear in the body of this report, the following summary, by classes of commodities, will throw a direct light on freight movement in the years 1913 and 1914:—

Canals.	Agricultural Products.	Animal Products.	Manu- factures.	Products of Forest.	Products of Mines.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1913.						
Sault Ste. Marie.....	5,253,665	198	733,910	62,958	36,648,593	42,699,324
Welland.....	1,684,967	361	548,373	337,927	999,086	3,570,714
St. Lawrence.....	1,545,775	8,269	460,161	660,226	1,627,996	4,302,427
Chambly.....	13,432	490	20,217	337,331	184,132	555,602
St. Peters.....	15,935	2,492	8,078	6,301	38,708	71,514
Murray.....	568	13	75,803	55	104,137	180,576
Ottawa.....	2,331	3,657	15,901	186,710	156,839	365,438
Rideau.....	3,437	3,458	15,213	27,331	121,784	171,223
Trent.....	1,840	208	2,414	50,812	436	55,800
St. Andrew's.....	377	65	1,629	9,274	69,950	81,295
Total.....	8,522,327	19,301	1,881,699	1,678,925	39,951,661	52,053,913
1914.						
Sault Ste. Marie.....	3,799,337	217	487,789	40,956	23,270,885	27,599,184
Welland.....	2,116,378	275	361,174	360,434	1,022,708	3,860,969
St. Lawrence.....	2,020,035	6,905	297,269	668,775	1,398,509	4,391,493
Chambly.....	9,248	211	11,111	293,242	123,093	436,905
St. Peters.....	11,845	1,543	4,117	3,126	33,549	54,180
Murray.....	149	.....	21,605	430	61,723	83,907
Ottawa.....	3,032	3,183	18,663	171,440	138,814	335,132
Rideau.....	2,027	3,010	13,466	15,041	118,195	151,739
Trent.....	795	336	3,043	62,473	1,068	67,715
St. Andrew's.....	22	1	288	6,050	35,652	42,013
Total.....	7,962,868	15,681	1,218,525	1,621,967	26,204,196	37,023,237

The total traffic in 1914 through the Canadian canal at Sault Ste. Marie was moved as follows:—In American vessels, 86 per cent; in Canadian vessels, 14 per cent.

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It will also help to an understanding of the traffic situation to see the ratio which each commodity class bore to the total during the past five years. The following table is therefore given:—

	1910.	1911.	1912.	1913.	1914.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Agricultural products.....	10.2	14.2	14.51	16.40	21.51
Animal products.....	1.2	.1	.04	.04	.04
Manufactures.....	5.2	6.2	4.68	3.61	3.29
Products of forests.....	3.9	4.0	3.43	3.22	4.38
Products of mines.....	79.5	75.5	77.34	76.73	70.78

CANADIAN AND AMERICAN TRAFFIC.

The following table shows the number and tonnage of Canadian and American vessels, and also the tonnage of Canadian and American traffic, which passed through the canals of Canada in 1908 and succeeding years:—

Year.	Canadian Vessels.		U. S. Vessels.		Freight Tonnage.		
	No.	Tonnage.	No.	Tonnage.	Canadian.	United States.	Total.
1908.....	29,040	6,780,789	7,489	4,835,320	5,012,147	12,190,673	17,502,820
1909.....	22,507	7,811,578	9,996	16,459,322	7,378,057	26,342,691	33,720,748
1910.....	25,337	8,931,790	11,462	21,777,297	7,883,614	35,106,994	42,990,608
1911.....	25,585	9,172,192	10,370	18,231,622	7,792,907	30,237,446	38,030,353
1912.....	27,371	10,237,335	11,785	24,636,190	9,376,529	38,210,716	47,587,245
1913.....	28,654	12,078,041	10,739	24,238,788	11,130,875	40,923,038	52,053,913
1914.....	26,125	12,050,856	7,742	15,636,414	9,382,206	27,641,031	37,023,237

Reducing the foregoing figures in relation to freight tonnage to a percentage basis, the situation is further illuminated:—

Year.	Canadian Per Cent.	American Per Cent.
1908.....	28.7	71.3
1909.....	21.8	78.2
1910.....	18.3	81.7
1911.....	20.5	79.5
1912.....	19.7	80.3
1913.....	21.3	78.7
1914.....	25.3	74.7

All of the freight traffic of Canada did not, however, pass through Canadian canals. At Sault St. Marie, 1,068,812 tons of Canadian commerce passed through the American canal at that point. The facts in this regard for preceding years are not available, although an effort will be made during the current year to get them. Adding the 1,068,812 tons which passed through the American canal to the net tonnage of Canadian traffic for all canals as shown in a preceding paragraph—5,521,228—we have a total of 6,590,040 for 1914 is produced.

The situation at Sault Ste. Marie in 1914, having reference to both the Canadian and American canals at that point, might be summarized as follows: Out of a total traffic belonging to the United States of 50,692,092 tons, 23,989,437 tons, or 47·3 per cent. passed through the Canadian canal. On the other hand, out of an aggregate traffic of 4,678,559 tons belonging to Canada, 1,068,812 tons, or 22·8 per cent, passed through the American canal.

The year 1914, in this respect, reflected normal conditions.

The ratio of Canadian traffic was bettered in 1914 wholly because of the large decline in American business. Measured by volume, Canadian freight tonnage decreased in 1914 by 15·7 per cent. American freight tonnage decreased by 32·5 per cent. Tables 1 and 7, in the body of this report, will give a considerable mass of details respecting the international character of canal traffic; but, for the purposes of immediate comparison, the following summary will be found helpful:—

Canals.	Total Traffic.	Canadian Tons.	Per Cent.	American Tons.	Per Cent.
Sault Ste. Marie.....	27,599,184	3,669,747	13·0	23,989,437	86·9
Welland.....	3,860,969	2,013,619	52·1	1,847,350	47·6
St. Lawrence.....	4,391,493	2,738,649	62·3	1,652,844	37·7
Chambly.....	436,905	308,091	70·5	128,814	29·5
St. Peters.....	54,180	54,164	99·9	16	
Murray.....	83,907	80,946	96·4	2,961	3·5
Ottawa.....	335,132	325,059	96·9	10,073	6·0
Rideau.....	151,739	142,203	93·7	9,536	6·3
Trent.....	67,715	67,715	100·0		
St. Andrews.....	42,013	42,013	100·0		
	37,023,237	9,382,206	25·3	27,641,031	74·7

It will be observed that the preponderance of American traffic, amounting to nearly 75 per cent of the total for all canals, arises very largely from the situation at Sault Ste. Marie, which is the chief gateway of commerce on the Great Lakes. At that point in 1914 the volume of freight tonnage belonging to the United States was equal to 86·9 per cent of the aggregate. The Canadian canal at Sault Ste. Marie was opened for traffic in 1895, and since that year the history of the freight movement through it is shown in the following table:—

Year.	Total Traffic.	Canadian Traffic.	Per cent Canadian.	American Traffic.	Per cent American.
1896.....	4,557,399	321,770	7·0	4,255,629	93·0
1897.....	4,947,063	337,146	6·8	4,609,917	93·2
1898.....	3,055,287	146,539	4·8	2,908,748	95·2
1899.....	3,006,664	299,975	9·9	2,706,689	90·1
1900.....	2,035,677	255,264	12·5	1,880,413	87·5
1901.....	2,820,394	494,613	17·5	2,325,781	82·5
1902.....	4,729,268	1,140,623	24·1	3,588,645	75·9
1903.....	5,511,868	1,362,820	24·7	4,149,048	75·3
1904.....	5,030,705	1,212,145	24·1	3,818,560	75·9
1905.....	5,473,406	1,304,355	23·8	4,169,051	76·2
1906.....	6,574,046	1,632,683	24·8	4,941,363	75·2
1907.....	15,588,165	1,957,334	12·5	13,630,831	87·5
1908.....	12,759,216	2,113,160	16·5	10,646,056	83·5
1909.....	27,861,245	2,767,875	9·1	25,093,370	90·9
1910.....	36,395,687	2,941,229	8·1	33,454,458	91·9
1911.....	30,951,709	3,167,936	10·2	27,783,773	89·8
1912.....	39,669,655	3,808,157	9·6	35,861,498	90·4
1913.....	42,699,324	4,816,718	11·3	37,882,606	88·7
1914.....	27,599,184	3,609,747	13·1	23,989,437	86·9

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The foregoing table will not be perfectly understood in the absence of facts respecting the character of American traffic through the Canadian canal at Sault Ste. Marie. When that traffic is analysed it is found to consist very largely of iron ore being moved eastward. This movement of ore on a large scale began in the nineties. The following table gives the facts since 1905:—

Year.	American Traffic through Canadian Canal.			Ore included in foregoing total.	Per cent of Ore.	Com-modities other than Ore.	Per cent of other Com-modities.
	Up.	Down.	Total.				
	Tons.	Tons.	Tons.	Tons.		Tons.	
1905	1,028,871	3,140,180	4,169,051	2,910,118	69.9	1,258,933	30.1
1906	1,367,796	3,573,567	4,941,363	2,929,366	59.3	1,011,997	40.7
1907	2,604,741	11,026,090	13,630,831	9,995,242	73.2	3,635,589	26.8
1908	2,419,709	8,226,347	10,646,056	7,362,351	69.1	3,283,705	30.9
1909	2,737,101	22,356,269	25,093,370	21,156,915	84.3	3,936,455	15.7
1910	4,004,538	29,449,920	33,454,458	28,440,952	85.0	5,013,506	15.0
1911	4,307,187	23,476,586	27,783,773	22,654,029	81.5	5,129,744	18.5
1912	3,133,638	32,727,860	35,861,498	31,134,251	87.0	4,727,247	13.0
1913	4,238,829	33,643,777	37,882,606	32,386,866	85.5	5,495,740	14.5
1914	2,398,944	21,737,678	24,136,622	20,817,953	86.2	3,318,669	13.8

The foregoing American total for 1914 includes 147,185 tons of Canadian wheat from Duluth, which, starting from a United States port, is, for the purposes of this table, counted as American.

The total of American traffic in the table above, it should be explained, does not agree closely with the figures in table 7, for the reason that Canadian grain shipped from Duluth is, for the purposes of the comparison in hand, classified as belonging to the business of the United States. The analysis of the situation at Sault Ste. Marie may be concluded by comparing the volume of Canadian and American eastbound traffic, exclusive of ore. A few cargoes of iron and copper ore of Canadian origin are carried annually eastward; but when ore is taken out of the account the facts remain as follows:—

Year.	Canadian Eastbound exclusive of ore.	Per cent of total Eastbound	American Eastbound exclusive of ore.	Per cent of total Eastbound
1905	838,537	82.7	303,630	9.7
1906	1,112,742	92.8	721,320	20.2
1907	1,446,788	91.7	1,142,468	10.3
1908	1,585,549	92.3	986,614	11.9
1909	2,038,245	98.0	1,229,282	5.5
1910	2,132,620	100.0	962,062	3.3
1911	2,466,806	99.1	820,488	3.5
1912	3,019,998	99.8	1,576,646	4.8
1913	4,114,402	99.0	1,271,882	3.8
1914	2,985,114	97.1	919,725	4.2

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At the Welland canal, iron ore is not a factor. The traffic is of a general character. The Welland is the principal gateway between Sault Ste. Marie and Montreal, and it will help to a clearer understanding of the canal situation if the facts with respect to traffic at that point are given. They are as follows:—

TRAFFIC THROUGH THE WELLAND CANAL.

Year.	Canadian— <i>Up.</i>	Per cent.	Canadian— <i>Down.</i>	Per cent.	United States— <i>Up.</i>	Per cent.	United States— <i>Down.</i>	Per cent.
	Tons.		Tons.		Tons.		Tons.	
1887	61,310	41.3	87,159	58.7	265,738	31.9	565,928	68.1
1891	25,260	25.8	72,522	74.2	264,952	30.2	612,279	69.8
1896	19,369	8.8	200,294	91.2	271,900	25.6	788,424	74.4
1897	12,091	6.3	179,098	93.7	212,108	19.6	870,095	80.4
1898	11,904	8.5	127,236	91.5	211,502	21.1	789,435	78.9
1899	17,464	10.2	153,174	89.8	135,038	21.8	484,094	78.2
1900	18,670	11.0	150,378	89.0	99,560	18.1	450,752	81.9
1901	22,804	10.2	200,693	89.8	83,601	21.1	313,111	78.9
1902	39,760	16.2	204,398	83.8	44,994	10.7	376,235	89.3
1903	116,143	34.6	220,152	65.4	153,947	23.1	512,677	76.9
1904	94,353	27.1	253,920	72.9	90,855	19.6	372,243	80.4
1905	104,490	24.6	319,944	75.4	127,569	19.1	540,447	80.9
1906	131,502	24.2	410,749	75.8	91,366	13.8	568,350	86.2
1907	202,051	29.6	479,292	70.4	188,113	20.1	744,676	79.9
1908	163,447	21.7	587,239	78.3	247,513	25.9	705,254	74.1
1909	382,041	37.5	635,187	62.5	260,048	25.7	748,675	74.3
1910	420,407	35.9	749,891	64.1	304,427	26.3	851,565	73.7
1911	508,865	38.0	828,085	62.0	334,054	27.8	866,625	72.2
1912	578,251	37.1	979,525	62.9	247,471	19.1	1,046,668	80.9
1913	641,402	32.4	1,338,274	67.6	363,701	22.9	1,227,337	77.1
1914	504,487	22.2	1,760,502	77.8	351,562	22.2	1,235,418	77.8

TRANSPORTATION OF CANADIAN WHEAT.

For several years special study has been given to the movement of Canadian wheat by water, and for this purpose the facts have been ascertained and tabulated in relation to both distribution and freight rates. The information developed in this way will have an increasing value as time proceeds.

The records of the Department show that the shipments each year through the Canadian canal at Sault Ste. Marie, since 1895, have been as follows:—

1895	Bushels.
1896	1,087,800
1897	7,274,000
1898	9,130,167
1899	3,456,934
1900	7,699,267
1901	5,573,267
1902	5,893,034
1903	19,896,900
1904	25,807,800
1905	25,250,969
1906	22,603,500
1907	26,361,400
1908	34,602,000
1909	41,793,300
1910	48,047,833
1911	51,774,833
1912	63,641,000
1913	83,743,034
1914	101,966,133
	77,467,833

It should be clearly understood that prior to 1909 the figures do not include shipments of Canadian wheat in bond from Duluth which passed through the

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Canadian canal. It must also be borne in mind that consignments which passed through the American canal are, in all years, excluded. In other words, the foregoing table relates to waterborne wheat which passed through the Canadian canal at Sault Ste. Marie, and includes shipments from Duluth only in 1909 and succeeding years.

Canadian wheat, as has been explained, also passed through the American canal at Sault Ste. Marie. The following summary gives the facts for 1914:—

	Bushels.
Through the Canadian canal.....	77,467,833
Through the American canal.....	17,564,233
Total.....	95,032,066

Shipments of Canadian flour from the west had a total of 3,275,532 barrels, of which 1,975,950 passed through the Canadian canal and 1,499,370 passed through the American canal at Sault Ste. Marie. At $4\frac{1}{2}$ bushels to the barrel, the volume of flour would be equal to 14,739,872 bushels of wheat. This wheat in the form of flour showed an increase of 7,161,107 bushels over 1913. Joining wheat and flour shipments through both canals, the final total is 106,442,605 bushels, which was 42,867,059 bushels below the record for the preceding year. Summarized, the movement of wheat in 1914 was as follows:

	Bushels.
Through the Canadian canal.....	77,467,833
Through the American canal.....	17,564,233
In the form of flour.....	14,739,872
Total.....	109,771,938

Combining shipments of Canadian wheat through the Canadian and American canals at Sault Ste. Marie since a special account was kept of the facts, following is the result:—

	Bushels.
1912.....	109,842,031
1913.....	141,726,899
1914.....	95,032,066

Special care has been taken during recent years to follow the distribution of waterborne wheat of Canadian origin. For the years 1913 and 1914 the volume which came down from Port Arthur-Fort William and passed through both the Canadian and American canals at Sault Ste. Marie took the following routes:—

From	1913	1914
Port Arthur-Fort William.	Bushels.	Bushels.
To Montreal.....	11,950,433	9,624,600
“ Georgian Bay ports.....	24,448,134	21,086,566
“ other Canadian ports.....	28,045,733	33,132,733
“ Buffalo.....	67,701,900	24,974,767
Total.....	132,146,200	88,818,666

In order to account for all the Canadian wheat which actually moved eastbound in 1913 and 1914, through both the Canadian and American canals

at Sault Ste. Marie, it is necessary to add to the foregoing the cargoes which came out in bond from Duluth. Joining the Port Arthur-Fort William shipments to those from Duluth, the following final quantities and distribution are had:—

From	1913	Per cent.	1914	Per cent.
Port Arthur-Fort William and Duluth.		Bushels.	Bushels.	
To Montreal.....	15,186,632	10.7	10,283,166	10.8
“ Georgian Bay ports.....	26,054,001	18.4	24,864,466	26.2
“ other Canadian ports.....	28,973,333	20.5	34,350,700	36.2
“ Buffalo.....	71,522,933	50.4	25,533,734	26.8
Total.....	141,726,899	.....	95,032,066	.....

It should be explained that “other Canadian ports” in the foregoing tables are ports lying between the Georgian bay and lake Ontario. For the most part the term means Port Colborne, which, as will be made plain later, is a port of transfer.

In order that a basis for comparison may be preserved, having regard to preceding reports, the following summary of the movement of Canadian wheat through the Canadian and American canals at Sault Ste. Marie is given:—

Canadian Wheat.	1909.	1910.	1911.	1912.	1913.	1914.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to—						
Montreal.....	10,517,266	13,185,370	12,761,666	14,929,099	11,950,433	9,624,600
Georgian bay.....	13,384,400	12,753,200	9,881,234	19,501,168	24,448,134	21,086,566
Other Canadian ports.....	10,149,633	9,603,400	11,880,666	20,458,700	28,045,733	33,132,733
Buffalo.....	12,841,334	15,693,363	27,945,600	44,228,266	67,701,900	24,974,767
Duluth to—						
Montreal.....	520,000	315,000	.....	283,500	3,236,199	658,566
Buffalo.....	528,200	224,500	710,334	5,714,367	3,811,033	3,777,900
Georgian bay.....	28,000	.....	461,500	1,418,767	1,605,867	1,217,967
Other Canadian ports.....	79,000	.....	.....	230,000	927,600	558,967
Unclassified.....	.....	.....	.....	3,078,164	.....	.....
Total.....	48,047,833	51,774,833	63,641,000	109,842,031	141,726,899	95,032,066
Through American canal.....	9,117,328	5,321,446	1,981,481	.....	.....	.....
Grand total.....	57,165,161	57,096,279	65,622,481	109,842,031	141,726,899	95,032,066

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In a preceding table the volume and percentage of Canadian wheat which took the various routes of distribution in 1914 are given. The following table shows in convenient form the percentages for prior years:—

Canadian Wheat.	1909.	1910.	1911.	1912.	1913.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Fort William to Montreal.....	21.9	25.5	20.1	13.6	8.4
“ “ Georgian bay.....	27.9	24.6	15.6	17.8	17.2
“ “ other Canadian ports.....	21.1	18.5	18.7	18.6	19.8
“ “ Buffalo.....	26.7	30.3	43.8	40.2	47.8
Duluth to Canadian ports.....	1.3	0.6	0.7	1.7	4.1
“ “ American ports.....	1.1	0.5	1.1	5.2	2.7
“ “ unclassified.....				2.9	

The causes of the diversion of Canadian wheat to Buffalo have been dealt with in preceding reports. It is perhaps significant of a change in conditions that in 1914 only 26.8 per cent of Canadian wheat sought an outlet through American channels, as compared with 50.4 per cent in 1913. The war in Europe was probably a potential factor in the matter during the autumn months.

During the year 1914 a special study was made of the movement of Canadian wheat by months as well as by routes of distribution. The facts thus gathered and tabulated will undoubtedly throw a helpful light on the whole situation. The following statements show the volume which passed through the Canadian and American canals in 1913:—

Canadian Canal.	April.	May.	June.	July.	August.
1913.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	634,600	1,973,900	1,782,667	1,407,733	1,097,900
“ “ Georgian bay.....	1,477,000	2,619,967	930,833	1,080,500	441,100
“ “ other Canadian ports.....	1,282,300	2,545,700	3,056,066	2,536,300	1,628,400
“ “ Buffalo.....	1,430,633	2,039,600	197,000		
Duluth to Montreal.....		24,000		22,533	187,000
“ “ Georgian bay.....	330,000	86,066			
“ “ other Canadian ports.....		77,600			
“ “ Buffalo.....	534,000	817,867	330,000	274,300	
Total.....	5,688,533	10,184,700	6,296,566	5,321,366	3,354,400

Canadian Canal.	September.	October.	November.	December.	Total.
1913.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	1,512,500	1,697,567	1,052,900	73,367	11,233,134
“ “ Georgian bay.....	589,533	5,988,400	6,455,400	1,949,400	21,532,133
“ “ other Canadian ports.....	1,908,600	6,421,233	4,437,900	1,763,500	25,579,999
“ “ Buffalo.....	2,250,633	12,058,366	13,987,133	7,319,133	39,282,498
Duluth to Montreal.....	204,000				437,533
“ “ Georgian bay.....					416,066
“ “ other Canadian ports.....	204,000				281,600
“ “ Buffalo.....		347,000			2,303,167
Total.....	6,669,266	26,512,566	25,933,333	11,105,400	101,066,130

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American Canal.	April.	May.	June.	July.	August.
1913.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....		245,000	63,000		
“ “ Georgian Bay ports.....	948,263	321,169	202,000	89,465	91,476
“ “ other Canadian ports.....	330,500	355,788	214,000	116,000	220,000
“ “ Buffalo.....	5,582,351	3,820,335	1,009,130	486,862	
Duluth to Montreal.....	202,500	404,753	239,403	52,507	
“ “ Georgian Bay ports.....					
“ “ other Canadian ports.....			109,000		
“ “ Buffalo.....	214,610	1,158,011	264,948	77,134	
Total.....	7,278,224	6,305,056	2,101,481	821,968	311,476

American Canal.	September.	October.	November.	December.	Total.
1913.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	72,000	337,300			717,300
“ “ Georgian Bay ports.....	92,231	318,932	352,500		2,416,036
“ “ other Canadian ports.....	638,440	448,000	143,000		2,465,728
“ “ Buffalo.....	1,896,794	7,323,130	5,719,724	2,770,277	28,608,603
Duluth to Montreal.....	229,500	504,455	204,500		1,837,618
“ “ Georgian Bay ports.....		61,000	185,000		246,000
“ “ other Canadian ports.....					109,000
“ “ Buffalo.....	100,700	178,000			1,993,403
Total.....	3,029,665	9,170,817	6,604,724	2,770,277	38,393,688

It will be observed that there is a difference of 2,267,078 between the total shown in the above table and the total for 1913 in a preceding table. This arose from a difficulty in identifying the cargoes as shown in the American reports for the purposes of the foregoing analysis. All cargoes which could not be classified by months were left out; but these omissions do not destroy the value of the comparison as between 1913 and 1914.

Joining the figures for the Canadian and American canals for 1913, following is the result:—

Canadian and American Canals.	April.	May.	June.	July.	August.
1913.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to—					
Montreal.....	634,600	2,218,900	1,845,607	1,407,733	1,097,900
Georgian bay.....	2,425,263	2,941,136	1,132,833	1,169,965	532,576
Other Canadian ports.....	1,612,800	2,901,488	3,270,066	2,652,300	1,848,400
Buffalo.....	7,012,984	5,859,935	1,206,130	486,862	
Duluth and Superior to—					
Montreal.....	202,500	428,753	239,403	75,040	187,000
Georgian bay.....	330,000	86,066			
Other Canadian ports.....		77,600	109,000		
Buffalo.....	748,610	1,975,878	594,948	351,434	
Total.....	12,966,757	16,489,756	8,398,047	6,143,334	3,665,876

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Canadian and American Canals.	September.	October.	November.	December.	Total.
1913.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to—					
Montreal.....	1,584,500	2,034,867	1,052,900	73,367	11,950,434
Georgian bay.....	681,764	6,307,332	6,807,900	1,949,400	23,948,169
Other Canadian ports.....	2,547,040	6,869,233	4,580,900	1,763,500	28,045,727
Buffalo.....	4,147,427	19,381,496	19,706,857	10,089,410	67,891,101
Duluth and Superior to—					
Montreal.....	433,500	504,455	204,500		2,275,151
Georgian bay.....		61,000	185,000		662,066
Other Canadian ports.....	204,000				390,600
Buffalo.....	100,700	525,000			4,296,570
Total.....	9,698,931	35,683,383	32,538,057	13,875,677	139,459,818

The movement of Canadian wheat, by months, in 1914, through (1) the Canadian canal, (2) the American canal, and (3) the total of both canals, is shown in the three following tables:—

Canadian Canal.	April.	May.	June.	July.	August.
1914.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	1,070,000	2,006,733	1,329,067	1,235,334	474,933
" " Georgian bay.....	778,300	3,328,667	668,567	1,087,700	206,100
" " other Canadian ports.....	924,000	4,466,700	3,417,600	2,730,200	1,074,000
" " Buffalo.....	2,774,600	4,115,467	844,267	705,433	53,333
Duluth to Montreal.....				107,000	
" " Georgian bay.....	355,833	2,098,067	326,000	117,000	
" " other Canadian ports.....			744,000		
" " Buffalo.....					
Total.....	5,902,733	16,015,634	7,329,501	5,982,667	1,808,366

Canadian Canal.	September.	October.	November.	December.	Total.
1914.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	1,229,700	1,075,800	833,533	60,000	9,315,100
" " Georgian bay.....	990,967	2,533,166	6,494,166	2,604,500	18,692,133
" " other Canadian ports.....	5,711,656	8,006,000	3,218,200	965,634	30,514,000
" " Buffalo.....	1,858,400	1,876,800	1,798,400	224,000	14,250,700
Duluth to Montreal.....					107,000
" " Georgian bay.....	881,000				3,777,900
" " other Canadian ports.....		67,000			811,000
" " Buffalo.....					
Total.....	10,671,733	13,558,766	12,344,299	3,854,134	77,467,833

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American Canal.	April.	May.	June.	July.	August.
1914.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	105,000	68,000			
“ “ Georgian bay.....		76,466	170,766	105,833	165,500
“ “ other Canadian ports.....		936,533			137,000
“ “ Buffalo.....	59,500	1,434,234		445,000	240,000
Duluth to Montreal.....		78,000			
“ “ Georgian bay.....					
“ “ other Canadian ports.....				128,100	48,867
“ “ Buffalo.....			41,567	393,400	
Total.....	164,500	2,593,233	212,333	1,072,333	591,367

American Canal.	September.	October.	November.	December.	Total.
1914.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....		136,500			389,500
“ “ Georgian bay.....	345,267	358,334	1,147,934	25,000	2,305,100
“ “ other Canadian ports.....	696,200	849,000			2,618,733
“ “ Buffalo.....	922,066	3,106,800	3,011,967	1,504,500	10,724,067
Duluth to Montreal.....	353,000	71,500	49,066		551,566
“ “ Georgian bay.....					
“ “ other Canadian ports.....	99,000	131,000			406,967
“ “ Buffalo.....		48,200	46,300	29,500	558,967
Total.....	2,415,533	4,701,334	4,255,267	1,559,000	17,564,900

Canadian and American Canals.	April.	May.	June.	July.	August.
1914.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	1,175,000	2,074,733	1,329,067	1,235,334	474,933
“ “ Georgian bay.....	778,300	3,405,133	839,334	1,193,533	371,600
“ “ other Canadian ports.....	924,000	5,403,233	3,417,600	2,730,200	1,211,000
“ “ Buffalo.....	2,834,100	5,549,700	844,266	1,150,433	293,334
Duluth to Montreal.....		78,000		107,000	
“ “ Georgian bay.....	355,833	2,098,067	326,000	117,000	
“ “ other Canadian ports.....			744,000	128,100	48,866
“ “ Buffalo.....			41,567	393,400	
Total.....	6,067,233	18,608,866	7,541,834	7,055,000	2,399,733

Canadian and American Canals.	September.	October.	November.	December.	Total.
1914.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	1,229,700	1,212,300	833,533	60,000	9,624,600
“ “ Georgian bay.....	1,335,567	2,891,500	7,642,100	2,629,500	21,086,567
“ “ other Canadian ports.....	6,407,866	8,855,000	3,218,200	965,634	33,132,733
“ “ Buffalo.....	2,780,467	4,983,600	4,810,367	1,728,500	24,974,767
Duluth to Montreal.....	353,000	71,500	49,066		658,566
“ “ Georgian bay.....	881,000				3,777,900
“ “ other Canadian ports.....	99,000	198,000			1,217,966
“ “ Buffalo.....		48,200	46,300	29,500	558,967
Total.....	13,086,600	18,260,100	16,599,566	5,413,134	95,032,066

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It will be observed that there were wide fluctuations in the monthly shipments as between 1913 and 1914. In May, July, and September, 1914, the movement was larger than for the corresponding months of 1913; but in the three last months of 1914 the falling-off, as compared with 1913, was strikingly heavy. Altogether it amounted to 41,824,317 bushels. Another salient feature of this comparison is that, while nearly 60 per cent of the total shipments took place in 1913 during the three last months of the year, in 1914 only 42 per cent occurred during those months. This result may have been caused by a lower yield in the west, coupled with the influence of the war in Europe.

Perhaps more significant still was the change in the destination of cargoes. In 1913 a preponderance of the Canadian wheat moved found an outlet by way of Buffalo. In 1913 Canadian channels carried the bulk of the shipments. In such a result is seen the force of the chief factor in creating the diversion to Buffalo—pressure. When the movement is heavy, cargoes seek the shortest and quickest route to foreign markets.

FREIGHT RATES BY WATER.

The study of freight rates by water was continued in 1914; but it was limited in its application to Canadian wheat. The movement of wheat by water takes place wholly through channels which are connected by canals, and for that reason is brought under some measure of statistical control. A very considerable volume of other commodities is moved on the Great Lakes, rivers, and other bodies of inland water in Canada, without passing through one of these gateways. Pending legislation which would bring all carriers by water definitely under the control of the Department of Railways and Canals for statistical purposes, it was deemed inexpedient to continue the accumulation of only a part of the facts with respect to freight rates. Insufficient data, it was feared, might create misleading deductions.

The inquiry into the freight rates on waterborne wheat moved from the head of Lake Superior to points eastward in 1914 was carried out with a great deal of care. Although it was largely voluntary with carriers as to whether or not they gave their rates, there was not a single instance of refusal. This was probably due in some degree to the sympathetic attitude of the Dominion Marine Association toward the work of the Department in this connection. As a result of this hearty co-operation, the rates of freight were secured on practically all cargoes; so that the accuracy of the figures given may be accepted without question. They are, at all events, the only facts obtainable under present conditions. They emphasize, however, very strikingly the great need for other data in relation to the marine interests of the Dominion. Not until carriers by water are on the same reporting basis as railways will the situation be satisfactory.

In tables on preceding pages, the facts with regard to the volume of Canadian wheat moved over the various routes by months have been given. Having regard strictly to the freight rates, the averages for 1913 and 1914 were as follow:—

	1913.	1914.
Port Arthur—Fort William to Montreal—		
Per ton per mile.....	.142 cent.	.124 cent.
Per bushel.....	5.351 "	4.58 "
Per ton.....	\$1.78	\$1.52
Port Arthur—Fort William to Georgian Bay—		
Per ton per mile.....	.148 cent.	.095 cent.
Per bushel.....	2.279 "	1.46 "
Per ton.....	76.00 "	48.61 "

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Port Arthur—Fort William to other Canadian ports—		
Per ton per mile.....	.104 cent.	.065 cent.
Per bushel.....	2.436 "	1.48 "
Per ton.....	81.21 "	49.29 "
Port Arthur—Fort William to Buffalo—		
Per ton per mile.....	.103 cent.	.061 cent.
Per bushel.....	2.430 "	1.63 "
Per ton.....	81.00 "	53.72 "
Port Arthur—Fort William to Kingston—		
Per ton per mile.....		.096 cent.
Per bushel.....		3.03 "
Per ton.....		\$1.00

The average freight rates, it will be seen, were lower in 1914 than in 1913. A feature of the figures each year is the close correspondence between the rates to other Canadian ports—which practically means Port Colborne—and Georgian Bay ports, although the difference in distance is considerable. The distance between Fort William and Port McNichol, a typical Georgian Bay port, is 514 miles, while to Port Colborne it is 851 miles. The addition of 337 miles to the voyage is not reflected in the freight rate. Very frequently during the season of navigation the rates to these points are identical, and in that fact is to be seen the operation of a law which always must be taken into account in considering freight rates by water. Competition eliminates material differences in distance.

Following was the record of freight rates, by months and by routes of distribution, in 1913 and 1914:—

Port Arthur - Fort William to Montreal.	1913.			1914.		
	Per bushel.	Per ton.	Per ton per mile.	Per bushel.	Per ton.	Per per mile.
	Cents.	\$	Cents.	Cents.	\$	Cents.
April.....	6.015	2.04	.165	5.52	1.84	.149
May.....	5.525	1.84	.135	5.01	1.67	.136
June.....	4.682	1.54	.127	4.17	1.39	.113
July.....	4.080	1.60	.130	4.02	1.34	.107
August.....	5.440	1.68	.137	4.47	1.49	.121
September.....	5.282	1.76	.144	4.53	1.51	.123
October.....	6.313	2.10	.171	4.31	1.43	.116
November.....	6.341	2.11	.172	4.30	1.40	.114
Average.....	5.351	1.78	.142	4.58	1.52	.124

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Port Arthur-Fort William to Georgian Bay.	1913.			1914.		
	Per bushel.	Per ton.	Per ton per mile.	Per bushel.	Per ton.	Per ton per mile.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
April.....	2.42	80.63	.157	1.82	60.72	.118
May.....	2.16	71.85	.125	1.45	48.66	.095
June.....	2.18	73.93	.142	1.11	37.02	.079
July.....	1.59	52.73	.102	.90	30.20	.068
August.....	1.43	47.81	.092	1.04	35.12	.085
September.....	1.53	51.26	.100	1.23	41.23	.090
October.....	2.21	73.95	.146	1.26	42.26	.082
November.....	2.46	82.30	.160	1.35	45.01	.087
December.....	3.35	\$1.12	.220	2.20	73.37	.143
Average.....	2.28	76.03	.148	1.46	48.61	.095

Port Arthur-Fort William to other Canadian ports.	1913.			1914.		
	Per bushel.	Per ton.	Per ton per mile.	Per bushel.	Per ton.	Per ton per mile.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
April.....	2.599	86.63	.127	1.75	58.46	.075
May.....	2.200	73.35	.091	1.60	53.43	.067
June.....	1.755	58.53	.072	1.41	47.19	.064
July.....	2.371	90.36	.122	1.35	45.12	.056
August.....	1.928	64.27	.082	1.05	35.30	.060
September.....	1.969	65.63	.083	1.34	44.90	.060
October.....	2.767	92.23	.166	1.40	49.51	.062
November.....	2.780	92.69	.116	1.52	50.75	.071
December.....	3.081	\$1.03	.146	2.24	72.22	.102
Average.....	2.436	84.25	.104	1.48	49.29	.069

Port Arthur-Fort William to Buffalo.	1913.			1914.		
	Per bushel.	Per ton.	Per ton per mile.	Per bushel.	Per ton.	Per ton per mile.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
April.....	2.739	91.30	.108	2.79	91.94	.105
May.....	2.442	81.40	.094	1.26	42.21	.048
June.....	1.954	65.13	.076	1.41	36.10	.041
July.....	2.289	76.30	.118	.82	27.52	.031
August.....	1.969	65.63	.090	2.10	70.00	.081
September.....	1.739	57.97	.066	1.11	37.20	.043
October.....	2.876	95.86	.122	1.59	53.11	.061
November.....	2.998	99.97	.114	1.46	49.25	.057
December.....	3.296	\$1.09	.126	2.23	74.33	.086
Average.....	2.436	81.25	.104	1.63	53.72	.061

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Port Arthur-Fort William to Kingston	1913.			1914.		
	Per bushel.	Per ton.	Per ton per mile.	Per bushel.	Per ton.	Per ton per mile.
	Cents.	\$	Cents.	Cents.	\$	Cents.
April.....						
May.....				4.06	1.32	.132
June.....				2.38	.71	.068
July.....				3.15	1.05	.101
August.....				2.72	.91	.088
September.....				2.92	.96	.092
October.....				3.37	1.11	.108
November.....				3.16	1.08	.104
December.....				3.75	1.25	.120
Average.....				3.08	1.00	.096

There is an aspect of the broad matter of freight rates on wheat which should not be overlooked. The ship owners do not receive all of the freight charges. Out of the rate certain payments have to be made. These payments on cargoes from Fort William to Montreal were officially ascertained to be as follows:—

Clearing house at Fort William.....	.01 to .03 cent per bushel.
Trimmers at Fort William.....	.06 “ “
Elevation at Montreal.....	.30 “ “
Shovelling at Montreal.....	.20 “ “
Total.....	.59 cent per bushel

To Port Colborne the average deductions would amount to .44 per bushel, to Buffalo .41, and to Georgian Bay Ports .38.

SESSIONAL PAPER No. 20a

MOVEMENT OF OTHER GRAIN.

Some attention was given in 1914 to the movement of Canadian grain other than wheat. The results for 1913 and 1914 were worked out, and they help to broaden the field of statistics in relation to waterborne traffic. The two chief items are oats and barley. The facts with respect to oats are as follow:—

Canadian Oats. Canadian Canal—Sault Ste. Marie. 1913.	April.	May.	June.	July.	August.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to Montreal.....	706,412	2,124,235	1,160,353	1,144,588	782,353
“ “ “ Georgian Bay.....		1,213,235	679,823	40,000	999,235
“ “ “ Other Canadian ports.....	54,294	1,309,883	447,529	75,471	1,181,706
“ “ “ Buffalo.....		566,176			
Duluth and Superior to Montreal.....		77,000		27,764	
“ “ “ Georgian Bay.....					
“ “ “ Other Canadian ports.....		61,235	152,000		
“ “ “ Buffalo.....					
Total.....	760,706	5,351,764	2,439,705	1,287,823	2,963,294
	Sept.	Oct.	Nov.	Dec.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to Montreal....	373,765	1,313,765	1,208,470	121,765	8,935,706
“ “ “ Georgian Bay....	10,000	2,020,823	1,538,706	2,292,176	8,793,998
“ “ “ Other Canadian ports....	384,588	333,588	310,000	238,000	4,335,059
“ “ “ Buffalo.....	126,117	160,000	1,281,882	1,982,647	4,116,822
Duluth and Superior to Montreal.....					104,764
“ “ “ Georgian Bay.....					
“ “ “ Other Canadian ports.....					213,235
“ “ “ Buffalo.....					
Total.....	894,470	3,828,176	4,339,058	4,634,588	26,499,584

5 GEORGE V., A. 1915

Canadian Oats. American Canal—Sault Ste. Marie. 1913.	April.	May.	June.	July.	August.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to Montreal.....	117,000	170,184	65,000	123,500	.....
“ “ “ Georgian Bay		440,001	572,827	485,312	10,000
“ “ “ Other Canadian ports.....		133,236	.....	584,000	116,000
“ “ “ Buffalo.....	237,672	1,135,629	273,427	233,394	100,715
Duluth and Superior to Montreal.....			118,042	.....	.....
“ “ Georgian Bay.....			154,000	157,000	.....
“ “ Other Canadian ports.....			.....	.....	.....
“ “ Buffalo.....		345,029	14,514	.....	.....
Total.....	354,672	2,224,079	1,197,810	1,583,206	226,715
	Sept.	Oct.	Nov.	Dec.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to Montreal.....			103,000	.....	578,684
“ “ “ Georgian Bay	18,876	364,000	35,000	.....	1,926,016
“ “ “ Other Canadian ports.....	70,712	51,000	.....	.....	954,948
“ “ “ Buffalo.....	150,468	2,592,908	5,125,051	2,241,286	12,090,550
Duluth and Superior to Montreal.....			.....	.....	118,042
“ “ Georgian Bay.....	212,000	.....	101,000	.....	624,000
“ “ Other Canadian ports.....
“ “ Buffalo.....	272,000	631,543
Total.....	452,056	3,279,908	5,364,051	2,241,286	16,923,783

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Canadian Oats. Canadian and American Canals. Sault Ste. Marie. 1913.		April.	May.	June.	July.	August.
		Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to Montreal.....		823,412	2,294,419	1,225,353	1,268,088	782,353
" " " Georgian Bay			1,653,236	1,252,650	525,312	1,009,235
" " " Other Canadian ports...		54,294	1,443,119	447,529	659,471	1,297,706
" " " Buffalo.....		237,672	1,701,805	273,427	233,394	100,715
Duluth and Superior to Montreal.....			77,000	118,042	27,764	
" " Georgian Bay.....				154,000	157,000	
" " Other Canadian ports.....			61,235	152,000		
" " Buffalo.....			345,029	14,514		
Total.....		1,115,378	7,575,843	3,637,515	2,871,029	3,190,009
		Sept.	Oct.	Nov.	Dec.	Total.
		Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William and Port Arthur to Montreal.....		373,765	1,313,765	1,311,470	121,765	9,514,390
" " " Georgian Bay		28,876	2,384,823	1,573,706	2,292,176	10,720,014
" " " Other Canadian ports...		455,300	384,588	310,000	238,000	5,290,007
" " " Buffalo.....		276,585	2,752,908	6,406,933	4,223,933	16,207,372
Duluth and Superior to Montreal.....						222,806
" " Georgian Bay.....		212,000		101,000		624,000
" " Other Canadian ports.....						213,235
" " Buffalo.....			272,000			631,543
Total.....		1,346,526	7,108,084	9,703,109	6,875,874	43,423,367

5 GEORGE V., A. 1915

Canadian Oats. Canadian Canal. 1914.	April.	May.	June.	July.	August.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	1,204,353	1,967,647	1,566,647	418,647	565,000
“ Georgian Bay.....	417,000	2,082,412	1,506,235	117,529	135,000
“ other Canadian ports.....		1,213,176	786,000	45,000	240,000
“ Buffalo.....	183,823	324,765	105,588		
Duluth to Montreal.....			130,000		
“ Georgian Bay.....			120,000		
“ other Canadian ports.....			201,588		
“ Buffalo.....					
Total.....	1,805,176	5,588,000	4,416,058	581,176	940,000
	Sept.	October.	Nov.	December.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	715,647	1,641,059	544,235	30,000	8,653,235
“ Georgian Bay.....	16,706	465,000	1,910,000	832,000	7,481,882
“ other Canadian ports.....	353,000	851,353	532,706	271,000	4,292,235
“ Buffalo.....		291,707			905,883
Duluth to Montreal.....					130,000
“ Georgian Bay.....					120,000
“ other Canadian ports.....					201,588
“ Buffalo.....					
Total.....	1,085,353	3,249,119	2,986,941	1,133,000	21,784,823

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Canadian Oats. American Canal. 1914.	April	May.	June.	July.	August.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....			112,941		122,353
“ Georgian Bay.....	315,294	196,706	155,647		39,529
“ other Canadian ports.....		317,882			
“ Buffalo.....	1,460,000	298,353	9,176		1,352
Duluth to Montreal.....			218,530		
“ Georgian Bay.....					
“ other Canadian ports.....			164,000		
“ Buffalo.....				133,882	
Total.....	1,775,294	812,941	660,294	133,882	163,234
	Sept.	October.	Nov.	December.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....					235,294
“ Georgian Bay.....		97,353	20,529		825,058
“ other Canadian ports.....					317,882
“ Buffalo.....	3,059	666,882	98,882	23,528	2,561,232
Duluth to Montreal.....					218,530
“ Georgian Bay.....					
“ other Canadian ports.....					164,000
“ Buffalo.....					133,882
Total.....	3,059	764,235	119,411	23,528	4,455,878

5 GEORGE V., A. 1915

Canadian Oats. Canadian and American Canals. 1914.	April.	May.	June.	July.	August.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	1,204,353	1,967,647	1,679,588	418,647	687,353
“ Georgian Bay.....	732,294	2,279,118	1,661,882	117,529	174,529
“ other Canadian ports.....		1,531,058	786,000	45,000	240,000
“ Buffalo.....	1,643,823	623,118	114,764		1,352
Duluth to Montreal.....			348,530		
“ Georgian Bay.....			120,000		
“ other Canadian ports.....			365,588		
“ Buffalo.....				133,882	
Total.....	3,580,470	6,400,941	5,076,352	715,058	1,103,234
	Sept.	October.	Nov.	December.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Fort William to Montreal.....	715,647	1,641,059	544,235	30,000	8,888,529
“ Georgian Bay.....	16,706	562,353	1,930,529	832,000	8,306,940
“ other Canadian ports.....	353,000	851,353	532,706	271,000	4,610,117
“ Buffalo.....	3,059	958,589	98,882	23,528	3,467,115
Duluth to Montreal.....					348,530
“ Georgian Bay.....					120,000
“ other Canadian ports.....					365,588
“ Buffalo.....					133,882
Total.....	1,088,412	4,013,354	3,106,352	1,156,528	26,240,701

Of barley, 5,284,350 bushels came down in 1914, as compared with 11,516,844 bushels in 1913. Of flax seed, the volume shipped eastward in 1914 was 7,175,977 bushels, as against 21,281,723 in 1913. These figures relate to both the Canadian and American canals at Sault Ste. Marie.

A large volume of grain passed through the government elevator at Port Colborne during the year 1914. Port Colborne is a point of transfer. Large vessels, which cannot pass through the Welland canal, discharge their cargoes at the elevator and smaller vessels also make use of the transfer facilities at that point. The volume of American and Canadian grain handled during the season is given, by months, in the following statement:—

Statement of grain loaded at Government elevator at Port Colborne for Montreal during season of navigation 1914:—

Months.	Canadian Grain.				American Grain.				Canadian and American.
	Wheat.	Oats.	Barley.	Flax.	Wheat.	Oats.	Barley.	Corn.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
April.....	94,241								94,241
May.....	4,112,900	666,614	322,970		371,916			29,033	5,503,433
June.....	2,335,770	1,386,716	247,394		897,057			29,179	4,896,116
July.....	2,525,900	329,669	65,000		1,862,831		261,500		5,044,900
August.....	421,000	20,000			4,457,000				4,898,000
September.....	2,975,433	104,260	39,564	34,564	2,876,127	88,438		20,000	6,138,386
October.....	5,047,174	346,360	218,194	47,951	1,076,741			36,427	6,772,847
November.....	1,735,251	154,816	17,250	49,956	167,976		67,900		2,193,149
December.....	138,776							81,131	219,907
Totals.....	19,386,445	3,008,435	910,372	132,472	11,709,648	88,438	329,400	195,770	35,760,979

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CANAL STATISTICS

INSURANCE RATES.

There were no material changes in the rates of marine insurance applicable to the Great Lakes during 1914. The official schedule was as follows:—

	First Class.	Second Class.
To Lake Erie and Georgian Bay Ports—		
April 15, a.m., to April 30, p.m.	\$ 0 45	\$ 0 60
May 1, a.m., to August 31, p.m.	0 30	0 40
September 1, a.m., to November 30, midnight	0 45	0 65
To Port Huron, Point Edward, Goderich, Sarnia and Detroit—		
April 1, a.m., to April 30, p.m.	0 40	0 55
May 1, a.m., to August 31, p.m.	0 25	0 35
September 1, a.m., to November 30, midnight	0 40	0 60
To Kingston and Lake Ontario Ports, including Ogdensburg and Prescott—		
April 1, a.m., to April 30, p.m.	0 65	0 75
May 1, a.m., to August 31, p.m.	0 45	0 55
September 1, a.m., to November 30, midnight	0 60	1 00
To Montreal direct without Transhipment—		
April 20, a.m., to October 31, p.m.	0 60	1 10
November 1, a.m., to November 30, p.m.	0 70	1 25
To Montreal via Kingston, Prescott and Ogdensburg and Transhipped—		
If transhipped at Kingston, Ogdensburg, or Prescott, and forwarded thence to Montreal, approved standard barges, add 15 cents to Kingston, Ogdensburg and Prescott rate.		
From Lake Superior Ports to Lake Michigan Ports—		
Charge Lake Erie Ports' rates.		
From Lake Michigan Ports to Lake Michigan Ports—		
Charge 50 per cent of Lake Erie Ports' rates.		
From Port Colborne to Montreal—		
Sailing April 15, a.m., to August 31, midnight	0 30	0 40
For through rates add the rate to lake Erie to the above. If transhipped again at Kingston, tariff charges apply.		

GENERAL STATISTICS.

The following tables of general statistics will afford further information with regard to the canals of Canada:—

STATEMENT of Total Freight passed through the Canals for the following years.

Years.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up and Down.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1887	336,648	1,154,424	138,692	202,563	151,805	192,528	86,374	457,482	713,519	2,006,997	2,720,516
1888	355,165	1,146,260	138,127	174,239	214,407	223,429	81,611	428,357	789,310	1,972,287	2,761,597
1889	384,777	1,156,306	122,295	198,497	267,224	300,193	81,243	603,311	855,529	2,258,367	3,113,896
1890	369,593	1,137,011	144,368	133,188	216,813	320,324	58,709	533,021	789,505	2,123,542	2,913,047
1891	370,120	1,155,247	103,814	123,193	248,188	307,958	59,747	543,259	772,869	2,129,657	2,902,526
1892	327,560	1,322,137	173,538	135,787	241,034	302,983	47,396	481,301	789,528	2,242,208	3,031,736
1893	351,706	1,344,822	214,076	141,602	247,329	385,709	54,912	806,773	868,023	2,678,966	3,546,989
1894	299,155	1,140,606	204,175	89,614	231,172	363,107	46,020	568,866	780,522	2,162,193	2,942,715
1895	264,824	1,070,046	286,191	91,177	362,637	608,778	62,285	590,140	975,937	2,360,141	*3,336,078
1896		1,619,668	259,659	100,519	1,197,245	3,536,054	117,535	867,040	1,867,792	6,123,281	7,991,073
1897	275,587	1,713,274	268,700	187,960	669,142	4,369,314	108,787	968,203	1,322,216	7,238,751	8,560,967
1898	263,989	1,819,887	187,253	98,967	829,508	2,425,121	81,615	912,135	1,362,365	5,256,110	6,618,475
1899	296,208	1,833,412	266,364	115,133	732,030	2,129,988	125,678	727,111	1,420,280	4,805,644	6,225,924
1900	312,201	1,632,915	270,033	81,714	568,197	1,339,915	105,155	703,563	1,255,586	3,758,107	5,013,693
1901	340,805	1,686,094	268,449	201,231	507,264	1,801,696	177,715	682,065	1,294,173	4,371,086	5,665,259
1902	529,085	2,064,480	308,212	342,484	515,828	3,000,636	190,243	562,229	1,543,368	5,969,829	7,513,197
1903	648,150	2,391,366	430,174	408,500	863,337	3,130,816	373,456	958,018	2,315,117	6,888,700	9,203,817
1904	606,737	2,047,499	511,887	276,578	699,784	2,778,903	483,795	851,053	2,302,203	5,954,033	8,256,236
1905	736,976	2,252,514	549,365	347,089	607,228	3,183,895	577,528	1,137,140	2,451,097	6,920,647	9,371,744
1906	1,238,929	2,355,855	627,094	234,919	991,508	3,595,256	482,239	997,385	3,339,770	7,183,415	10,523,185
1907	1,034,733	3,162,158	891,692	226,138	1,991,959	11,060,878	819,369	1,356,712	4,737,753	15,805,886	20,543,639
1908	1,028,246	3,292,422	560,736	278,721	1,704,310	8,218,866	972,300	1,447,219	4,265,592	13,237,228	17,502,820
1909	1,608,659	3,504,849	1,060,715	607,894	1,985,522	22,385,226	1,023,829	1,544,054	5,744,349	27,976,399	33,720,748
1910	2,312,740	3,861,272	600,144	661,436	3,323,822	29,530,163	995,740	1,705,282	7,232,455	35,758,153	42,990,608
1911	2,370,516	3,910,558	572,470	995,719	2,546,677	23,458,256	2,086,777	2,089,380	7,576,440	30,453,913	38,030,353
1912	2,340,444	4,973,342	867,250	961,838	2,042,819	32,434,735	1,343,288	2,623,529	6,593,801	40,993,444	47,587,245
1913	2,212,928	6,286,637	967,712	1,478,263	2,694,527	33,630,484	1,906,947	2,876,415	7,782,114	44,271,799	52,053,913
1914	1,474,124	6,381,242	999,256	618,275	1,491,563	21,610,033	1,264,343	3,184,401	5,229,286	31,793,951	37,023,237

*Sault Ste. Marie canal opened in August, 1895.

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years.

CANADIAN VESSELS.

Years.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Number of Trips.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up and Down.	
1887.....	1,201,529	1,194,665	162,554	36,277	1,071	65	30,778	221,013	1,395,932	1,452,020	2,847,952	18,991
1888.....	1,113,290	1,120,774	158,209	34,368	1,252	.....	22,553	189,876	1,295,304	1,345,018	2,640,322	17,661
1889.....	1,285,574	1,207,892	188,131	39,371	976	802	20,271	252,565	1,494,952	1,500,630	2,995,582	19,393
1890.....	1,314,127	1,250,999	229,478	32,909	929	351	14,003	296,676	1,558,537	1,580,935	3,139,472	20,655
1891.....	1,356,518	1,287,168	201,758	28,642	550	292	16,350	244,176	1,575,176	1,560,278	3,135,454	19,246
1892.....	1,517,249	1,460,505	177,136	29,184	1,466	394	14,659	201,374	1,710,510	1,691,455	3,401,965	21,177
1893.....	1,548,094	1,422,326	170,186	26,787	1,172	10	17,037	248,442	1,736,489	1,697,565	3,434,054	20,757
1894.....	1,319,792	1,260,907	217,635	19,298	2,177	5	6,394	222,696	1,545,998	1,502,906	3,048,904	19,027
1895.....	1,258,848	1,165,683	253,693	13,383	.....	.....	5,889	285,553	1,518,440	1,464,619	2,983,059	17,136
1896.....	1,547,757	1,420,342	200,292	5,234	157	.....	4,115	271,809	1,752,321	1,697,385	3,449,706	20,972
1897.....	1,629,192	1,482,951	215,785	11,378	.....	.....	3,533	297,898	1,848,510	1,792,227	3,640,737	21,466
1898.....	1,704,661	1,609,255	215,393	4,927	499	518	6,805	255,927	1,927,358	1,870,627	3,797,985	21,509
1899.....	1,865,643	1,774,789	242,817	32,436	925	3,691	42,290	345,980	2,151,675	2,156,896	4,308,571	23,579
1900.....	1,767,293	1,681,340	265,926	14,922	2,909	64	38,015	358,781	2,074,143	2,055,107	4,129,250	21,755
1901.....	1,615,952	1,587,221	279,007	82,541	3,300	2,908	97,332	312,003	1,995,591	1,984,673	3,980,264	20,860
1902.....	1,914,167	1,840,787	241,356	97,492	1,874	2,164	101,335	286,520	2,258,732	2,226,963	4,485,695	22,196
1903.....	2,061,258	2,088,969	340,383	143,614	7,018	3,082	188,896	379,612	2,597,555	2,615,277	5,212,832	23,767
1904.....	1,838,260	1,907,856	299,245	159,740	5,175	4,223	237,910	319,661	2,380,590	2,391,510	4,772,100	21,851
1905.....	2,059,097	2,031,766	312,773	188,138	11,820	3,191	262,401	322,005	2,646,091	2,545,100	5,191,191	23,726
1906.....	2,271,776	2,264,476	292,705	155,595	24,420	5,506	202,276	309,567	2,791,177	2,735,144	5,526,321	25,498
1907.....	2,561,948	2,661,317	337,822	129,246	9,153	7,331	238,172	383,922	3,147,095	3,181,685	6,328,911	28,833
1908.....	2,726,776	2,748,139	318,327	227,315	5,057	7,844	348,944	398,387	3,399,104	3,381,685	6,780,789	29,040
1909.....	3,335,187	2,992,403	300,320	217,989	82,591	111,236	257,945	513,907	3,976,043	3,835,535	7,811,578	22,507
1910.....	3,891,613	3,504,463	315,656	122,688	95,151	89,618	287,555	627,046	4,597,975	4,343,815	8,931,790	25,337
1911.....	3,997,073	3,646,516	333,500	176,690	8,499	2,332	393,012	614,570	4,732,084	4,440,108	9,172,192	25,585
1912.....	4,457,303	4,168,304	617,407	21,176	9,907	1,053	180,735	781,450	5,265,352	4,971,983	10,237,335	27,371
1913.....	4,964,635	4,827,587	898,249	67,031	3,531	5,231	348,477	963,300	6,214,892	5,863,149	12,078,041	28,654
1914.....	4,891,369	4,976,317	764,317	124,505	4,687	2,109	383,433	902,119	6,045,806	6,005,050	12,050,856	28,125

STATEMENT of the Tonnage of Canadian and United States Vessels for the following years.

20A—31

Years.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Number of Trips.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up and Down.	
1887.....	16,265	17,925	38,857	56,708	143,730	140,562	52,793	98,840	251,645	315,035	566,680	3,883
1888.....	14,304	26,801	42,425	50,047	177,714	156,095	49,778	114,613	284,221	347,556	631,777	3,921
1889.....	21,125	26,449	55,996	50,732	253,088	206,567	56,249	160,442	386,458	444,190	830,648	4,542
1890.....	10,390	16,345	38,156	36,397	248,418	234,728	39,697	97,266	338,661	384,736	721,397	3,364
1891.....	10,357	29,851	70,665	27,727	283,013	238,818	31,083	146,602	395,118	442,998	838,116	3,602
1892.....	12,023	29,405	88,221	22,763	280,315	229,437	37,037	172,594	417,596	454,199	871,795	3,928
1893.....	10,752	34,303	214,047	33,741	351,994	282,724	50,994	307,740	627,787	658,508	1,286,295	4,585
1894.....	18,528	30,201	139,720	20,830	302,562	269,788	37,406	192,992	498,216	513,811	1,012,027	4,131
1895.....	8,838	24,768	139,554	17,712	262,240	216,542	32,295	185,730	441,927	444,732	886,679	4,427
1896.....	11,496	19,093	195,228	21,953	357,205	292,359	40,416	290,370	604,345	623,775	1,228,120	4,650
1897.....	14,666	18,367	269,430	17,618	338,938	277,345	26,341	347,698	649,375	661,028	1,310,403	4,675
1898.....	12,142	9,541	133,524	32,880	308,878	305,464	32,331	336,004	586,875	683,889	1,270,764	4,264
1899.....	17,217	18,044	172,897	30,002	1,605,887	1,156,503	51,902	234,336	1,846,848	1,438,885	3,285,733	6,101
1900.....	13,316	17,824	157,689	30,443	1,208,725	744,276	45,741	190,971	1,425,471	983,514	2,408,985	5,502
1901.....	11,587	18,706	177,169	28,124	922,464	1,044,707	54,895	224,622	1,166,115	1,316,159	2,482,274	5,634
1902.....	13,622	37,871	187,826	70,641	1,756,938	1,654,672	123,257	241,602	2,081,653	2,004,786	4,086,439	6,433
1903.....	14,014	24,168	265,208	65,247	1,738,187	1,689,414	106,401	335,836	2,121,810	2,114,665	4,236,475	6,695
1904.....	10,122	16,890	275,721	39,993	1,464,316	1,475,055	68,081	305,697	1,818,240	1,837,665	3,655,905	6,253
1905.....	19,743	19,444	364,985	81,876	2,350,494	1,701,704	1,101,536	456,459	2,830,758	2,259,483	5,096,241	7,085
1906.....	34,306	15,324	356,259	78,561	2,738,623	1,928,131	115,675	418,436	3,244,863	2,440,452	5,685,315	7,319
1907.....	57,349	72,018	304,591	72,048	4,730,053	5,376,060	205,769	623,941	5,463,767	6,141,067	11,604,834	9,328
1908.....	54,587	32,705	442,773	124,120	2,975,624	4,142,392	218,835	536,103	3,685,819	4,835,320	8,521,139	7,489
1909.....	263,592	109,407	442,176	200,202	4,178,378	10,429,614	213,750	621,903	5,098,196	11,361,126	16,459,322	9,996
1910.....	119,222	50,498	429,702	305,330	5,509,417	14,488,565	299,462	576,101	6,356,803	15,420,494	21,777,297	11,462
1911.....	49,778	12,643	626,897	576,313	3,348,936	12,057,484	709,084	850,487	4,734,695	13,496,927	18,231,622	10,370
1912.....	50,296	15,518	763,426	470,330	5,778,534	16,011,911	614,311	931,864	7,206,567	17,429,623	24,636,190	11,785
1913.....	61,301	29,788	673,382	711,603	5,657,984	15,567,499	703,212	834,019	7,095,879	17,142,909	24,238,788	10,739
1914.....	39,246	31,535	563,517	373,829	3,292,736	10,259,835	268,800	806,916	4,164,299	11,472,115	15,636,414	7,742

Vessel and Freight Tonnage passed through the Sault Ste. Marie Canal.

Years.	Canadian Vessels.		U.S. Vessels.		Total No.	Vessel Tonnage.	Freight Tonnage.			Lockages No.	Days Open. No.	Remarks.
	No.	Tonnage.	No.	Tonnage.			Canadian	United States.	Total.			
1895.....	609	126,534	583	623,092	1,192	749,626			595,837	699	87	Canal first operated Sept. 9, 1895.
1896.....	2,070	589,407	3,066	3,805,749	5,136	4,395,156			4,577,399	3,042	218	
1897.....	1,909	405,546	2,359	3,391,936	4,268	3,797,482			4,947,065	2,604	238	
1898.....	1,811	403,931	1,864	2,353,699	3,675	2,757,630			3,055,387	2,520	243	
1899.....	2,000	558,552	1,769	2,389,457	3,769	2,948,009			3,006,664	2,610	239	
1900.....	1,790	577,310	1,291	1,617,438	2,081	2,194,748			2,035,677	2,205	238	
1901.....	2,796	775,151	1,408	1,674,597	4,204	2,449,748			2,820,394	2,910	246	
1902.....	3,080	1,366,930	1,964	3,237,372	5,044	4,604,302			4,729,268	3,418	264	
1903.....	2,711	1,615,939	1,640	3,146,897	4,351	4,762,746			5,511,868	3,242	256	
1904.....	2,637	1,555,042	1,325	2,675,663	3,962	4,230,705			5,030,705	3,022	241	
1905.....	3,970	1,803,290	1,692	2,734,349	5,662	5,537,637			5,473,406	4,031	255	
1906.....	3,922	1,959,252	1,758	4,399,872	5,680	6,359,124			6,574,039	4,152	253	
1907.....	3,217	2,154,688	3,132	9,961,281	6,349	12,115,969			15,588,165	4,596	238	
1908.....	3,289	2,603,232	2,204	7,035,655	5,293	9,638,887	2,092,231	10,666,985	12,759,216	3,667	235	Origin of cargo first shown.
1909.....	2,597	2,988,936	3,734	14,850,738	6,331	17,839,674	3,366,495	24,494,750	27,861,245	5,046	240	
1910.....	2,744	3,173,494	5,228	20,187,704	7,972	23,361,198	2,345,619	33,050,068	36,395,687	6,110	248	
1911.....	2,713	3,108,880	4,068	16,252,340	6,781	19,361,220	3,177,581	27,774,128	30,951,709	6,802	236	
1912.....	2,643	3,296,229	5,213	22,536,015	7,856	25,832,244	4,090,362	35,579,293	39,669,655	6,200	240	
1913.....	3,279	3,793,434	5,006	22,181,007	8,285	25,974,441	4,954,734	37,744,590	42,699,324	6,266	246	
1914.....	3,011	3,473,292	2,966	13,827,870	5,977	17,301,162	3,609,747	23,989,437	27,599,184	4,712	239	

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CAPITAL EXPENDITURE.

The following statement brings the capital expenditure on the canals of the Dominion down to March 31, 1914. It must be understood, however, that the total shown is apart from the outlay by the Imperial Government on the Carillon and Grenville canal, as to which the records were lost in the destruction by fire of the Ordnance Office, Montreal, in 1852. The details are as follow:—

Canal.	Construction.		Enlargement.		Total.	
	\$	cts.	\$	cts.	\$	cts.
Beauharnois.....	1,636,690	26			1,636,690	26
Carillon and Grenville.....	63,053	64	4,119,039	32	4,182,092	96
Chambly.....	637,056	76	94,639	76	731,696	52
Cornwall.....	1,945,624	73	5,297,179	48	7,242,804	21
Culbute.....	382,391	46			382,391	46
Lachine.....	2,589,532	85	11,173,882	04	13,763,414	89
Lake St. Francis.....			75,906	71	75,906	71
Lake St. Louis.....			298,176	11	298,176	11
Murray.....	1,248,946	71			1,248,946	71
Rideau.....	4,084,323	37	83,130	84	4,167,454	21
Sault Ste. Marie.....	4,994,372	51			4,994,372	51
Soulanges.....	7,777,675	02			7,777,675	02
Ste. Anne's.....	134,456	51	1,035,759	12	1,170,215	63
St. Lawrence River and Canals.....	18,442	85	3,451,470	56	3,469,913	41
St. Ours.....	121,537	65	5,690	91	127,228	56
St. Peter's.....	648,547	14			648,547	14
Tay.....	489,599	23			489,599	23
Trent.....	13,611,034	95			13,611,034	95
Welland.....	7,693,824	03	21,749,473	88	29,443,297	91
Williamsburg { Farran's Point.....			877,090	57		
{ Galops.....			6,121,213	70		
{ Rapide Plat.....			2,158,242	00	10,491,098	07
{ Williamsburg.....	1,320,655	54	13,896	26		
St. Andrew's Lock.....	1,533,750	57			1,533,750	57
Total.....	50,931,524	78	56,554,791	26	107,486,316	04

The cost of maintenance for the fiscal year 1914 was \$1,753,897.51.

I have the honour to be, sir,

Your obedient servant,

J. L. PAYNE,
Comptroller of Statistics.

CANAL STATISTICS

FOR

SEASON OF NAVIGATION, 1914.

GRAIN PASSED DOWN WELLAND.

The quantity of barley, corn, oats, peas, rye, and wheat passed down the Welland canal, from ports west of Port Colborne for a period of thirty-three years is as follows:—

Quantity passed down to Montreal.	To Ports in Ontario.		Quantity from U.S. Ports to U.S. Ports.
	Tons.	Tons.	Tons.
1882.....	180,694		63,881
1883.....	186,814	10,650	121,876
1884.....	142,194	12,153	104,537
1885.....	96,569	11,909	117,346
1886.....	203,940	9,881	151,551
1887.....	185,034	11,838	134,868
1888.....	160,358	25,599	169,664
1889.....	267,769	19,075	213,766
1890.....	288,513	16,899	245,932
1891.....	295,509	6,805	202,710
1892.....	261,954	8,942	201,540
1893.....	501,806	25,555	222,958
1894.....	273,651	16,699	203,979
1895.....	231,491	32,096	133,823
1896.....	461,049	73,386	160,372
1897.....	*560,254	53,257	157,756
1898.....	519,532	31,279	144,612
1899.....	332,746	40,197	68,011
1900.....	244,661	17,525	84,589
1901.....	151,566	13,732	83,370
1902.....	208,215	22,787	81,164
1903.....	351,936	20,062	111,828
1904.....	198,246	23,711	102,523
1905.....	341,431	42,061	129,270
1906.....	304,935	33,351	176,119
1907.....	635,573	42,032	163,295
1908.....	756,141	38,142	135,172
1909.....	652,742	40,238	129,587
1910.....	789,661	63,657	115,457
1911.....	836,924	51,560	121,655
1912.....	961,855	47,866	117,195
1913.....	1,265,368	63,806	122,069
1914.....	1,836,456	90,910	70,186

During the last decade the quantity of agricultural products, as above passed down the Welland and St. Lawrence canals to Montreal has increased from 341,431 tons in 1905 to 1,836,456 tons in 1914, and the quantity passed down the Welland canal from United States ports to United States has decreased from 129,270 to 70,186 tons the same years.

5 GEORGE V., A. 1915

The quantity of barley, buckwheat, corn, oats, peas, rye, and wheat, arrived at Montreal via Grand Trunk and Canadian Pacific railways for a period of 15 years, is reported as follows:—

Year.	Tons.
1900.....	229,624
1901.....	227,700
1902.....	263,861
1903.....	253,959
1904.....	154,625
1905.....	148,377
1906.....	386,963
1907.....	383,735
1908.....	285,262
1909.....	426,163
1910.....	280,705
1911.....	241,134
1912.....	462,444
1913.....	268,388
1914.....	689,969

The quantity of the same articles passed down the whole length of the St. Lawrence canals to Montreal for the same period was:—

Year.	Tons.
1900.....	295,928
1901.....	203,316
1902.....	242,225
1903.....	400,057
1904.....	220,076
1905.....	375,630
1906.....	449,673
1907.....	684,697
1908.....	776,374
1909.....	652,742
1910.....	789,661
1911.....	836,924
1912.....	964,187
1913.....	1,265,376
1914.....	1,836,456

Comparative shipments of grain by the St. Lawrence route, and railways, are as follows:—

QUANTITY OF GRAIN TO SEABOARD BY COMPETING ROUTES.

The quantity of grain and peas passed down the whole length of the St. Lawrence canals to Montreal is as follows:—

For 1913.....	Tons.	1,265,376
1914.....		1,836,456
		571,080

The quantity of grain and peas carried to Montreal via Canadian Pacific and Grand Trunk railways is reported as follows:—

For 1913.....	Tons.	268,388
1914.....		689,969
		421,581

5 GEORGE V., A. 1915

The quantity of grain transhipped at Port Colborne in 1809 and the four previous years was as follows:—

Articles.	1905.	1906.	1907.	1908.	1909.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Wheat.....	679,840	1,009,474	1,428,300	1,106,244	2,686,963
Corn.....	104,027	110,629	112,036		
Rye.....					
Oats.....		29,118	30,824	23,945	
Barley.....		2,103		56,544	22,216
Flaxseed.....			30,040	49,628	8,202

WELLAND CANAL.

The total quantity of freight passed on the Welland canal during the season of 1914 was 3,860,969 tons; of this quantity 135,870 tons was way or local freight.

There were 3,004,920 tons of freight passed eastward, and 856,049 passed westward.

East- and Westbound Through Freight.

The total quantity of through freight passed through the whole length of the Welland canal during the season of 1914 was 3,725,099 tons.

Of this quantity 2,936,740 tons were eastbound and 788,359 westbound freight.

Of the eastbound through freight, Canadian vessels carried 2,426,846 tons and United States vessels carried 509,794 tons; and of the westbound through freight, Canadian vessels carried 451,449 tons and United States vessels carried 336,910 tons, or a total of 2,936,740 tons for Canadian, and 788,359 tons for American vessels.

ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1914 was 4,391,493 tons; of this quantity, 3,405,539 tons passed eastward and 985,954 passed westward.

East- and Westbound Through Freight.

The total quantity of through freight was 3,692,919 tons; of this quantity 3,067,497 tons were eastbound and 625,422 tons were westbound.

Way Freight.

Of the total quantity of (way) or local freight, 338,045 tons were eastbound and 360,529 tons westbound freight.

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THROUGH TRAFFIC BETWEEN MONTREAL AND PORTS ON LAKE ERIE, MICHIGAN, ETC

The total quantity of through freight passed eastward from Lake Erie and westward from Montreal through the Welland and St. Lawrence canals, during fifteen years, was as follows:—

Year.	Eastward to Montreal.	Westward from Montreal.
1900.....	288,251	6,217
1901.....	184,420	13,714
1902.....	250,475	25,289
1903.....	390,756	100,699
1904.....	278,328	71,512
1905.....	448,704	72,482
1906.....	554,231	96,791
1907.....	789,167	1,281
1908.....	864,926	3,472
1909.....	925,005	191,510
1910.....	1,170,139	172,360
1911.....	1,293,638	233,335
1912.....	1,559,963	236,979
1913.....	1,710,219	333,592
1914.....	2,052,900	360,645

THROUGH FREIGHT FROM UNITED STATES PORTS TO UNITED STATES PORTS.

The total quantity of through freight passed eastward and westward through the Welland canal, from United States ports to United States ports, for a period of fifteen years, was as follows:—

Year.	Eastward.	Westward.	Total.
	Tons.	Tons.	Tons.
1900.....	218,969	99,560	318,529
1901.....	190,476	83,543	274,019
1902.....	224,110	44,919	269,029
1903.....	221,074	149,151	370,225
1904.....	165,337	87,144	252,481
1905.....	190,547	112,549	303,096
1906.....	237,226	84,205	321,431
1907.....	218,997	177,660	396,657
1908.....	209,518	239,136	448,654
1909.....	196,838	248,581	445,419
1910.....	197,301	288,198	485,499
1911.....	175,752	309,603	485,355
1912.....	180,319	235,437	415,756
1913.....	204,597	320,736	525,333
1914.....	170,624	338,455	509,079

The total quantity of freight passed through the Welland canal from United States ports to United States ports shows a decrease of 16,254 tons, as compared with the previous year; and an increase of 190,550 tons as compared with 1900.

5 GEORGE V., A. 1915

The following statement shows the aggregate number of vessels and the total quantity of freight passed through the Welland canal, and the quantity passed between United States ports during the year 1867 to 1914, inclusive:—

Fiscal Year.	Aggregate Number of Trips.	Total quantity transported on the Welland Canal.	Quantity passed from United States ports to United States ports.
	Number.	Tons.	Tons.
1867.....	5,405	933,260	458,386
1868.....	6,157	1,161,821	641,711
1869.....	6,069	1,231,903	688,700
1870.....	7,356	1,311,956	747,567
1871.....	7,729	1,478,122	772,756
<i>Season of Navigation</i>			
1872.....	6,063	1,333,104	606,627
1873.....	6,425	1,506,484	656,208
1874.....	5,814	1,389,173	748,557
1875.....	4,242	1,038,050	477,809
1876.....	4,789	1,099,810	488,815
1877.....	5,129	1,175,398	493,841
1878.....	4,429	968,758	373,738
1879.....	3,960	865,664	284,043
1880.....	4,104	819,934	179,605
1881.....	3,332	686,506	194,173
1882.....	3,334	790,643	282,806
1883.....	3,267	1,005,156	432,611
1884.....	3,138	837,811	407,079
1885.....	2,738	784,928	384,509
1886.....	3,589	980,135	464,478
1887.....	2,785	777,918	340,501
1888.....	2,647	878,800	434,753
1889.....	2,975	1,085,273	563,584
1890.....	2,883	1,016,165	233,957
1891.....	2,594	975,013	553,800
1892.....	2,615	955,554	541,065
1893.....	2,843	1,294,823	631,667
1894.....	2,412	1,008,221	592,267
1895.....	2,222	869,595	469,779
1896.....	2,766	1,279,987	653,213
1897.....	2,725	1,274,292	564,694
1898.....	2,384	1,140,077	487,539
1899.....	2,202	789,770	360,529
1900.....	2,399	719,360	318,529
1901.....	1,547	620,209	274,019
1902.....	1,568	665,387	269,029
1903.....	1,787	1,002,919	370,225
1904.....	1,433	811,371	252,481
1905.....	1,595	1,092,050	305,096
1906.....	1,536	1,201,967	321,431
1907.....	1,982	1,614,132	396,743
1908.....	2,351	1,703,453	448,654
1909.....	2,433	2,025,951	445,419
1910.....	2,544	2,326,290	487,499
1911.....	2,480	2,537,629	485,355
1912.....	2,905	2,851,915	415,756
1913.....	3,229	3,570,714	525,333
1914.....	3,692	3,860,969	509,079

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The total quantity of freight passed through the several divisions of the Canadian canal system during the season of 1914 is as follows:—

	Farm Stock.	Forest Produce of Wood.	Manu- factures.	Products of Mines.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Sault Ste. Marie.....	217	40,956	487,789	13,270,885	3,799,337	27,599,184
Welland.....	275	360,434	361,174	1,022,708	2,116,378	3,860,969
St. Lawrence.....	6,905	668,775	297,269	1,398,509	2,020,035	4,391,493
Chambly.....	211	293,242	11,111	123,093	9,248	436,905
St. Peter's.....	1,543	3,126	4,117	33,549	11,845	54,180
Murray.....		430	21,605	61,723	149	83,907
Ottawa.....	3,183	171,440	18,663	138,814	3,032	335,132
Rideau.....	3,010	15,041	13,466	118,195	2,027	151,739
Trent.....	336	62,473	3,043	1,068	795	67,715
St. Andrew's.....	1	6,050	288	35,652	22	42,013

The total quantity of freight moved on the Welland canal was 3,860,969 tons, of which 2,116,378 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 4,391,493 tons, of which 2,020,035 were agricultural products, and 297,269 tons were manufactures.

On the Ottawa canals the total quantity of freight moved was 335,132 tons; of this quantity, 171,440 tons were the produce of the forest.

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The United States canal was open to navigation during the season of—

1889.....	234 days.	1902.....	256 days.
1890.....	228 "	1903.....	249 "
1891.....	225 "	1904.....	223 "
1892.....	233 "	1905.....	245 "
1893.....	219 "	1906.....	249 "
1894.....	234 "	1907.....	233 "
1895.....	231 "	1908.....	231 "
1896.....	232 "	1909.....	236 "
1897.....	234 "	1910.....	224 "
1898.....	241 "	1911.....	237 "
1899.....	231 "	1912.....	237 "
1900.....	238 "	1913.....	245 "
1901.....	230 "	1914.....	242 "

The Canadian canal was open to navigation during the season of—

1895.....	87 days.	1905.....	255 days.
1896.....	218 "	1906.....	253 "
1897.....	233 "	1907.....	238 "
1898.....	243 "	1908.....	235 "
1899.....	239 "	1909.....	240 "
1900.....	238 "	1910.....	248 "
1901.....	246 "	1911.....	236 "
1902.....	264 "	1912.....	240 "
1903.....	256 "	1913.....	246 "
1904.....	241 "	1914.....	239 "

The average number of vessels passing per day through the two canals for the season 1914 was 78.

COMPARATIVE STATEMENT of the Commerce through the United States St. Mary's Falls Canals and the Canadian Sault Ste. Marie Canal for the Seasons of 1913 and 1914.

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CANAL STATISTICS

		Traffic for 1914.		Total Traffic for		Increase.	Decrease.
		United States Canal.	Canadian Canal.	Season of 1914.	Season of 1913.	Amount.	Amount.
Vessels.....	Passages....	12,639	5,977	18,616	23,884		5,268
Lockages.....	Number.....	8,790	4,712	13,502	16,867	3,365	
Tonnage registered.....	Net tons.....	24,690,381	17,301,162	41,991,543	58,037,060		16,046,517
Tonnage freight.....	".....	27,771,467	27,599,184	55,370,651	79,721,525		24,350,874
Passengers.....	Number.....	29,972	30,446	60,418	76,918		16,500
Coal hard.....	Net tons.....	1,906,418	342,210	2,248,628	2,673,673		425,045
Coal soft.....	".....	10,240,259	1,996,434	12,236,693	15,951,885		3,715,192
Flour.....	Barrels.....	7,511,543	2,205,810	9,717,353	10,203,462		486,109
Wheat.....	Bushels.....	52,190,614	98,067,167	150,257,781	204,446,661		54,188,880
Grain, excluding wheat.....	".....	36,044,479	32,165,065	68,209,544	113,632,293		55,422,749
Manufactured and pig iron.....	Net tons.....	14,179	108,481	112,660	431,777		319,117
Salt.....	Barrels.....	676,892	101,409	778,301	735,376	42,925	
Copper.....	Net tons.....	88,877	2,887	91,764	106,994		15,230
Iron ore.....	".....	10,516,927	20,913,764	31,430,691	48,091,821		16,661,130
Lumber, ft. B.M.....	".....	439,019,000	20,596,200	459,615,200	600,066,000		141,450,800
Silver ore.....	Net tons.....						
Building stone.....	".....				481		481
Unclassified freight.....	".....	867,130	392,256	1,259,386	1,748,486		489,100

C.—TABLE showing the Tonnage of the undermentioned Articles passed through the Welland canal in transit between Ports in the United States during a series of forty-four years, ended December 31, 1914.

Years.	Vegetable Food.								Heavy Goods.					
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	*Other Articles.	Total.	Railway Iron.	Other Iron.	Sugar and Salt.	Coal.	Ores.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869.....	30,681	211,085	91,149	2,942		667	1,006	337,530	68,064	14,334	89,086	28,566	35,912	235,962
1872.....	10,482	124,695	89,761	1,391	7,400		608	234,337	24,040	13,239	49,843	95,741	59,401	224,264
1873.....	10,805	127,727	101,329	1,920	1,188	3	392	243,366	4,659	13,826	40,507	170,242	62,942	292,176
1874.....	8,230	229,053	125,627		5,948		5,368	374,226	5,742	8,941	22,888	203,673	19,651	260,895
1875.....	1,881	113,832	54,188	2,641	2,946	500	1,920	177,908	14	4,123	12,931	192,767	34,616	244,451
1876.....	5,187	96,247	58,138		1,905	525	403	162,405		5,531	29,395	167,110	25,808	227,844
1877.....	3,342	107,396	65,260	1,603	2,314	258	413	180,586	8,976	8,688	8,336	172,868	41,107	239,975
1878.....	1,316	65,542	60,026	859	277		341	128,361		10,713	3,892	150,583	13,535	178,723
1879.....	159	53,791	33,401		464		11	87,826	2,405	3,648	6,318	118,573	17,797	148,741
1880.....		30,611	16,122	1,551	296			48,580	4,743	3,515	371	65,945	18,380	92,954
1881.....		34,320	30,031	924			10	65,285	1,313	5,570		83,858	6,464	97,205
1882.....	107	30,227	32,433	537		684	14	64,002		4,076		158,552	14,533	177,161
1883.....	2,041	54,382	66,128	735	731		8,579	132,496	1,209	6,901	8	196,462	24,891	229,471
1884.....	1,715	40,956	53,707		9,874		8,170	114,422	698	599		210,790	15,100	227,187
1885.....	124	53,235	63,229	732	882		1	118,203		1,594		198,416	15,029	215,039
1886.....	7,591	53,258	94,048		4,799		13,201	172,888	156	5,328	1	189,964	11,364	206,813
1887.....	11,780	37,678	83,431	1,732	12,050		10,859	157,530	15	4,406		82,780	627	87,828
1888.....	8,563	39,999	102,974	2	26,510	179	11,598	189,825	63	1,601	56	173,259	2,309	177,288
1889.....	5,017	39,229	147,045		27,492		17,225	236,208		1,587	896	227,476	1,204	231,163
1890.....	9,204	31,527	180,842	6,519	27,030		20,497	275,619		504	208	162,231	1,620	164,563
1891.....	6,802	32,097	127,494	8,113	52,823		26,115	253,444		292	705	186,572	1,773	189,342
1892.....	11,018	26,950	131,222	6,433	36,935		31,992	244,550		576	2	183,895		184,473
1893.....	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389		344		206,827		207,171
1894.....	17,795	53,846	105,329	28,095	27,621		60,402	198,358		297		188,521		188,818
1895.....	10,169	27,881	100,512	7,904	17,020		46,316	209,802	181	246		149,490		149,917
1896.....	16,224	34,878	175,094	11,128	16,137	490	46,456	300,407		146		207,348		207,494
1897.....	7,237	28,919	169,057	14,173	14,969		41,887	276,242	965	15		163,143		166,123
1898.....	4,212	11,268	150,667	6,909	12,732	1,197	22,671	209,656	770	339	4	156,814		157,927
1899.....	6,118	12,926	81,777	2,424	19,526	923	18,198	141,892	351	1,646	553	88,931		91,481
1900.....	7,966	18,771	60,545	2,402	39,706	2,149	14,248	145,787		953		46,024		46,977
1901.....	7,165	23,557	55,531	7,119	26,344		14,016	143,732	83	80	105	46,702		46,970
1902.....	13,785	32,639	66,111	7,418	10,006		12,675	142,634		214		12,911		13,125

*Apples, meal of all kinds, peas, potatoes.

C.—Table showing the Tonnage of the undermentioned Articles passed through the Welland canal in transit between Ports in the United States during a series of forty-four years, ended December 31, 1914—*Concluded*.

20A—4

Years.	Vegetable Food.								Heavy Goods.					
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	*Other	Total Articles.	Railway Iron.	Other Iron.	Sugar and Salt.	Coal.	Ores.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1903.....	6,082	15,439	108,917	11,433	6,112	4,175	13,568	165,725	459			113,072		113,535
1904.....	8,556	14,269	60,964	16,621	16,497		13,079	129,986				63,882		63,882
1905.....	24,054	15,483	93,622	9,197	10,892		9,682	162,930		1		73,464		73,465
1906.....	15,215	13,410	135,410	9,266	11,323		10,678	195,132		169		33,523		33,692
1907.....	18,898	21,892	124,474	2,812	4,741	2	22,001	194,820		30		110,347	4,050	114,420
1908.....	17,694	24,651	99,830	7,418	2,070	2	21,393	172,788				158,351	1,400	159,751
1909.....	15,452	17,940	100,967	4,224			22,683	161,266		5		131,131	1,531	132,667
1910.....	11,859	10,717	126,938	3,840			8,751	161,925				201,893		201,893
1911.....	2,852	4,950	116,705				7,565	132,072		1,863	26,303	223,942	4,483	256,491
1912.....	9,878	15,911	91,254	2,160	1,400		12,714	133,317		300	11,078	166,419	4,979	182,776
1913.....	11,967	20,258	114,662		7,407		8,685	162,979		505	18,387	237,230	5,202	261,324
1914.....	8,580	32,657	85,700		5,210		10,278	142,425			25,258	236,976	6,341	268,575

*Apples, meal all kinds, pease, potatoes.

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CANAL STATISTICS

A.—TABLE showing the total tonnage of the undermentioned articles moved Up December

Year.	VEGETABLE FOOD.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	45,674	313,825	120,599	20,951		904	1,937
1872	26,651	239,998	254,902	6,035	7,752	64	2,745
1873	30,665	355,847	180,169	8,225	1,194	3	3,777
1874	24,019	413,212	181,151	18,871	5,954	513	8,677
1875	13,964	253,835	103,749	35,751	3,383	917	6,337
1876	15,778	201,906	144,501	18,455	24,496	1,454	3,198
1877	13,558	253,953	169,196	19,870	2,810	2,439	2,355
1878	9,121	191,982	185,931	10,979	3,088		2,302
1879	10,710	274,570	144,506	4,655	1,239	440	2,444
1880	12,679	242,020	163,738	17,772	477	1,016	1,480
1881	9,959	127,832	101,075	24,509		1,844	2,086
1882	12,261	215,056	54,799	20,126	611	3,226	403
1883	13,471	152,794	182,269	10,436	731	1,642	10,983
1884	13,683	144,851	118,811	7,155	10,746	1,320	9,168
1885	13,334	124,206	117,536	15,801	1,116		1,912
1886	19,474	154,169	219,442	1,595	4,911	564	14,657
1887	23,949	221,927	114,938	9,574	12,050		12,533
1888	16,983	160,963	194,886	5,906	26,629	811	13,608
1889	7,931	126,664	353,595	4,272	28,356	2,673	18,552
1890	14,461	118,002	327,304	10,830	27,728	1,549	20,876
1891	13,517	198,658	185,180	8,113	52,959	64,888	28,042
1892	17,046	232,019	192,548	6,433	37,173	9,392	32,815
1893	15,235	258,392	441,092	18,599	31,283	3,671	36,981
1894	33,628	270,993	169,233	28,353	27,962	567	60,673
1895	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896	42,425	320,563	320,444	11,368	28,178	9,405	56,591
1897	9,065	324,743	390,615	14,173	25,161	8,483	44,674
1898	5,578	207,647	437,861	12,286	17,502	16,127	23,182
1899	11,625	197,732	204,004	2,907	24,037	923	18,460
1900	10,968	137,800	163,599	4,035	41,055	3,538	14,815
1901	18,978	151,586	67,756	7,119	28,485	2,961	14,024
1902	22,282	225,171	67,647	7,418	11,232	4,079	12,963
1903	25,998	259,031	210,758	14,656	7,911	4,904	13,994
1904	35,049	165,138	116,444	27,171	16,582		13,183
1905	38,512	254,458	180,921	55,432	36,072	1,711	9,883
1906	18,294	326,798	211,805	31,446	49,306	1,784	10,739
1907	22,739	488,565	271,693	13,240	73,369	2,270	22,683
1908	23,209	732,131	127,402	31,172	33,423	6,667	21,668
1909	38,763	590,196	140,902	23,151	75,135	33	30,221
1910	41,152	587,493	229,980	21,575	136,233		18,149
1911	57,061	562,282	273,932	15,029	163,333	112	11,360
1912	45,807	795,989	121,333	25,241	185,546	714	14,626
1913	45,710	1,005,362	144,354	96,889	199,794	6,867	10,640
1914	87,701	1,599,909	112,133	89,622	225,668	10,220	10,318

* Fiscal. † Apples, meal of all kinds, peas, potatoes.

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and Down, through the Welland canal, during a period of forty-four years, ended 31, 1914.

Total.	Railway Iron.	Other Iron.	Sugar and Salt.	Iron & Salt having paid full tolls on St. Lawrence canals.	Coal.	Ores.	Total.
Tons	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
503,860	46,806	16,924	91,575	37,153	103,126	58,781	275,623
538,147	26,217	17,141	50,540	44,243	186,932	98,605	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	43,387
647,397	6,032	12,068	23,309	9,579	323,503	56,825	431,316
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,565
409,788	51	7,997	30,300	20,327	288,211	81,654	378,540
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,109
403,403	10	11,518	3,980	12,686	295,318	15,229	338,741
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,670
442,182	5,360	4,812	413	22,273	109,986	34,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,482		5,348	50	17,327	237,559	23,700	283,984
373,326	1,237	7,922	66	17,037	307,058	31,785	365,105
305,734	698	652	461	3,242	274,471	53,205	332,729
273,905	78	2,055	597	14,243	248,272	26,728	291,973
414,812	166	6,123	48	12,324	271,356	27,447	317,464
394,971	1,351	5,636		6,715	145,193	13,866	172,761
419,786	93	3,220	316	13,617	223,871	16,872	257,989
542,043	47	2,479	1,254	20,269	268,305	2,435	294,789
519,291		753	1,027	28,047	202,384	8,138	240,249
367,177	127	1,610	2,567	7,953	224,644	3,415	240,316
527,426	163	1,567	878	3,666	211,616	355	218,245
805,253	6	2,075	374	8,139	233,096		243,690
591,409		3,072	159	977	203,608		207,816
486,421	185	6,245	54	2,819	158,866	1,140	169,309
788,974	1,192	6,332	82	3,264	223,445	1,158	235,473
816,914	7,206	17,012	227	590	176,226		201,261
720,183	1,444	11,722	799	734	162,336	13,433	190,468
459,688	567	6,361	1,282	1,318	97,732	26,125	133,385
375,720		8,190	533	4,800	47,392	58,400	119,315
290,909	83	6,094	327	8,773	49,480	99,487	164,244
350,792	64	7,488		15,201	64,014	22,480	109,247
537,252	488	5,407	2,554	45,846	147,884	18,323	220,502
373,568	11,381	9,957	1,093	4,164	113,525	39,683	179,803
576,989	2,651	10,912	226	4,221	172,642	22,381	213,033
650,172	3,747	8,493	100	16,204	147,587	5,862	181,993
894,559	961	4,923	246	18,761	267,212	25,040	317,143
975,672		35,726	429		316,921	18,004	371,080
898,401		87,025			377,681	33,301	498,007
1,034,582		57,581			577,491	34,311	669,383
1,083,109		126,956	35,888		619,682	37,480	820,006
1,189,256		139,991	21,630		709,696	82,376	953,603
1,509,616		96,245	28,396		945,790	78,776	1,149,207
2,135,571		34,037	35,060		949,306	14,151	1,032,554

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B.—TABLE showing the Total Way and Through Tonnage of the undermentioned articles cleared downward on the Welland canal during a series of forty-three years, ended December 31, 1914.

VEGETABLE FOOD.

Years.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869	44,110	310,090	119,541	3,920		680	1,541	479,882
1872	26,648	231,056	254,534	693	7,594	64	2,300	524,889
1873	30,660	345,720	180,042	643	1,188	3	3,557	563,813
1874	24,017	406,157	181,128	377	5,953		3,301	620,933
1875	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877	13,538	248,894	169,185	10,216	2,810	2,405	1,833	488,931
1878	8,854	188,106	185,931	1,217	3,088		2,100	389,296
1879	10,588	271,545	114,276	803	1,196		2,387	430,795
1880	12,467	240,601	162,891		477		1,417	417,853
1881	9,655	121,393	103,075	252		6	1,371	285,752
1882	12,205	205,870	54,797	537		1,954	225	275,594
1883	13,256	146,741	182,143	975	731	518	10,971	355,335
1884	13,626	135,804	118,811	270	10,746	477	9,018	288,752
1885	13,322	144,090	117,536	618	1,116		1,628	248,310
1886	19,418	146,151	218,897		4,891		14,581	403,928
1887	23,940	210,755	114,938	1,711	12,050		12,149	375,543
1888	16,973	150,833	194,886	555	26,629	811	13,358	404,045
1889	7,922	120,498	353,595	197	28,356	1,918	18,273	530,759
1890	14,461	114,924	327,394	6,519	27,728	1,121	20,836	512,983
1891	13,517	196,326	185,177	8,113	52,959	65,071	27,895	549,058
1892	17,046	229,569	192,548	6,433	37,173	9,392	32,548	524,709
1893	15,232	257,203	441,092	18,461	31,283	3,671	36,981	803,923
1894	33,628	270,514	169,233	28,353	27,962		60,587	590,277
1895	43,895	202,636	164,894	8,689	18,236		46,435	484,785
1896	42,159	319,388	320,444	11,368	28,178	8,970	54,031	784,538
1897	9,025	322,993	390,615	14,173	25,127	8,483	44,651	815,067
1898	5,578	206,313	437,849	12,286	17,491	16,127	23,170	718,814
1899	11,625	197,732	204,004	2,424	23,541	923	18,440	458,689
1900	10,968	137,800	163,509	3,449	40,256	3,538	14,802	374,322
1901	18,937	151,325	67,757	7,119	28,281	2,961	14,021	290,400
1902	22,282	223,499	67,647	7,418	11,223	4,079	12,912	340,060
1903	25,997	257,370	210,758	14,656	7,911	4,904	13,982	535,578
1904	35,046	164,515	116,444	27,171	16,582		13,157	372,915
1905	38,512	247,599	150,921	55,432	36,072	1,710	9,882	570,129
1906	18,227	326,789	111,243	31,446	49,306	1,411	10,739	549,161
1907	22,689	488,565	271,693	13,240	73,369	2,270	22,683	894,509
1908	23,187	739,751	127,402	31,172	33,423	6,667	21,668	974,270
1909	38,763	590,074	140,902	23,151	75,135	33	30,206	898,264
1910	41,152	587,493	229,980	21,575	136,233		18,149	1,034,582
1911	57,061	562,282	273,932	14,622	163,333	112	11,360	1,082,702
1912	45,807	795,989	121,333	25,241	185,546	714	14,626	1,189,256
1913	45,710	1,005,362	144,354	96,889	199,794	6,867	10,640	1,509,616
1914	87,701	1,599,909	112,333	89,622	225,668	10,220	10,318	2,135,571

*Fiscal. †Apples, meal all kinds, potatoes.

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D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels entering the canal at Port Colborne, during the Season of Navigation in 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913 and 1914.

Articles.	Canadian Vessels.				United States Vessels.				Total.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	329	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat.....		149,378		38,473		60,514		6,305		254,670
Corn.....		21,356		4,682		174,588		10,132		210,758
Barley.....		2,580		667		11,409				14,656
Oats.....		306		1,335		6,112				7,753
Pease.....		63				22				85
Rye.....						4,904				4,904
Coal.....		389		12,991		8,133		8,496		30,009
Miscellaneous merchandise.....		39,563		3,367		41,584		2,000		86,514
Shingles, woodenware, etc.....				54						54
Sawed lumber..... Ft. B.M.		12,841,552		1,625,855		17,871,652		14,733,677		47,072,736
Square lumber..... Cub. ft.		572,000		660,000				84,200		1,316,200
Firewood..... Cords				210		9				219
Staves..... No.				641,000						641,000
	228	157,539	55	39,375	205	187,748	42	15,918	530	400,580
1904.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat.....		116,794		33,302		14,269				164,365
Corn.....		12,768		7,814		95,862				116,444
Barley.....		2,619		824		23,728				27,171
Oats.....						16,261				16,261
Pease.....						3				3
Rye.....		1,925		7,187		17,133		7,668		33,913
Coal.....		34,907				1,925				36,832
Miscellaneous merchandise.....		29,567				60,548				90,115
Shingles, woodenware, etc.....										
Sawed lumber..... Ft. B.M.		15,077,382		854,811		32,754,541		9,572,655		58,259,389
Square timber..... Cub. ft.		944,508		744,000				149,000		1,837,508
Firewood..... Cords						717				717
Staves..... No.		634,000								634,000
	252	182,373	91	48,692	319	286,656	64	29,120	726	546,841
1905.		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat.....		188,706		18,575		28,757		2,512		238,550
Corn.....		6,385		6,636		163,374		4,526		180,921
Barley.....		6,870		1,451		47,111				55,432
Oats.....		8,225		2,570		21,535		3,742		36,072
Pease.....						76				76
Rye.....						1,171				1,711
Coal.....		18,756		35,324		28,330		8,678		91,088
Iron ore.....		14,353		8,023						22,381
Merchandise.....		29,375		7,485		74,975		3,126		114,961
Shingles, woodenware, etc.....				2,748,941		2,325				2,325
Sawed lumber..... Ft. B.M.		2,867,147				38,290,831		12,479,689		54,589,200
Square timber..... Cub. ft.		355,000		951,524						538,000
Firewood..... Cords				183,000		900				900

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D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels, etc.—Continued.

Articles.	Canadian Vessels.		American Vessels.		Total.
	Steam.	Sail.	Steam.	Sail.	Steam and Sail.
	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.
	328 | 238,690	121 | 66,355	305 | 310,622	43 | 15,758	797 | 631,425
1906.					
	Tons.	Tons.	Tons.	Tons.	Tons.
Wheat.....	250,493	34,355	35,578		320,436
Corn.....	8,177		202,250	1,378	49,306
Barley.....	8,546	5,046	17,854		31,446
Oats.....	21,900	16,083	11,323		49,306
Pease.....			11		11
Rye.....		5	1,406		1,411
Coal.....	30,455	47,242	24,190	9,356	111,243
Iron ore.....	5,862				5,862
Merchandise.....	35,383	7,009	110,263	50	152,705
Shingles, woodenware, etc.....	16	37	851		904
Sawed lumber..... Ft. B.M.	3,471,514	235,624	25,711,196	10,789,755	40,188,089
Square timber..... Cub. ft.	375,000	200,000			575,000
Firewood..... Cords	110	18	1,093		1,221
Staves..... No.			300,000		300,000
	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.
	375 | 290,509	148 | 81,070	408 | 397,616	76 | 36,921	1007 | 806,116
1907.					
	Tons.	Tons.	Tons.	Tons.	Tons.
Wheat.....	294,298	50,808	130,818	4,429	480,303
Corn.....	6,713	514	259,895	4,571	271,693
Barley.....	8,726	468	4,046		13,240
Oats.....	49,689	16,647	7,033		73,369
Pease.....			25		25
Rye.....			2,270		2,270
Coal.....	31,506	57,373	50,183	14,493	143,555
Iron ore.....	12,040	8,950			20,990
Merchandise.....	21,545	9,436	5,231	6,235	42,447
Shingles, woodenware, etc.....			2,222		2,222
Sawed lumber..... Ft. B.M.			14,395,124	11,201,446	25,596,570
Square timber..... Cub. ft.	558,000	323,000			881,000
Firewood..... Cords			660		660
	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.	No. | Tonnage.
	567 | 432,623	149 | 64,034	428 | 319,030	36 | 19,866	1180 | 835,553
1908.					
	Tons.	Tons.	Tons.	Tons.	Tons.
Wheat.....	505,151	39,001	183,011	3,498	730,751
Corn.....	2,405		124,997		127,402
Barley.....	19,775	1,133	10,264		31,172
Oats.....	30,091	643	2,689		33,423
Pease.....			40		40
Rye.....	742		5,925		6,667
Coal.....	33,733	42,656	57,448	8,344	148,181
Merchandise.....	26,815	14,783	14,410	13,686	69,694
Firewood..... Cords		70	1,173		1,243
Sawed lumber..... Ft. B.M.			17,572,070	6,578,545	24,150,615
Square timber..... Cub. ft.	221,300	313,000			534,300

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D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels, etc.—Continued.

Articles.	Canadian Vessels.				American Vessels.				Total.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	555	486,406	136	71,034	323	324,576	26	17,317	1040	899,333
1909.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	415,208		34,903		133,172				583,283	
Corn.....	6,694				134,208				140,902	
Barley.....	17,943		360		4,848				23,151	
Oats.....	70,392		4,743						75,135	
Pease.....					63				63	
Rye.....	33								33	
Coal.....	160,475		53,681		21,097		630		235,883	
Merchandise.....	52,994		14,732		12,232		16,498		96,506	
Sawed lumber.....					31,643		10,214		41,857	
Square timber.....	3,450		7,840		125		1,475		12,890	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	596	599,416	142	88,963	249	285,704	14	13,563	1001	987,646
1910.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	481,624		22,200		77,040				580,864	
Corn.....	13,759				214,221				229,980	
Barley.....	17,159		576		3,840				21,575	
Oats.....	135,743				490				136,233	
Pease.....					123				123	
Rye.....							894		361,990	
Coal.....	216,679		114,671		29,646		20,466		361,990	
Merchandise.....	39,149		15,231		21,818				96,064	
Sawed lumber.....	3,630		800		16,932				21,362	
Square timber.....	1,930		5,000		800				7,730	
Shingles.....					525				525	
Unenumerated.....	74,434		1,772		24,031				100,237	
Total.....	986,207		160,250		389,466		21,360		1,557,283	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	640	670,037	122	83,755	270	304,171	48	42,830	1080	1,100,793
1911.	Tons.		Tons.		Tons.		Tons.		Tons.	
Wheat.....	483,984		24,826		49,330				558,140	
Corn.....	29,978		11,368		232,586				273,932	
Barley.....	14,382		240						14,622	
Oats.....	162,455		878						163,333	
Pease.....									112	
Rye.....	112								112	
Coal.....	230,809		79,311		40,109		22,489		372,718	
Merchandise.....	45,838		19,325		45,881		34,449		145,493	
Sawed lumber.....	300				25,361		9,020		34,681	
Square timber.....	3,260		4,500		2,277				10,037	
Shingles.....					60				60	
Unenumerated.....	95,017				14,386				109,403	
Total.....	1,066,135		140,448		409,990		65,958		1,682,513	

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D.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal in Canadian and United States vessels, etc.—*Concluded.*

Articles.	Canadian Vessels.				United States Vessels.				Total.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	774	790,044	152	95,202	450	427,226	52	33,102	1428	1,345,574
1912.										
		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat.....		603,854		78,794		111,284				793,932
Corn.....		536		2,181		118,616				121,333
Barley.....		22,022		353		2,866				25,241
Oats.....		170,446		3,269		11,831				185,546
Pease.....						150				150
Rye.....						714				714
Coal.....		331,536		44,212		154,653		3,800		534,201
Merchandise.....		48,659		17,602		47,836		32,340		146,437
Sawed lumber.....						22,689		15,361		38,050
Square timber.....		9,000		8,660		1,409				19,069
Shingles.....						250				250
Unenumerated.....		73,387		1,186		69,367				143,940
Total.....		1,259,440		156,257		541,665		51,501		2,088,863
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	1043	1,081,973	148	104,194	375	386,284	28	18,908	1594	1,590,459
1913.										
		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat.....		761,418		87,153		154,768				1,003,339
Corn.....		1,549				142,805				144,354
Barley.....		82,241		2,448		12,200				96,889
Oats.....		188,442		1,937		9,415				199,794
Pease.....										
Rye.....		3,136				3,731				6,867
Coal.....		498,269		59,145		107,946		1,735		667,095
Merchandise.....		59,375		18,701		28,825		21,008		127,909
Sawed lumber.....		1,500				19,200		3,736		24,436
Square timber.....		4,636		4,004		1,040				9,680
Shingles.....										
Unenumerated.....		183,957		9,059		76,613		3,550		273,179
Total.....		1,784,523		182,447		556,543		30,029		2,553,531
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	1301	1,345,319	154	93,099	357	353,547	25	7,279	1837	1,799,244
1914.										
		Tons.		Tons.		Tons.		Tons.		Tons.
Wheat.....		1,268,410		101,833		189,666				1,559,909
Corn.....		4,973		1,422		105,738				112,133
Barley.....		80,488		4,423		4,711				89,622
Oats.....		210,795		3,699		10,982				225,476
Pease.....										
Rye.....		1,114				9,106				10,220
Coal.....		531,240		32,288		132,215		901		696,544
Merchandise.....		61,135		16,751		14,987				92,873
Sawed lumber.....		450				17,285		1,670		19,405
Square timber.....		4,846				1,397				6,243
Shingles.....		175								175
Unenumerated.....		102,804				20,936		400		124,140
Total.....		2,266,430		160,416		507,023		2,871		2,936,740

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WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

WELLAND CANAL—WESTBOUND FREIGHT.

The total quantity of Through Freight passed up the Welland canal in Canadian and United States vessels during the Season of Navigation in 1914 is as follows:—

Summary.	Tons.	Tons.
In Canadian steam vessels.....	444,621	
“ sail vessels.....	6,828	
Total quantity in Canadian vessels.....		451,449
In United States steam vessels.....	336,910	
“ sail vessels.....		
Total in United States vessels.....		336,910
Grand total freight passed up the Welland canal in Canadian and United States vessels.....		788,359

STATEMENT of the Quantity of Through Freight passing up and down the Welland canal during the Season of Navigation in 1914.

Summary.	Tons.	Tons.
In Canadian steam vessels up.....	444,621	
“ “ down.....	2,266,430	
Total in Canadian steam vessels.....		2,711,051
In Canadian sail vessels up.....	6,828	
“ “ down.....	160,416	
Total in Canadian sail vessels.....		167,244
Total quantity in Canadian vessels.....		2,878,295
In United States steam vessels up.....	336,910	
“ “ down.....	507,023	
Total in United States steam vessels.....		843,933
In United States sail vessels up.....		
“ “ down.....	2,871	
Total in United States sail vessels.....		2,871
Total quantity in United States vessels.....		846,804
Total in Canadian and United States vessels.....		3,725,099
	Down or East bound.	Up or West bound.
In Canadian vessels.....	2,426,846	451,449
In United States vessels.....	509,894	336,910
Total.....	2,936,740	788,359

F.—STATEMENT showing the Quantity of Freight passed Eastward, from Lake Erie, through the whole length of the Welland and St. Lawrence canals, to Montreal, during the Seasons of Navigation 1902 to 1914.

Articles.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
<i>Class 3.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Cement and water lime			35					5,652	484			270	
Clay, lime and sand				22									
Iron, railway	50		8,170	10									
" pig										1,901		93	430
" all other	5,785	2,542	1,651	384	269	124	553	12,689	7,154	34,540	28,996	5,402	150
Steel			16	48									
Stone, for cutting													
Apples			1			9,936							
Barley		2,206	9,697	43,607	21,196	105,984	24,318	19,143	20,000	14,853	20,572	60,854	56,784
Corn	1,719	123,864	55,021	84,204	55,559		10,454	17,137	77,612	134,239	7,345	9,344	6,031
Flaxseed		3,643	212	15,694	80,570	49,159	27,500	19,634	6,607	11,696	15,413	117,548	4,285
Flour	6,755	16,151	24,662	14,574	9,174	3,730	5,028	21,905	27,081	44,588	38,026	34,152	60,723
Mcal, all kinds		348	57	270	60		156		10,323	3,967			
Oats	1,442	2,438		21,404	37,164	66,941	28,081	65,624	129,900	147,180	164,581	72,733	97,361
Oil cake		462	7,846	9,229									
Pease		63						30		20	10		
Rye	4,079	4,260		1,711	1,405	2,266	6,662	120			714	4,567	9,385
Salt		132	615	168	75	143	419				931	686	100
Seed, all kinds						20							
Hay, pressed													
Tobacco, raw													
Wheat	200,975	226,746	133,528	190,505	289,611	450,446	686,626	550,775	562,149	541,174	768,633	763,851	1,184,645
All other agricultural products, vegetables								5,876					308
Hides, skins, horns and hoofs			10		2								
Horses													
Lard and lard oil				2,847	4,810								
Meats, all kinds											41		
Pork							524						
Tallow		3		53									
All other agricultural products, animal			1					366					
Total, class 3	220,805	382,858	241,522	384,727	499,895	688,749	790,321	718,951	841,310	934,158	1,045,262	1,069,500	1,420,202

<i>Class 4.</i>													
Agricultural implement	13	58	17										
Ashes		2	16										
Bricks							1,548						
Crockery				93									
Furniture		3	6		6				2			36	
Glass, all kinds		15	3	21	11	4							
Molasses	54	240		820									
Nails		19		64									
Oil	12,091	14,619	12,848	20,700	19,995	22,111	30,002	31,149	26,932	45,930	52,871	67,576	48,401
Paint		5											
Pitch and tar				53		101							
Rags		4											
Resin		20											
Soda ash				72	72	15							
Sugar				2,019				173	345	1,177	3,475	898	2,812
Tin			87	53									
Tobacco				204									
White lead													
Whisky, beer and other spirits		2	766	635	614	1,244	1,056	525	959	581	1,739	1,298	447
Merchandise not enumerated	419	582	713	851	466	2,294	2,126	10,418	9,224	11,254	13,601	4,270	719
Total, class 4	12,577	15,569	14,456	25,572	21,164	25,749	34,730	42,265	37,462	58,942	71,686	74,078	52,379
<i>Class 5.</i>													
Barrels, empty	15												
Hoops													
Sawed lumber	1,085			3,957	100					300			175
Staves, pipe and barrel			394		2,400								
Staves, West India and pipe													
Timber, sq. in vessels			1,544	1,260	1,500	4,180							
Timber, sq. in rafts								900	1,800	1,360	5,560	3,444	12,907
Woodenware	17												
Total, class 5	1,117		1,938	5,217	4,000	4,180		900	1,800	1,660	5,560	3,444	13,082
<i>Special class.</i>													
Coal				29,351	29,172	70,489	42,075	175,115	289,567	298,873	424,988	563,197	567,237
Iron ore	15,976		17,362	3,837				1,824			12,467		
Stones, all kinds							1,272						
Total, special class	15,976		17,362	33,188	29,172	70,489	43,367	176,939	289,567	298,873	437,455	563,197	567,237
Grand total	250,475	398,427	275,278	448,704	554,231	789,167	869,398	939,055	1,170,139	1,293,633	1,559,963	1,710,219	2,052,900

G.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland canals to Lake Erie, during the Seasons of Navigation in 1902, 1903, 1904, 1905, 1906, 1907, 1909, 1910, 1911, 1912, 1913 and 1914.

Articles.	1902.	1903.	1904.	1905.	1906.	1907.	1909.	1910.	1911.	1912.	1913.	1914.
<i>Class 3.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Bricks.....	22	80	115	132		556						
Brimstone.....	20	23	12									
Cement and water lime.....	178	3,924	39	181	88	13	400	17,565	8,625	40,074	36,890	18,000
Clay, lime and sand.....	1	181				100						
Cotton, raw.....		23										
Fish.....		8	4			39						
Gypsum.....												
Iron, railway.....	11,735	39,641	283	126	7,289	4,119						
“ pig.....	558	273		312	680	7,655	7,231	2,060	2,300	2,598	675	7,268
“ all other.....	2,904	5,845	3,782	3,633	8,235	6,987		540				
Salt.....	4	87	99	150	17							
Steel.....	11	332	58	192	111	2,561	35,153		22,352	66,544	49,692	10,602
Stone for cutting.....			41									
Flour.....				18								
Hay.....						30	255					
Meals.....		17	25					1,113				
Oats.....												
Potatoes.....												
Seeds, all kinds.....	58	325	164	35	17							
Tobacco, raw.....	1	2										
Agricultural products, not enumerated, vegetable.....	1			127								
Hides and skins.....	16	6										
Horses.....												
Lard and lard oil.....	11			28	20	1						
Meats, other than pork.....		1	25			15						
Pork.....												
Wool.....								150	150		25	164
All other articles not enumerated.....												
Total, class 3.....	15,520	50,768	4,647	4,934	16,457	22,076	43,039	21,278	34,427	109,366	87,282	36,034

<i>Class 4.</i>												
Agricultural implements.....					5							
Ashes, pot and pearl.....		2										
Crockery and earthenware.....		32	291	155	294	456						
Dye woods, etc.....			2			2						
Furniture.....		1	5	2	1	35		90				
Glass, all kinds.....	1,384	1,207	1,671	1,641	2,519	3,634						
Manilla.....			24	93	37	15						
Marble.....					35							
Molasses.....		6		1		50						
Nails.....	1,292	2,878	1,009	3,061	4,011	3,331						
Oil, in barrels.....	14	16	1,418	120	148	155	1	80	667	15	100	
Paint.....	97	158	202	367	412	295						
Pitch and tar.....	27	58	198	5	239							
Rags.....	1	29		15		50						
Resin.....		1				25						
Soda ash.....	201	264	387	28	310	37						
Stone, wrought.....				1		5						
Sugar.....	1,314	204	52	1,168	1,153	6,046	40	3,024		1,275	510	7,819
Tin.....	506	209	362	928	1,365	1,173						
Turpentine.....	2	1				1						
White Lead.....	37	80	82	80	304	283						
Whiting.....	61	22	33	158	93	18						
Whisky, beer, etc.....	182	452	432	384	483	1,040	220	1,187	163	867	1,492	4,390
Merehandise not enumerated.....	1,049	3,674	6,200	15,360	11,707	16,498	21,359	15,129	12,090	12,353	17,878	49,969
Total, class 4.....	6,169	9,294	13,379	23,566	23,116	33,049	21,620	19,510	12,920	14,509	19,980	62,178
<i>Class 5.</i>												
Barrels, empty.....					54,906							
Firewood, in vessels.....	3,600	40,026	40,435	43,982	2,307	2,337						
Pulpwood.....						101,989	122,867	121,572	182,682	113,104	225,928	262,433
Lumber, sawn, in vessels.....							3,984		3,306		402	
Railway ties in vessels.....		611										
Woodenware.....					5							
Total, class 5.....	3,600	40,637	40,425	43,982	57,218	104,326	126,851	121,572	185,988	113,104	226,330	262,433
<i>Special Class.</i>												
Coal.....			10,200									
Iron ore.....			2,861									
Total, special class.....			13,961									
Grand total.....	25,289	100,699	71,512	72,482	96,791	159,451	191,510	172,360	233,335	236,729	333,592	360,645

H.—STATEMENT showing the Quantity of Freight passed Eastward and Westward through the Welland canal from United States Ports to United States Ports, during the Seasons of Navigation from 1902 to 1914, inclusive.

Articles.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	1914.
<i>Class 3.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Bricks.....													
Cement and water lime.....									2,000			11,060	
Fish.....						20				91			
Iron, railway.....													
“ all other.....	30			1	27	30				1,863	300	505	
Salt.....												238	
Steel.....					2	509	9,086						
Stone for cutting.....													
Apples.....													
Barley.....	7,418	11,433	16,621	9,197	9,266	2,812	7,148	4,224	3,840		2,160		
Corn.....	66,111	108,917	60,964	93,622	135,240	124,474	99,830	100,967	126,938	116,705	91,254	114,662	85,700
Flour.....	13,785	6,082	8,556	24,054	15,215	18,898	17,694		11,859	2,852	9,878	11,967	8,580
Hay, pressed.....				200									
Meal, all kinds.....	12,675	13,456	13,076	9,606	10,668	21,976	21,353		9,621	7,565	12,569	8,685	10,278
Marble.....				87									
Nails.....				1									
Oil cake.....	110	740	16,497	228		114							
Oats.....	10,006	6,112	3	10,892	11,323	4,741	2,070				1,400	7,407	5,219
Pease.....		22		76	11	25	40	63	123		150		
Potatoes.....													
Rye.....		4,174				2	2						
Flax seed.....		1,594			756			15,452					
Seeds, all kinds.....	10	27		43	3	17							
Tobacco.....													
Wheat.....	32,639	15,436	14,269	15,483	13,410	21,802	24,651	17,940	10,717	4,950	15,911	20,258	32,657
Agricultural products, vegetable.....		1			1	7		22,620		19	37		
Hides and skins, etc.....							21	315	233				
Horses.....		2											
Lard and lard oil, etc.....	2,413				22	86							
Meats, other than pork.....													
Pork.....	632	152	379	273	268	429							
Sheep.....							190						
Tallow.....													
Wool.....	752	482	134	21	89	30		157	233	9			
Total, class 3.....	146,581	168,720	130,301	163,301	196,301	196,061	182,085	161,738	164,654	134,054	133,659	184,782	142,425

<i>Class 4.</i>														
Agricultural implem'ts	399		396	552	494		2	254						
Crockery and earthen-ware						5								
Furniture	17				1					2				
Marble														
Molasses														
Nails						3								
Oil, in barrel	1,594	2,000	1			8	15		8	45	2	1,119	83	
Paint			17	42	1	1	1							
Rags		4		4										
Soda ash														
Stone, wrought														
Sugar	280		53	53	840	26,075		1,196		26,303	11,078	18,419	24,858	
White lead				7		4								
Whiting						21								
Whisky, beer and all other spirits		3				30			122	230	137	109	236	
Merchandise	1,928	2,010	1,554	2,008	2,324	41,621	1,839	5,866	67,860	64,059	67,481	70,255	79,649	
Total, class 4	4,218	4,017	2,021	2,666	3,660	67,768	1,857	7,316	67,890	90,639	78,698	89,632	104,826	
<i>Class 5.</i>														
Empty barrels				3	2	1								
Firewood, in vessels	4		717	2,700	3,609	1,980	3,509		1,531	2,046	2,394			
Lumber, sawn, in vessels	72,806	48,337	30,194	15,726	27,701	14,314	21,571	24,327	11,738	30,191	26,614	14,937	16,424	
Masts and spars, in vessels														
Hop poles			154											
Railway ties, in vessels			652	2,248		2,151	478							
Shingles				62	53	70								
Split posts				12					25					
Staves, salt barrels					1,500									
Timber, square, in vessels								125		723			437	
Woodenware, etc.								2,932	1,583	2,270	3,550		1,650	
Total, class 5	72,810	48,337	31,717	20,751	32,865	18,516	25,558	27,384	14,877	32,237	32,001	18,487	18,511	
<i>Special class.</i>														
Coal	501		1,100	3,346	4,400	110,347		400	201,893	228,942	166,419	237,230	236,976	
Stone, not suitable for cutting														
Kryolite						2,734								
Iron ore						1,316			1,552	4,483	4,979	5,202	6,341	
Total, special class	501		1,100	3,346	4,400	114,397		400	203,445	228,425	171,398	242,432	243,317	
Grand total	224,110	221,074	165,337	190,547	237,226	396,743	209,518	193,838	450,776	485,355	415,756	525,333	509,079	

5 GEORGE V., A. 1915

L.—STATEMENT of the quantity of Grain Transhipped to the following Ports for the season of 1914.

Ports.	Wheat.	Oats.	Barley.	Corn.	Other grain.	Total.	Total.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.
Kingston.....	3,955,867	1,795,294	120,460	98,713	83,000	6,053,334	157,175
Prescott.....							
Ogdensburg....	401,734					401,734	12,052
Total bushels..	4,357,601	1,795,294	120,460	98,713	83,000	6,455,068	.....
Total tons...	130,728	30,520	2,891	2,764	2,324	.....	169,227

M.—The quantity of Coal passed through the Welland canal during a series of years from 1885 to 1914 inclusive, is as follows:—

Years.	From Canadian Ports to Canadian Ports.		From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Total. Tons.
	Up.	Down.	Up.	Down.	Up.	Down.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
1885.....			193,442	4,974	10,321	31,350	240,087
1886.....			184,564	5,400	22,187	49,724	261,875
1887.....			81,617	1,163	26,775	25,968	135,523
1888.....			172,381	878	17,365	27,183	217,807
1889.....			226,352	1,124	12,036	25,931	265,443
1890.....	80		116,616	615	17,280	22,781	202,372
1891.....			185,190	1,382	17,374	20,698	224,644
1892.....			183,244	651	12,391	15,330	211,616
1893.....			204,704	2,123	8,325	17,944	233,096
1894.....			187,794	727	1,269	13,947	203,737
1895.....	4		148,887	603	1,565	7,807	158,866
1896.....	20	210	206,093	1,255	4,127	11,740	223,443
1897.....		4	165,143		1,277	9,799	176,225
1898.....			156,055	759	986	4,536	162,336
1899.....			86,638	2,293	525	8,276	97,732
1900.....	8		45,032	992		1,360	47,392
1901.....			46,345	357	456	2,322	49,480
1902.....			12,410	501	65	51,037	64,013
1903.....	3		113,076		4,796	30,009	147,884
1904.....	2,919		62,782	1,100	3,711	32,813	103,325
1905.....			70,118	3,346	11,436	37,742	172,642
1906.....	60		29,123	4,400	7,161	106,843	147,587
1907.....	2,857		110,347		10,453	143,555	267,212
1908.....	4,401		158,351		5,988	148,181	316,921
1909.....			130,731	400	11,067	235,483	377,681
1910.....	2,045		197,482	4,411	15,974	357,579	577,491
1911.....	731		221,752	2,160	24,451	370,558	619,682
1912.....			163,461	2,958	12,034	531,243	709,696
1913.....			235,730	1,500	42,965	665,595	945,790
1914.....			236,976		13,107	699,223	949,306

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N.—STATEMENT showing the quantity of Coal passed through the whole length of the St. Lawrence canals during the season of 1885 to 1914 inclusive.

Years.	Quantity passed up.	Quantity passed down to Montreal.	Total Quantity passed up and down.
	Tons.	Tons.	Tons.
1885.....	5,035	122,829	127,864
1886.....	3,301	118,802	122,103
1887.....	7,579	121,618	129,197
1888.....	8,341	123,050	131,391
1889.....	5,360	124,290	129,650
1890.....	6,538	135,168	141,706
1891.....	7,951	141,701	149,652
1892.....	7,543	157,134	164,677
1893.....	2,285	147,139	149,424
1894.....	16,213	169,552	185,765
1895.....		165,151	165,151
1896.....	689	161,551	162,240
1897.....	40	164,963	165,003
1898.....	400	175,609	176,009
1899.....	448	201,546	201,994
1900.....	10	280,169	280,179
1901.....	2,765	298,245	301,010
1902.....	9,231	95,702	104,933
1903.....	30	290,548	290,578
1904.....	9,670	320,973	330,643
1905.....	8,518	345,589	354,107
1906.....	6,989	313,080	320,069
1907.....	1,281	406,978	408,259
1908.....	23,939	448,140	472,079
1909.....	13,543	469,695	483,238
1910.....	7,351	746,926	754,277
1911.....	6,230	756,474	762,704
1912.....	9,300	903,237	912,537
1913.....	3,500	1,225,288	1,228,788
1914.....	7,750	1,038,127	1,045,877

5 GEORGE V., A. 1915

O.—STATEMENT showing the quantity of Through Freight passed down the Welland canal, etc.

RECAPITULATION.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1903.	Tons.	Tons.	Tons.
Barley.....	2,206	1,017	11,433
Corn.....	116,223	13,846	80,689
Oats.....	2,438		5,315
Peas.....	63		22
Rye.....	4,200		644
Wheat.....	226,746	14,199	13,725
Total, grain.....	351,936	29,062	111,828
Other Articles.....	38,850	82,298	101,621
Total.....	390,786	111,360	213,449
1904.			
Barley.....	9,697	853	16,621
Corn.....	55,021	3,950	57,473
Oats.....			16,497
Peas.....			3
Rye.....			11,929
Wheat.....	133,528	18,908	
Total, grain.....	198,246	23,711	102,523
Other articles.....	77,031	80,092	138,475
Total.....	375,277	103,803	240,998
1905.			
Barley.....	43,607	2,628	9,197
Corn.....	84,204	3,095	93,622
Oats.....	21,404	3,776	10,892
Peas.....			76
Rye.....	1,711		
Wheat.....	190,505	32,562	15,483
Total, grain.....	341,431	42,061	129,270
Other articles.....	107,273	123,225	104,747
Total.....	448,704	165,286	234,017
1906.			
Barley.....	21,196	984	9,266
Corn.....	55,559	15,688	140,558
Oats.....	37,164	819	11,323
Peas.....		11	
Rye.....	1,405	6	
Wheat.....	289,611	15,843	14,972
Total grain.....	404,935	33,351	176,119
Other articles.....	118,224	176,277	59,884
Total.....	523,159	209,628	236,003

SESSIONAL PAPER No. 20a

O.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal, etc.—*Continued.*RECAPITULATION—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dulhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1907.	Tons.	Tons.	Tons.
Barley.....	9,936	492	2,812
Corn.....	166,299	31,901	133,493
Oats.....	67,063	1,565	4,741
Peas.....			25
Rye.....	2,266	2	2
Wheat.....	450,009	8,072	22,222
Total grain.....	635,573	42,032	163,295
Other articles.....	153,594	126,423	93,127
Total.....	789,167	168,455	256,422
1908.			
Barley.....	24,318	3,546	3,308
Corn.....	10,454	11,489	105,459
Oats.....	28,081	3,272	2,070
Peas.....			40
Rye.....	6,662	3	2
Wheat.....	1686,626	19,832	24,293
Total grain.....	756,141	38,142	135,172
Other articles.....	108,785	162,378	91,875
Total.....	864,926	200,520	227,047
1909.			
Barley.....	19,143		4,008
Corn.....	17,137	22,798	100,967
Oats.....	65,624	2,872	6,639
Peas.....	30		33
Rye.....	33		
Wheat.....	550,775	14,568	17,940
Total grain.....	652,742	40,238	129,587
Other articles.....	272,263	113,970	126,223
Total.....	925,005	154,208	255,810
1910.			
Barley.....	20,000		1,575
Corn.....	77,612	49,326	103,042
Oats.....	129,900	6,333	
Peas.....			128
Rye.....			
Wheat.....	562,149	7,998	10,717
Total grain.....	789,661	63,657	115,457
Other articles.....	380,500	152,325	55,683
Total.....	1,170,161	215,982	171,140

5 GEORGE V., A. 1915

O.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal, etc.—*Concluded.*

RECAPITULATION—*Concluded.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports on Lake Ontario.
1911.			
	Tons.	Tons.	Tons.
Barley.....	14,331	291	
Corn.....	134,239	22,988	116,705
Oats.....	147,180	16,153	
Peas.....			
Rye.....		112	
Wheat.....	541,174	12,016	4,950
Total grain.....	836,924	51,560	121,655
Other articles.....	500,881	115,721	55,790
Total.....	1,337,805	167,281	177,445
1912.			
Barley.....	20,572	218	4,451
Corn.....	7,345	1,372	112,616
Oats.....	164,581	20,965	
Peas.....	10	12	128
Rye.....	714		
Wheat.....	768,633	25,299	
Total grain.....	961,855	47,866	117,195
Other articles.....	598,108	214,395	69,444
Total.....	1,559,963	262,261	186,639
1913.			
Barley.....	91,856	5,033	
Corn.....	9,344	20,348	114,662
Oats.....	173,827	18,560	7,407
Peas.....			
Rye.....	4,567	2,300	
Wheat.....	985,774	17,565	
Total grain.....	1,265,368	63,806	122,069
Other articles.....	916,254	135,742	50,303
Total.....	2,181,622	199,548	172,372
1914.			
Barley.....	89,622		
Corn.....	6,031	85,700	20,402
Oats.....	204,166	5,210	16,292
Peas.....			
Rye.....	9,385		835
Wheat.....	1,527,252		32,657
Total grain.....	1,836,456	90,910	70,186
Other articles.....	855,855	46,652	36,681
Total.....	2,692,311	137,562	106,867

TABLE 1.—Comparative Statement of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation of 1913 and 1914.

	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian	United States.
1913.													
Sault Ste. Marie.....	634,118	2,752,099	27,372	1,403,129	2,373,665	33,425,887	1,859,116	223,938	1,894,271	37,805,053	42,699,324	4,954,734	37,744,590
Welland.....	395,667	1,335,059	245,735	3,215	320,736	294,597	42,965	1,022,740	1,005,103	2,565,611	3,570,714	2,093,406	1,477,308
St. Lawrence.....	749,035	1,750,553	354,532	34,303	126	.....	432	1,413,446	1,104,125	3,198,302	4,302,427	2,837,019	1,465,408
Chambly.....	8,334	10,096	339,113	.....	.....	.....	.....	198,039	347,467	298,135	555,602	358,801	196,801
St. Peters.....	29,486	42,028	.....	.....	.....	.....	.....	.....	29,486	42,028	71,514	71,514	.....
Murray.....	168,614	4,670	.....	.....	.....	.....	.....	1,692	5,600	170,306	10,270	180,576	18,481
Ottawa.....	51,428	273,652	.....	37,616	.....	.....	.....	2,742	.....	54,170	311,268	365,438	6,973
Rideau.....	80,147	77,464	960	.....	.....	.....	.....	12,652	.....	81,107	90,116	157,746	13,477
Trent.....	17,541	38,259	.....	.....	.....	.....	.....	.....	.....	17,541	38,259	55,800	.....
St. Andrews.....	78,538	2,757	.....	.....	.....	.....	.....	.....	.....	78,538	2,757	81,295	.....
Grand total.....	2,212,928	6,286,637	967,712	1,478,263	2,694,527	33,630,484	1,906,947	2,876,415	7,782,114	44,271,799	52,053,915	11,130,875	40,923,038
1914.													
Sault Ste. Marie.....	379,703	2,490,510	10,174	582,175	1,153,050	21,438,985	1,245,894	298,693	2,788,821	24,810,363	27,509,184	3,609,747	23,989,437
Welland.....	225,532	1,769,052	278,955	450	338,455	170,624	13,107	1,064,794	856,049	3,004,920	3,860,969	2,013,619	1,847,350
St. Lawrence.....	571,331	1,725,196	413,149	91	58	424	1,416	1,679,828	985,954	3,405,539	4,391,493	2,738,649	1,652,844
Chambly.....	4,335	8,492	295,258	.....	.....	.....	.....	128,820	299,593	137,312	436,905	308,091	128,814
St. Peters.....	21,793	32,387	.....	.....	.....	.....	.....	.....	21,793	32,387	54,180	54,164	16
Murray.....	76,021	2,938	1,490	.....	.....	.....	.....	3,458	77,511	6,396	83,907	80,946	2,961
Ottawa.....	57,330	238,317	.....	35,559	.....	.....	3,926	.....	61,256	273,876	335,132	325,059	10,073
Rideau.....	80,867	62,009	230	.....	.....	.....	.....	8,633	81,097	70,642	151,739	142,203	9,536
Trent.....	15,531	52,009	.....	.....	.....	.....	.....	175	15,531	52,184	67,715	67,715	.....
St. Andrews.....	41,681	332	.....	.....	.....	.....	.....	.....	41,681	332	42,013	42,013	.....
Grand total.....	1,474,124	6,381,242	999,256	618,275	1,491,563	21,610,033	1,264,343	3,184,401	5,229,286	31,793,951	37,023,237	9,382,206	27,641,031

TABLE 2.—Statement showing the Number, Tonnage, and Nationality of Vessels passed through the several canals during the Season of Navigation in 1914.

Vessels.	Total No. of Trips.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
<i>Canadian Vessels.</i>												
<i>Steam and Sail.</i>												
Sault Ste. Marie.....	3,011	1,361,117	1,479,667	44,373	121,977	301		360,770	87,087	1,766,561	1,706,731	3,473,292
Welland.....	2,902	1,067,392	1,066,296	330,574	216	4,386	2,109	24,230	383,280	1,426,582	1,451,901	2,878,483
St. Lawrence.....	8,982	1,873,438	1,835,688	373,968	164			164	421,813	2,247,570	2,257,665	4,505,235
Chambly.....	346	24,914	22,889	1,979					2,954	26,893	25,843	52,736
St. Peters.....	1,192	41,763	38,489							41,763	38,489	80,252
Murray.....	914	112,892	85,173	9,446	543				2,693	122,338	88,409	210,747
Ottawa.....	2,197	187,882	202,760		1,605			269		188,151	204,365	392,516
Rideau.....	2,600	82,804	85,831	3,977					4,292	86,781	90,123	176,904
Trent Valley.....	3,647	88,664	85,983							88,664	85,983	174,647
St. Andrews.....	334	50,503	55,541							50,503	55,541	106,044
Total Canadian.....	26,125	4,891,369	4,976,317	764,317	124,505	4,687	2,109	385,433	902,119	6,045,806	6,005,050	12,050,856
<i>United States Vessels.</i>												
Sault Ste. Marie.....	2,966	7,185	8,521	14,189	359,715	3,001,845	10,079,352	258,504	98,559	3,281,723	10,546,147	13,827,870
Welland.....	790	5,289	3,137	68,194	195	277,646	178,948	2,282	221,521	353,411	403,801	757,212
St. Lawrence.....	1,263	15,015	16,009	363,794	394	13,206	1,514	3,258	363,300	395,273	381,217	776,490
Chambly.....	2,348		2,557	116,561					122,554	116,561	125,111	241,672
St. Peters.....	8	334	53					26		360	53	413
Murray.....	57	1,670	235	389		39	21	37	498	2,135	754	2,889
Ottawa.....	275	8,943	96		13,525			4,693		13,626	13,621	27,257
Rideau.....	35	810	927	390					484	1,200	1,411	2,611
Trent Valley.....												
St. Andrews.....												
Total United States.....	7,742	39,246	31,535	563,517	373,829	3,292,736	10,259,835	268,800	806,916	4,164,299	11,472,115	15,636,414
Grand total Canadian and U.S.....	33,867	4,930,615	5,007,852	1,327,834	498,334	3,297,423	10,261,944	654,233	1,709,035	10,210,105	17,477,165	27,687,270

TABLE 3.—Statement showing the Number, Tonnage, and Nationality of Vessels passed through the several canals during the Season of Navigation in 1914.

Vessels.	Total No.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
SAULT STE. MARIE CANAL.												
Canadian vessels, steam.....	2,674	1,334,859	1,464,241	44,373	121,977	301	.....	360,410	87,087	1,739,943	1,673,305	3,413,248
" " sail.....	337	26,258	33,246	.....	.....	.....	.....	360	.....	26,618	33,426	60,044
Total Canadian.....	3,011	1,361,117	1,497,667	44,373	121,977	301	.....	360,770	87,087	1,766,561	1,706,731	3,473,292
United States vessels, steam.....	2,955	6,297	8,154	14,189	359,715	3,001,845	10,073,067	257,445	98,559	3,279,776	10,539,495	13,819,271
" " sail.....	11	888	367	.....	.....	.....	6,285	1,059	.....	1,947	6,652	8,599
Total United States.....	2,966	7,185	9,521	14,189	359,715	3,001,845	10,079,352	258,504	98,559	3,281,723	10,546,147	13,827,870
Grand total, Sault Ste. Marie canal.....	5,977	1,368,302	1,506,188	58,562	481,692	3,002,146	10,079,352	619,274	185,646	5,048,284	12,252,878	17,301,162
WELLAND CANAL.												
Canadian vessels, steam.....	2,592	995,188	989,843	311,621	216	3,622	2,109	24,039	365,436	1,334,470	1,357,604	2,692,074
" " sail.....	310	72,204	76,453	18,953	.....	764	.....	191	17,844	92,112	94,297	186,409
Total Canadian.....	2,902	1,067,392	1,066,296	330,574	216	4,386	2,109	24,230	383,280	1,426,582	1,451,901	2,878,483
United States vessels, steam.....	735	4,702	3,137	64,557	195	274,789	175,873	1,727	201,806	345,775	381,011	726,786
" " sail.....	55	587	.....	3,637	.....	2,857	3,075	555	19,715	7,636	22,790	30,426
Total United States.....	790	5,289	3,137	68,194	195	277,646	178,948	2,282	221,521	353,411	403,801	757,212
Grand total, Welland canal.....	3,692	1,072,681	1,069,433	398,768	411	282,032	181,057	26,512	604,801	1,779,993	1,855,702	3,635,695
ST. LAWRENCE CANALS.												
Canadian vessels, steam.....	5,304	1,367,812	1,333,355	344,372	164	.....	.....	164	391,538	1,712,348	1,725,057	3,437,405
" " sail.....	3,678	505,626	502,333	29,596	.....	.....	.....	.....	30,275	535,222	532,608	1,067,830
Total Canadian.....	8,982	1,873,438	1,835,688	373,968	164	.....	.....	164	421,813	2,247,570	2,257,665	4,505,235
United States vessels, steam.....	854	2,503	82	345,476	92	12,844	302	184	343,005	361,097	343,481	704,578
" " sail.....	409	12,422	15,927	18,318	302	362	1,212	3,074	20,295	34,176	37,736	71,912
Total United States.....	1,263	15,015	16,009	363,794	394	13,206	1,514	3,258	363,300	395,273	381,217	776,490
Grand total, St. Lawrence canals.....	10,245	1,888,453	1,851,697	737,762	558	13,206	1,514	3,422	785,113	2,642,843	2,638,882	5,281,725

TABLE 3.—Statement showing the number, Tonnage, and Nationality of Vessels passed through the several canals during the Season of Navigation in 1914—*Concluded*.

Vessels.	Total No.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total tons.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
CHAMBLY CANAL.												
Canadian vessels, steam.....	167	20,604	18,636	127						20,731	18,636	39,367
" " sail.....	179	4,310	4,253	1,852					2,954	6,162	7,207	13,369
Total Canadian.....	346	24,914	22,889	1,979					2,954	26,893	25,843	52,736
United States vessels, steam.....												
" " sail.....	2,348		2,557	116,561					122,554	116,561	125,111	241,672
Total United States.....	2,348		2,557	116,561					122,554	116,561	125,111	241,672
Grand total, Chambly canal.....	2,694	24,914	25,446	118,540					125,508	143,454	150,954	294,408
ST. PETER'S CANAL.												
Canadian vessels, steam.....	451	18,350	14,763							18,350	14,763	33,113
" " sail.....	741	23,413	23,726							23,413	23,726	47,139
Total Canadian.....	1,192	41,763	38,489							41,763	38,489	80,252
United States vessels, steam.....	1								26	26		26
" " sail.....	7	334	53							334	53	387
Total United States.....	8	334	53						26	360	53	413
Grand total, St. Peter's canal.....	1,200	42,097	38,542						26	42,123	38,542	80,665
MURRAY CANAL.												
Canadian vessels, steam.....	656	87,558	63,217	8,086	543					1,290	95,644	160,694
" " sail.....	258	25,334	21,956	1,360						1,403	26,694	50,053
Total Canadian.....	914	112,892	85,173	9,446	543					2,693	122,338	210,747
United States vessels, steam.....	47	1,670	235	327		37	14	14	463	2,048	712	2,760
" " sail.....	10			62		2	7	23	35	87	42	129
Total United States.....	57	1,670	235	389		39	21	37	498	2,135	754	2,889
Grand total, Murray canal.....	971	114,562	85,408	9,835	543	39	21	37	3,191	124,473	89,163	213,636

OTTAWA CANALS.											
Canadian vessels, steam.....	930	86,249	91,239		1,009			269	86,518	92,248	178,766
" " sail.....	1,267	101,633	111,521		596				101,633	112,117	213,750
Total Canadian.....	2,197	187,882	202,760		1,605			269	188,151	204,365	392,516
United States vessels, steam.....											
" " sail.....	275	8,943	96		13,525			4,693	13,636	13,621	27,257
Total United States.....	275	8,943	96		13,525			4,693	13,636	13,621	27,257
Grand total, Ottawa canals.....	2,472	196,825	202,856		15,130			4,962	201,787	217,986	419,773
RIDEAU CANAL.											
Canadian vessels, steam.....	2,208	60,881	64,304	3,964				4,277	64,845	68,581	133,426
" " sail.....	392	21,923	21,527	13				15	21,936	21,542	43,478
Total Canadian.....	2,600	82,804	85,831	3,977				4,292	86,781	90,123	176,904
United States vessels, steam.....	22	39	157	141				235	180	392	572
" " sail.....	13	771	770	249				249	1,020	1,019	2,039
Total United States.....	35	810	927	390				484	1,200	1,411	2,611
Grand total, Rideau canal.....	2,635	83,614	86,758	4,367				4,776	87,981	91,534	179,575
TRENT VALLEY CANALS.											
Canadian vessels, steam.....	2,915	66,025	64,360						66,025	64,360	130,385
" " sail.....	732	22,639	21,623						22,639	21,623	42,262
Total Canadian.....	3,647	88,664	85,983						88,664	85,983	174,647
United States vessels, steam.....											
" " sail.....											
Total United States.....											
Grand total, Trent Valley canals.....	3,647	88,664	85,983						88,664	85,983	174,647
ST. ANDREW'S CANAL.											
Canadian vessels, steam.....	197	13,130	11,861						13,130	11,861	24,991
" " sail.....	137	37,373	43,680						37,373	43,680	81,053
Total Canadian.....	334	50,503	55,541						50,503	55,541	106,044
United States vessels, steam.....											
" " sail.....											
Total United States.....											
Grand total, St. Andrew's canal.....	334	50,503	55,541						50,503	55,541	106,044

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TABLE 4.—Comparative Statement of all the canals, for the years ending December 31, 1913 and 1914.

Articles.	1913.	1914.	Increase.	Decrease.
<i>Class No. 1.</i>				
	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam.....	9,730,702	10,244,207	513,505	
" sail.....	2,347,360	1,806,649		540,711
United States vessels, steam.....	23,788,434	15,253,993		8,534,441
" sail.....	450,333	382,421		67,912
Total, Class No. 1.....	36,316,829	27,687,270	513,505	9,143,064
<i>Class No. 2.</i>				
	No.	No.	No.	No.
Passengers.....	335,799	287,326		48,473
<i>Class No. 3.</i>				
	Tons.	Tons.	Tons.	Tons.
Barley.....	423,728	332,983		90,745
Buckwheat.....	5	317	312	
Corn.....	176,490	154,335		22,155
Oats.....	842,737	816,232		26,505
Rye.....	13,620	45,954	32,334	
Flax.....	711,921	108,671		603,250
Peas.....	375	84		291
Wheat.....	5,956,153	6,045,317	89,164	
Flour.....	334,602	408,708	74,106	
Hay.....	18,283	15,008		3,275
Other mill products.....	26,542	15,844		10,698
Fruit and vegetables.....	9,958	12,224	2,266	
Potatoes.....	7,915	7,191		724
Live stock.....	2,820	1,587		1,239
Poultry, game and fish.....	2,237	1,529		708
Dressed meats.....	168	61		107
Other packing house products.....	1,996	1,523		473
Hides and leather.....	70	40		30
Wool.....	228	484	256	
All other animal products.....	11,774	10,457		1,317
Total, Class No. 3.....	8,541,628	7,978,549	198,438	761,517
<i>Class No. 4.</i>				
	Tons.	Tons.	Tons.	Tons.
Agricultural products.....	28,299	14,085		14,214
Cement, bricks, lime.....	413,041	147,657		265,384
Household goods and furniture.....	3,948	3,469		479
Iron, pig and bloom.....	67,646	41,846		25,800
" and steel, all other.....	311,955	162,179		149,776
Petroleum and other oils.....	169,765	135,751		34,014
Sugar.....	54,445	71,036	16,591	
Salt.....	20,775	20,620		155
Wines, liquors and beers.....	27,847	19,881		7,966
Merchandise not enumerated.....	783,978	602,001		181,977
Total, Class No. 4.....	1,881,699	1,218,525	16,591	679,765
<i>Class No. 5.</i>				
	Tons.	Tons.	Tons.	Tons.
Pulpwood.....	980,726	1,017,993	37,267	
Sawed lumber.....	596,722	470,400		126,322
Squared timber.....	41,032	24,369		16,663
Shingles.....	7,296	3,288		4,008
Other woods.....	53,149	105,917	52,768	
Total, Class No. 5.....	1,678,925	1,621,967	90,035	146,993

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TABLE 4.—Comparative Statement of all the canals, for the years ending December 31, 1913 and 1914—*Concluded.*

Articles.	1913.	1914.	Increase.	Decrease.
<i>Class No. 6.</i>	Tons.	Tons.	Tons.	Tons.
Hard coal.....	1,503,412	1,176,567		326,845
Soft coal.....	5,241,567	3,561,754		1,679,813
Coke.....	2	20	18	
Copper ore.....	25,855	2,887		22,968
Iron ore.....	32,498,724	20,917,633		11,581,091
Other ore.....	32,192	33,051	862	
Sand, etc.....	649,909	512,281		137,628
Total, Class No. 6.....	39,951,661	26,204,196	880	13,748,465
Grand total.....	52,053,913	37,023,237	305,944	15,336,620

Net decrease, 15,030,676.

TABLE 5.—Statement of Traffic on the undermentioned canals during the Season of Navigation in 1914.

Articles.	Sault Ste. Marie.	Welland.	St. Lawrence.	Chambly.	St. Peters.	Murray.	Ottawa.	Rideau.	Trent Valley.	St. Andrews.
<i>Class No. 1.—Vessels.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Canadian Vessels..... Steam.	3,413,248	2,692,074	3,437,405	39,367	33,851	160,694	178,766	133,426	130,385	24,991
“ “..... Sail.	60,044	186,409	1,067,830	13,369	46,401	50,053	213,750	43,478	44,262	81,053
United States..... Steam.	13,819,271	726,786	704,578	.....	26	2,760	.....	572	.....	.....
“ “..... Sail.	8,599	30,426	71,912	241,672	387	129	27,257	2,039	.....	.....
<i>Total, Class No. 1.....</i>	<i>17,301,162</i>	<i>3,635,695</i>	<i>5,281,725</i>	<i>294,408</i>	<i>80,665</i>	<i>213,636</i>	<i>419,773</i>	<i>179,515</i>	<i>174,647</i>	<i>106,044</i>
<i>Class No. 2.</i>	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Passengers.....	30,446	25	106,618	2,677	351	15,893	23,835	19,730	85,218	2,533
<i>Class No. 3.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Barley.....	151,662	89,622	91,675	1	17	.....	6	.....	.....	.....
Buckwheat.....	.....	.....	316	.....	.....	.....	.....	1	.....	.....
Corn.....	11,121	112,133	30,951	17	11	.....	21	81	.....	.....
Oats.....	376,168	225,668	209,704	1,419	2,443	.....	348	448	24	10
Rye.....	26,347	10,220	9,387	.....	.....	.....	.....	.....	.....	.....
Flax.....	66,444	20,657	21,570	.....	.....	.....	.....	.....	.....	.....
Peas.....	.....	.....	40	2	10	.....	5	21	6	.....
Wheat.....	2,942,015	1,559,909	1,542,796	2	4	.....	130	92	369	.....
Flour.....	220,581	87,701	98,151	695	623	.....	499	366	80	12
Hay.....	864	.....	7,510	4,663	1,131	.....	293	459	88	.....
Other mill products.....	2,144	10,318	1,427	346	584	.....	570	322	133	.....
Fruit and vegetables.....	1,940	150	5,832	2,018	1,302	149	608	221	4	.....
Potatoes.....	51	.....	676	85	5,720	.....	552	16	91	.....
Live stock.....	28	.....	649	174	21	.....	417	27	271	.....
Poultry, game and fish.....	.....	66	90	17	1,284	.....	44	27	.....	1
Dressed meats.....	.....	.....	17	.....	27	.....	3	12	.....	.....
Other packing house products.....	45	45	751	20	183	.....	169	310	.....	.....
Hides and leather.....	.....	.....	22	.....	.....	.....	.....	18	.....	.....
Wool.....	142	164	175	.....	.....	.....	.....	3	.....	.....
All other animal products.....	2	.....	5,201	.....	28	.....	2,550	2,613	63	.....
<i>Total, Class No. 3.....</i>	<i>3,799,554</i>	<i>2,116,653</i>	<i>2,026,940</i>	<i>9,459</i>	<i>13,388</i>	<i>149</i>	<i>6,215</i>	<i>5,037</i>	<i>1,131</i>	<i>23</i>

<i>Class No. 4.</i>										
Agricultural implements.....	6,550	6,570	126	93	15		114	588	29	
Cement, bricks, lime.....	46,899	35,871	46,160	616	205	13,870	2,900	556	430	150
Household goods and furniture.....			2,604	95	41		203	381	145	
Iron, pig and bloom.....	24,754	81,100	6,663	733			972	615	9	
Iron and steel, all other.....	83,727	25,937	50,076	1,557	165	40	144	515		18
Petroleum and other oils.....	8,623	73,990	51,192	65	449	135	578	630	88	1
Sugar.....	11,478	34,860	23,262	103	155		490	673	15	
Salt.....	14,487	200	2,973	868	530		751	809	2	
Wines, liquors and beers.....	4,571	5,243	8,283	56	112	76	675	851	14	
Merchandise not enumerated.....	286,700	170,403	105,930	6,925	2,445	7,484	11,836	7,848	2,311	119
Total, Class No. 4.....	487,789	361,174	297,269	11,111	4,117	21,605	18,663	13,466	3,043	288
<i>Class No. 5.</i>										
Pulpwood.....	1,920	329,673	472,376	188,605				1,173	21,968	2,280
Sawed lumber.....	34,327	21,099	164,049	104,178	1,850		131,683	10,429	2,760	25
Squared timber.....	20	6,243	15,972	145	209	70	1,072	341	237	
Shingles.....	2,500	175	212	27	187		36	65	86	
Other woods.....	2,189	3,244	16,166	287	820	360	38,649	3,033	37,424	3,745
Total, Class No. 5.....	40,956	360,434	668,775	293,242	3,126	430	171,440	15,041	62,473	6,050
<i>Class No. 6.</i>										
Hard coal.....	342,210	250,083	448,402	118,560	172	2,708	4,660	9,454	78	240
Soft coal.....	1,996,434	699,223	799,118	6	27,602	1,350	36,893	823	285	20
Coke.....			20							
Copper ore.....	2,887									
Iron ore.....	20,913,764	3,862						3	4	
Other ore.....	13,575	10,289	4,020	636			3,900	634		
Sand, etc.....	2,015	59,251	146,949	3,891	5,775	57,665	93,361	107,281	701	35,392
Total, Class No. 6.....	23,270,885	1,022,708	1,398,509	123,093	33,549	61,723	138,814	118,195	1,068	35,652
Grand total.....	27,599,184	3,860,969	4,391,493	436,905	54,180	83,907	335,132	151,739	67,715	42,013

TABLE 6.—Summary Statement of Traffic on the undermentioned canals during the Season of Navigation ended December 31, 1914, showing the total quantity of each description of property passed through.

Articles.	Sault Ste. Marie.	Welland.	St. Lawrence.	Chambly.	St. Peters.	Murray.	Ottawa.	Rideau.	Trent Valley.	St. Andrews
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Vessels of all kinds	17,301,162	3,635,695	5,281,725	294,408	79,600	213,636	419,773	179,515	174,647	106,044
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Passengers.....	30,446	25	106,618	2,677	351	15,893	23,835	19,730	85,218	2,533
<i>Forest—Produce of Wood.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Pulpwood.....	1,920	329,673	472,376	188,605				1,173	21,966	2,280
Sawed lumber.....	34,327	21,099	164,049	104,178	1,850		131,683	10,429	2,760	25
Squared timber.....	30	6,243	15,972	145	269	70	1,072	341	237	
Shingles.....	2,500	175	212	27	187		36	65	86	
Other woods.....	2,189	3,244	16,166	287	820	360	38,649	3,033	37,424	3,745
Total.....	40,956	360,434	668,775	293,242	3,126	430	171,440	15,041	62,473	6,050
<i>Animals and Produce of Animals.</i>										
Live stock.....	28		649	174	21		417	27	271	
Poultry, game and fish.....		66	90	17	1,284		44	27		1
Dressed meats.....			17		27		3	12	2	
Other packing house products.....	45	45	751	20	183		169	310		
Hides and leather.....			22					18		
Wool.....	142	164	175					3		
All other animal products.....	2		5,201		28		2,550	2,613	63	
Total.....	217	275	6,905	211	1,543		3,183	3,010	336	1
<i>Agricultural Products.</i>										
Barley.....	151,662	89,622	91,675	1	17		6			
Buckwheat.....			316					1		
Corn.....	11,121	112,133	30,951	17	11		21	81		
Oats.....	376,168	225,668	209,701	1,419	2,443		348	448	24	10
Rye.....	26,347	10,220	9,387							
Flax.....	66,444	20,657	21,570							
Pease.....			40	2	10		5	21	6	

Wheat.....	2,942,015	1,559,909	1,542,796	2	4		130	92	369	
Flour.....	220,581	87,701	98,151	695	623		499	366	80	12
Hay.....	864		7,510	1,663	1,131		293	459	88	
Other mill products.....	2,144	10,318	1,427	346	584		570	322	133	
Fruit and vegetables.....	1,940	150	5,832	2,018	1,302	149	608	221	4	
Potatoes.....	51		676	85	5,720		552	16	91	
Total.....	3,799,337	2,116,378	2,020,035	9,248	11,845	149	3,032	2,027	795	22
<i>Manufactures.</i>										
Agricultural implements.....	6,550	6,570	126	93	15		114	588	29	
Cement, bricks and lime.....	46,899	35,871	46,160	616	205	13,870	2,900	556	430	150
Household goods and furniture.....			2,604	95	41		203	381	145	
Iron, pig and bloom.....	24,754	8,100	6,663	733			972	615	9	
Iron, steel, all other.....	83,727	25,937	50,076	1,557	165	40	144	515		18
Petroleum and other oils.....	8,623	73,990	51,192	65	449	135	578	630	88	1
Sugar.....	11,478	34,860	23,262	103	155		490	673	15	
Salt.....	14,487	200	2,973	868	530		751	809	2	
Wines, liquors and beers.....	4,571	5,243	8,243	56	112	76	675	851	14	
Merchandise not enumerated.....	286,700	170,403	105,930	6,925	2,445	7,484	11,836	7,848	2,311	119
Total.....	487,789	361,174	297,269	11,111	4,117	21,605	18,663	13,466	3,043	288
<i>Products of Mines.</i>										
Hard coal.....	342,210	250,083	448,402	118,560	172	2,708	4,660	9,454	78	240
Soft coal.....	1,996,434	699,223	799,118	6	27,602	1,350	36,893	823	285	20
Coke.....			20							
Copper ore.....	2,887									
Iron ore.....	20,913,764	3,862						3	4	
Other ore.....	13,575	10,289	4,020	636			3,900	634		
Sand, etc.....	2,015	59,251	146,949	3,891	5,775	57,665	93,361	107,281	701	35,392
Total.....	23,270,885	1,022,708	1,398,509	123,093	33,549	61,723	138,814	118,195	1,068	35,652
Grand totals (passengers and tonnage of vessels) not included.....	27,599,184	3,860,969	4,391,493	436,905	54,180	83,907	335,132	151,739	67,715	42,013

TABLE 7, (No. 1.)—GENERAL STATEMENT showing the Quantity of each Article transported on the Sault Ste. Marie canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural Implem'ts	6,550								6,550		6,550	6,550	
All other animals		2								2	2		2
Barley		87,867		8,784		52,323		2,688		151,662	151,662	96,651	55,011
Cement bricks, etc.	37,269				9,630				46,899		46,899	37,269	9,630
Coal, hard	74				158,860			183,276	342,210		342,210		342,210
" soft	300		600		944,744			1,050,790	1,996,434		1,996,434		1,996,434
Corn						11,121				11,121	11,121		11,121
Flax		31,338		22,719		12,387				66,444	66,444	54,057	12,387
Flour	18	193,421				22,968		4,174	18	220,563	220,581	197,613	22,968
Fruits and vegetables	1,940								1,940		1,940	1,940	
Hay	864								864		864	864	
Iron, pig and bloom	17,094			2,000	60		5,600		22,754	2,000	24,754	18,870	5,884
Iron and steel, all other	30,360	34,313		2,200	16,839		15		47,214	36,513	83,727	64,095	19,632
Live stock	28								28		28	28	
Merchandise	241,398		9,574	2	20,638	1,299	6,213	621	277,823	8,877	286,700	253,290	33,410
Oats		347,265		15,400		9,253		4,250		376,168	376,168	370,342	5,826
Other Mill products		2,144								2,144	2,144	2,144	
Other pack, house prod.	45								45		45	45	
Other woods		2,189								2,189	2,189	2,189	
Ore, all other	120	80		13,375					120	13,455	13,575	13,575	
" copper						2,887				2,887	2,887		2,887
" iron	3,696	26,588		60,983		20,732,509		89,988	3,096	20,910,068	20,913,764	95,811	20,817,953
Petroleum	8,554	30			39				8,593	30	8,623	8,584	39
Potatoes	51								51		51	51	
Pulpwood	1,920								1,920		1,920	1,920	
Rye						26,347				26,347	26,347		26,347
Sawed lumber	676	933		29,191		3,527			676	33,651	34,327	27,178	7,149
Shingles	1	20				2,479			1	2,499	2,500	21	2,479
Square timber	20								20		20	20	
Sugar	11,478								11,478		11,478	11,478	
Salt	12,247				2,240				14,487		14,487	14,397	90
Sand and stone	399	1,616							399	1,616	2,015	2,015	
Wheat		1,755,637		427,521		561,885		196,972		2,942,015	2,942,015	2,324,035	617,980
Wines, liquors and beers	4,571								4,571		4,571	4,571	
Wool	30	112							30	112	142	142	
Total freight	379,703	2,490,510	10,174	582,175	1,153,050	21,438,985	1,245,894	298,693	2,788,821	24,810,363	27,599,184	3,009,747	23,989,437

TABLE 7, (No. 2.)—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural Implan'ts.	6,570								6,570		6,570	6,570	
Barley		84,911						4,711	89,622	89,622	82,200	7,422	
Cement, bricks, etc.	31,419	810	900				2,742	32,319	3,552	35,871	33,129	2,742	
Coal, hard.					236,976		13,107	250,083		250,083		250,083	
“ soft.								699,223	699,223	699,223		699,223	
Corn		5,835				85,700		20,598	112,133	112,133	560	111,573	
Flax		16,873	3,784					3,784	16,873	20,657	20,657		
Flour		78,885				8,580		236	87,701	87,701	78,885	8,816	
Fruits and vegetables.	150							150	150	150	150		
Iron, pig and bloom	7,268	830						2	7,268	832	8,100	8,098	2
Iron and steel, all other	21,800	220	20					3,897	21,820	4,117	25,937	22,040	3,897
Merchandise	75,824	1,838	13,431		70,052	9,131		127	159,307	11,096	170,403	92,124	78,279
Oats		198,577				5,210		21,881	225,668	225,668	212,921	12,747	
Other mill products.		40				10,278			10,318	10,318	40	10,278	
Other pack. house prod.	45								45	45	45		
Other woods	450	1,144				1,650			450	2,794	3,244	1,594	1,650
Ore, all other	120	3,828			6,341				6,461	3,828	10,289	3,948	6,341
“ iron.		200							3,662	3,862	200	3,662	
Petroleum	20	58,445			83				15,442	103	73,990	58,465	15,525
Poultry, game and fish					66				66	66	66		66
Pulpwood	70,390		259,283						329,673	329,673	329,673		
Rye		1,114						9,106	10,220	10,220	5,340	4,880	
Sawed lumber				450		16,424		4,225	21,099	21,099	1,119	19,980	
Shingles		175							175	175	175		
Square timber		3,766				437		2,040	6,243	6,243	3,766	2,477	
Sugar	7,290	2,262			24,858			450	32,148	2,712	34,860	9,552	25,308
Salt		200							200	200	200		
Sand and stone		8,708	1,200			400		48,943	1,200	58,051	59,251	5,908	53,343
Wheat		1,299,943				32,657		227,309	1,559,909	1,559,909	1,031,289	528,620	
Wines, liquors and beers	4,156	448	203		79	157		200	4,438	805	5,243	4,807	436
Wool	30		134						164	164	164		
Total freight	225,532	1,769,052	278,955	450	338,455	170,624	13,107	1,064,794	856,049	3,004,920	3,860,969	2,013,619	1,847,350

TABLE 7, (No. 3.)—GENERAL STATEMENT showing the Quantity of each Through Article transported on the Welland canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural Implem'ts	6,570								6,570		6,570	6,570	
Barley		84,911					4,711			89,622	89,622	82,200	7,422
Cement, bricks, etc.	31,419	110	900						32,319	110	32,429	32,429	
Coal, hard					236,976		13,107		250,083		250,083		250,083
" soft								696,544	696,544		696,544		696,544
Corn		5,835				85,700		20,598		112,133	112,133	560	111,573
Flax		16,873	3,784					3,784	16,873	20,657	20,657	20,657	
Flour		78,885				8,580		236	87,701		87,701	78,885	8,816
Fruits and vegetables	150								150		150	150	
Iron, pig and bloom	7,268	830					2	7,268	832		8,100	8,098	2
Iron and steel, all other	21,800	220	20				3,987	21,820	4,117	25,937	22,040	3,897	
Merchandise	75,824	1,838	13,431		70,052	9,131	127	159,307	11,096	170,403	92,124	78,279	
Oats		198,577				5,210		21,881	225,668		225,668	212,921	12,747
Other mill products		40				10,278			10,318		10,318	40	10,278
" Pack. house prod	45								45		45		
" woods		1,144				1,650			2,794		2,794	1,144	1,650
Ore, all other	120	2,000			6,341			6,461	2,000	8,461	2,120	6,341	
Iron		200						3,662	3,862		3,862	200	3,662
Petroleum	20	57,559			83			15,442	103	73,001	73,104	57,579	15,525
Poultry, game & fish					66				66		66		66
Pulpwood	3,150		259,283						262,433		262,433	262,433	
Rye		1,114						9,106	10,220		5,340	4,880	
Sawed lumber				450		16,424		2,531	19,405		19,405	1,110	18,286
Shingles		175							175		175		
Square timber		3,766				437		2,040	6,243		3,766	2,477	
Sugar	7,290	2,262			24,858			450	32,148	2,712	34,860	9,552	25,308
Salt		200							200		200		
Sand and stone			1,200			400			1,200	400	1,600	1,200	400
Wheat		1,299,943				32,657		227,309	1,559,909	1,559,909	1,031,289	528,620	
Wines, liquors and beers	4,156	448	203		79	157		200	4,438	805	5,243	4,807	436
Wool	30		134						164		164	164	
Totals	157,842	1,756,930	278,955	450	338,455	170,624	13,107	1,008,736	788,359	2,936,740	3,725,099	1,937,807	1,787,292

TABLE 7. (No. 4).—GENERAL STATEMENT showing the Quantity of each Way Article transported on the Welland canal during the Season of Navigation in 1914.

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Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Cement, bricks, etc.....		700						2,742		3,442	3,442	700	2,742
Coal, soft.....								2,679		2,679	2,679		2,679
Other woods.....	450								450	450	450	450	
Ore, all other.....		1,828								1,828	1,828	1,828	
Petroleum.....		886								886	886	886	
Pulpwood.....	67,240								67,240	67,240	67,240	67,240	
Sawed lumber.....								1,694		1,694	1,694		1,694
Sand and stone.....		8,708						48,943		57,651	57,651	4,708	52,943
Total freight.....	67,690	12,122						56,058	67,690	68,180	135,870	75,812	60,05

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TABLE 7, (No. 5).—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence canals during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural implem'ts.	110	5		10	1				111	15	126	125	1
All other animals.	1,280	3,912	1		8				1,289	3,912	5,201	5,201	
Barley	66	85,413						6,196	66	91,609	91,675	87,519	4,156
Buckwheat	8	308							8	308	316	316	
Cement, bricks, etc.	42,661	1,549	1,950						44,611	1,549	46,160	45,029	1,131
Coal, hard	676	647			140		1,065	445,874	1,741	446,661	448,402	526	447,876
" soft	155,047	1,060			280			642,731	155,047	644,071	799,118	157,972	641,146
Coke		20								20	20	20	
Corn	9,214	16,332						5,405	9,214	21,737	30,951	10,561	20,390
Dressed meats	4	13							4	13	17	17	
Flax		17,786	3,784						3,784	17,786	21,570	21,570	
Flour	1,595	96,556							1,595	96,556	98,151	98,151	
Fruits and vegetables	849	4,979				4			849	4,983	5,832	5,828	4
Hay	6,156	1,354							6,156	1,354	7,510	7,510	
Hides and leather	15		3		4				22		22		
Household goods	864	1,729	8		1			2	873	1,731	2,604	2,599	5
Iron, pig and bloom	4,947	1,716							4,947	1,716	6,663	5,638	1,025
Iron and steel, all other	38,750	9,676					1,650		38,750	11,326	50,076	48,426	1,650
Live stock	68	573	2		6				76	573	649	647	2
Merchandise	72,782	27,625	5,310		33		180		78,305	27,625	105,930	103,964	1,966
Oats	2,829	195,871						11,004	2,829	206,875	209,704	203,908	5,796
Other mill products	263	1,164							263	1,164	1,427	1,427	
" pack, house prod.	226	505		20					226	525	751	751	
" woods	931	15,235							931	15,235	16,166	16,166	
Ore, all other	4,020								4,020		4,020	120	3,900
Pens	37						3		40		40	40	
Petroleum	1,215	36,051						15,926	1,215	49,977	51,192	39,323	11,869
Poultry, game and fish	1	89							1	89	90	90	
Potatoes	135	539	1	1					136	540	676	674	2
Pulpwood	70,390	35	401,951						472,341	35	472,376	472,376	
Rye		6,335					3,052			9,387	9,387	6,747	2,640
Sawed lumber	42,533	121,512	4						42,537	121,512	164,049	164,045	4
Shingles	2	209	1						3	209	212	212	
Square timber	24	10,911						5,037	24	15,948	15,972	12,083	3,889
Sugar	20,322	2,940							20,322	2,940	23,262	23,262	
Salt	2,207	598					168		2,375	598	2,973	2,637	336
Sand and stone	70,347	76,602							70,347	76,602	146,949	144,298	2,651
Wheat	13,316	984,529						544,951	13,316	1,529,480	1,542,796	1,040,391	502,405
Wines, liquors and beers	7,407	816		60					7,407	876	8,283	8,283	
Wool	34	2	134		5				173	2	175	175	
Total freight.....	571,331	1,725,196	413,149	91	58	424	1,416	1,670,828	985,954	3,405,539	4,391,493	2,738,649	1,652,844

TABLE 7, (No. 6).—GENERAL STATEMENT showing the Quantity of each Through Article transported on the St. Lawrence canals during the Season of Navigation in 1914.

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Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
All other animals.....	409	1,242							409	1,242	1,651	1,651	
Barley.....		84,409						6,196		90,605	90,605	86,449	4,156
Buckwheat.....		308								308	308	308	
Cement, bricks, etc.....	20,148	110	1,950						22,098	110	22,208	22,208	
Coal, hard.....								421,331		421,331	421,331		421,331
“ soft.....	7,750							616,796	7,750	616,796	624,546	7,750	616,796
Corn.....	1,306	626						1,306	6,031	7,337	1,932		5,405
Flax.....		17,786	3,784						3,784	17,786	21,570	21,570	
Flour.....	2	77,080							2	77,080	77,082	77,082	
Fruits and vegetables.....	546	4,323							546	4,323	4,869	4,869	
Hay.....		135								135	135	135	
Hides and leather.....	10								10		10	10	
Household goods.....	589	1,430							589	1,430	2,019	2,019	
Iron, pig and bloom.....	1,906	481							1,906	481	2,387	2,387	
Iron and steel, all other.....	20,682	721						1,650	20,682	2,371	23,053	21,403	1,650
Live stock.....	2	7							2	7	9	9	
Merchandise.....	61,663	18,774	5,107						66,770	18,774	85,544	85,544	
Oats.....		193,162						11,004		204,166	204,166	198,370	5,796
Other mill products.....	41	238							41	238	279	279	
“ pack, house prod.	14	367							14	367	381	381	
“ woods.....		1,064								1,064	1,064	1,064	
Petroleum.....	380	35,475						13,926	380	49,401	49,781	38,102	11,679
Poultry, game and fish.....		47								47	47	47	
Pulpwood.....	70,390		401,951						472,341		472,341	472,341	
Rye.....		6,333						3,032		9,385	9,385	6,745	2,640
Sawed lumber.....	5,061								5,061		5,061	5,061	
Shingles.....		175								175	175	175	
Square timber.....		7,870						5,037		12,907	12,907	9,018	3,889
Sugar.....	14,352	2,812							14,352	2,812	17,164	17,164	
Salt.....	107	100							107	100	207	207	
Wheat.....	870	982,358						544,951	870	1,527,309	1,528,179	1,025,774	302,405
Wines, liquors and beers.....	6,238	656		60					6,238	716	6,954	6,954	
Wool.....	30		134						164		164	164	
Total freight.....	212,496	1,438,089	412,926	60				1,629,348	625,422	3,067,497	3,692,919	2,117,172	1,575,747

TABLE 7, (No. 7).—GENERAL STATEMENT showing the Quantity of each Way Article transported on the St. Lawrence canals during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural implem'ts.	110	5		10	1				111	15	126	125	1
All other animal.	871	1,670	1		8				880	2,670	3,550	3,550	
Barley	66	1,004							66	1,004	1,070	1,070	
Buckwheat	8								8		8	8	
Cement, bricks, etc.	22,513	1,439							22,513	1,439	23,952	22,821	1,131
Coal, Hard	676	647			140	1,065	24,543		1,741	25,330	27,071	526	26,545
" Soft	147,297	1,060			280		25,935		147,297	27,275	174,572	150,222	24,350
Coke		20								20	20	20	
Corn	7,908	15,708							7,908	15,706	23,614	8,629	14,985
Dressed meats	4	13							4	13	17	17	
Flour	1,593	19,476							1,593	19,476	21,069	21,069	
Fruits and vegetables	303	656			4				303	606	963	959	4
Hay	6,156	1,219							6,156	1,219	7,375	7,375	
Hides and leather	5		3		4				12		12	12	
Household goods	275	299	8		1		2		284	301	585	580	5
Iron, pig and bloom	3,041	1,235							3,041	1,235	4,276	3,251	1,025
Iron and steel, all other.	18,068	8,955							18,068	8,955	27,023	27,023	
Live stock	66	566	2		6				74	566	640	638	2
Merchandise	11,119	8,851	203		33		180		11,535	8,851	20,386	18,420	1,966
Oats	2,829	2,709							2,829	2,709	5,538	5,538	
Other mill products	222	926							222	926	1,148	1,148	
" pack. houseprod.	212	138		20					212	158	370	370	
" woods	931	14,171							931	14,171	15,102	15,102	
Ore, all other	4,020								4,020		4,020	120	3,900
Peas	37	3							37	3	40	40	
Petroleum	835	576							835	576	1,411	1,211	190
Poultry, game and fish.	1	42							1	42	43	43	
Potatoes	135	539			1	1			136	540	676	674	2
Pulpwood		35								35	35	35	
Rye	2									2	2	2	
Sawed lumber	37,472	121,512	4						37,476	121,512	158,988	158,984	4
Shingles	2	34	1						3	34	37	37	
Square timber	24	3,041							24	3,041	3,065	3,065	
Sugar	5,970	128							5,970	128	6,098	6,098	
Salt	2,100	498				168			2,268	498	2,766	2,430	336
Sand and stone	70,347	76,602							70,347	76,602	146,949	144,298	2,651
Wheat	12,446	2,171							12,446	2,171	14,617	14,617	
Wines, liquors and beers	1,169	160							1,169	160	1,329	1,329	
Wool	4	2	5						9	2	11	11	
Total freight	358,835	287,110	227	30	54	425	1,413	50,480	360,529	338,045	698,574	621,477	77,097

TABLE 7, (No. 8).—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural implem'ts.	87	6							87	6	93	93	
Barley.....	1								1		1	1	
Cement, bricks, etc....	332							284	332	284	616	332	284
Coal, hard.....	60						118,500	60	118,500	60	118,500	60	118,500
" soft.....							6			6	6	6	
Corn.....	17								17		17	17	
Flour.....	657	38							657	38	695	695	
Fruits and vegetables...	473	1,545							473	1,545	2,018	2,018	
Hay.....	190	3,950	523						713	3,950	4,663	4,663	
Household goods.....	65	30							65	30	95	95	
Iron, pig and bloom....	66	2					665	66	667	733	68	665	
Iron and steel, all other.	515	9					1,033	515	1,042	1,557	524	1,033	
Live stock.....	22	152						22	152	174	174		
Merchandise.....	358	433	2,045				4,089	2,403	4,522	6,925	2,836	4,089	
Oats.....	11	1,408						11	1,408	1,419	1,419	1,419	
Other mill products....	305	41						305	41	346	346		
" pack-house prod.	20							20		20	20		
" woods.....	60	227						60	227	287	287		
Ore, all other.....	5	460					171	5	631	636	465	171	
Peas.....	2								2		2		
Petroleum.....	63	2						63	2	65	65		
Poultry, game and fish.		17							17		17		
Potatoes.....	3	92						3	82	85	85		
Pulpwood.....			188,605					188,605		188,605	188,605	188,605	
Sawed lumber.....	57	36	104,085					103,142	36	104,178	104,178	104,178	
Shingles.....		27							27	27	27		
Square timber.....							145		145				145
Sugar.....	88	15						88	15	103	103		
Salt.....	530	2					336	530	338	868	532	336	
Sand and stone.....	300						3,591	300	3,591	3,891	300	3,591	
Wheat.....		2							2		2		
Wines, liquors and beer.	50	6						50	6	56	56		
Wool.....													
Total freight.....	4,335	8,492	295,258				128,820	299,593	137,312	436,905	308,091	128,814	

TABLE 7, No. 9.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peter's canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural implem'ts.	15								15		15	15	
All other animals.	27	1							27	1	28	28	
Barley	17								17		17	17	
Cement, bricks, etc.	196	9							196	9	205	205	
Coal, hard.	170	2							170	2	172	172	
" soft.	36	27,566							36	27,566	27,602	27,602	
Corn.	11								11		11	11	
Dressed meats.	27								27		27	27	
Flour	562	61							562	61	623	623	
Fruits and vegetables.	1,292	10							1,292	10	1,302	1,302	
Hay	1,121	10							1,121	10	1,131	1,131	
Household goods.	25	16							25	16	41	41	
Iron and steel, all other	110	55							110	55	165	165	
Live stock	18	3							18	3	21	21	
Merchandise.	1,918	527							1,918	527	2,445	2,429	16
Oats.	2,379	64							2,379	64	2,443	2,443	
Other mill products.	534	50							534	50	584	584	
" pack. house prod.	173	10							173	10	183	183	
" woods.	511	309							511	309	820	820	
Peas.	10								10		10	10	
Petroleum.	391	58							391	58	449	449	
Poultry, game and fish.	280	1,004							280	1,004	1,284	1,284	
Potatoes.	5,719	1							5,719	1	5,720	5,720	
Sawed lumber.	1,293	557							1,293	557	1,850	1,850	
Shingles.	166	21							166	21	187	187	
Square timber.	269								269		269	269	
Sugar.	143	12							143	12	155	155	
Salt.	509	21							509	21	530	530	
Sand.	3,759	2,016							3,759	2,016	5,775	5,775	
Wheat.	4								4		4	4	
Wines, liquors and beers	108	4							108	4	112	112	
Total freight.	21,793	32,387							21,793	32,387	54,180	54,164	16

TABLE 7, No. 10.—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total Tons.	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Cement, bricks, etc....	13,030		840						13,870		13,870	13,870	
Coal, hard.....								2,708	2,708	2,708	2,708	500	2,208
" soft.....	50	550						750	50	1,300	1,350	600	750
Fruits and vegetables..	62	87							62	87	149	149	
Iron and steel, all other.	40								40		40	40	
Merchandise.....	5,283	2,201							5,283	2,201	7,484	7,481	3
Other woods.....	360								360		360	360	
Petroleum.....	85	50							85	50	135	135	
Square timber.....	20	50							20	50	70	70	
Sand and stone.....	57,015		650						57,665		57,665	57,665	
Wines, liquors and beers	76								76		76	76	
Total freight.....	76,021	2,938	1,490					3,458	77,511	6,396	83,907	80,946	2,961

TABLE 7, No. 11.—GENERAL STATEMENT showing the Quantity of each Article transported on the Ottawa canals during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural implem'ts.	93	21							93	21	114	114	
All other animals	70	2,480							70	2,480	2,550	2,550	
Barley	6								6		6	6	
Cement, bricks, etc.	2,814	86							2,814	86	2,900	2,857	43
Coal, hard	937						3,723		4,660		4,660		4,660
“ soft	36,880	13							36,880	13	36,893	36,893	
Corn	21								21		21		
Dressed meats	1	2							1	2	3	3	
Flour	483	16							483	16	499	499	
Fruits and vegetables	116	492							116	492	608	608	
Hay	1	292							1	292	293	293	
Household goods	146	57							146	57	203	203	
Iron, pig and bloom	955	17							955	17	972	972	
Iron and steel, all other	131	13							131	13	144	144	
Live stock	22	395							22	395	417	417	
Merchandise	7,842	3,791					203		8,045	3,791	11,836	10,366	1,470
Oats	83	265							83	265	348	348	
Other mill products	152	418							152	418	570	570	
“ pack house prod.	101	68							101	68	169	169	
“ woods	3	38,646							3	38,646	38,649	38,649	
Ore, all other	3,900								3,900		3,900		3,900
Peas	5								5		5	5	
Petroleum	446	132							446	132	578	578	
Poultry, game and fish		44								44	44	44	
Potatoes	8	544							8	544	552	552	
Sawed lumber	112	96,684		34,887					112	131,571	131,683	131,683	
Shingles		36								36	36	36	
Square timber		400		672						1,072	1,072	1,072	
Sugar	436	54							436	54	490	490	
Salt	740	11							740	11	751	751	
Sand and stone	75	93,286							75	93,286	93,361	93,361	
Wheat	130								130		130	130	
Wines, liquors and beers	621	54							621	54	675	675	
Wool													
Total freight	57,330	238,317		35,559			3,926		61,256	273,876	335,132	325,059	10,073

TABLE 7, No. 12.—GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural implem'ts.	403	185							403	185	588	588	
All other animals.	616	1,997							616	1,997	2,613	2,613	
Buckwheat		1								1		1	
Cement, bricks, etc.	238	318							238	318	556	508	48
Coal, hard.	678	278						8,498	678	8,776	9,454	101	9,353
" soft.	459	229					135		459	364	823	688	135
Corn.	22	59							22	59	81	81	
Dressed meats.	3	9							3	9	12	12	
Flour.	196	170							196	170	366	366	
Fruits and vegetables.	83	138							83	138	221	221	
Hay.	432	27							432	27	459	459	
Hides and leather.	16	2							16	2	18	18	
Household goods.	201	180							201	180	381	381	
Iron, pig and bloom.	559	56							559	56	615	615	
Iron and steel, all other.	448	67							448	67	515	515	
Live stock.	11	16							11	16	27	27	
Merchandise.	5,735	2,113							5,735	2,113	7,848	7,848	
Oats.	18	430							18	430	448	448	
Other mill products.	123	199							123	199	322	322	
" pack, house prod.	190	120							190	120	310	310	
" woods.	1,133	1,900							1,133	1,900	3,033	3,033	
Ore, all other.	404		203						634		634	634	
" iron.		3								3	3	3	
Peas.	21								21		21	21	
Petroleum.	283	347							283	347	630	630	
Poultry, game and fish.	25	2							25	2	27	27	
Potatoes.	7	9							7	9	16	16	
Pulpwood.	75	1,098							75	1,098	1,173	1,173	
Sawed lumber.	2,081	8,348							2,081	8,348	10,429	10,429	
Shingles.	39	26							39	26	65	65	
Square timber.	339	2							339	2	341	341	
Sugar.	515	158							515	158	673	673	
Salt.	645	164							645	164	809	809	
Sand and stone.	64,111	43,170							64,111	43,170	107,281	107,281	
Wheat.	6	86							6	86	92	92	
Wines, liquors and beers.	749	1.2							749	102	851	851	
Wool.									3		3	3	
Total freight.	80,867	62,009	230				8,633		81,097	70,642	151,739	142,203	9,536

TABLE 7, No. 13.—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Agricultural implem'ts	14	15							14	15	29	29	
All other animals	34	29							34	29	63	63	
Cement, bricks, etc.	209	221							209	221	430	430	
Coal, hard	72	6							72	6	78	78	
" Soft	267	18							267	18	285	285	
Dressed meats	1	1							1	1	2	2	
Flour	68	12							68	12	80	80	
Fruits and vegetables	4								4		4	4	
Hay	73	15							73	15	88	88	
Household goods	121	24							121	24	145	145	
Iron, pig and bloom	9								9		9	9	
Live stock	226	45							226	45	271	271	
Merchandise	1,538	773							1,538	773	2,311	2,311	
Oats	24								24		24	24	
Other mill products	112	21							112	21	133	133	
" woods	10,845	26,404					175		10,845	26,579	37,424	37,424	
" Iron	4								4		4	4	
Peas	6								6		6	6	
Petroleum	77	11							77	11	88	88	
Potatoes	88	3							88	3	91	91	
Pulpwood	150	21,816							150	21,816	21,966	21,966	
Sawed lumber	841	1,919							841	1,919	2,760	2,760	
Shingles	46	40							46	40	86	86	
Square timber	147	90							147	90	237	237	
Sugar	15								15		15	15	
Salt		2								2	2	2	
Sand and stone	166	535							166	535	701	701	
Wheat	360	9							360	9	369	369	
Wines, liquors and beers	14								14		14	14	
Wool													
Total freight	15,531	52,009					175		15,531	52,184	67,715	67,715	

TABLE 7, No. 14.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Andrew's canal during the Season of Navigation in 1914.

Articles.	From Canadian to Canadian Ports.		From Canadian to U. States Ports.		From U. States to U. States Ports.		From U. States to Canadian Ports.		Tons.		Total	Origin of Cargo.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		Canadian.	U. S.
Cement, bricks, etc.....		150								150	150	150	
Coal, Hard.....	240								240		240	240	
" Soft.....	20								20		20	20	
Flour.....		12								12	12	12	
Iron and steel, all other.....		18								18	18	18	
Merchandise.....	3	116							3	116	119	119	
Outs.....		10								10	10	10	
Other woods.....	3,745								3,745		3,745	3,745	
Petroleum.....		1								1	1	1	
Poultry, game and fish.....	1								1		1	1	
Pulpwood.....	2,280								2,280		2,280	2,280	
Sawed lumber.....		25								25	25	25	
Sand and stone.....	35,392								35,392		35,392	35,392	
Total freight.....	41,681	332							41,681	332	42,013	42,013	

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TABLE 8.—Statement showing the Classified Tonnage of all kinds of Vessels

SAULT STE.

CANADIAN.							
Class	Steam Vessels.	No.	Tonnage.	Class	Sailing Vessels.	No.	Tonnage.
1	5,000 to 5,704 tons.....	1	5,704	1	5,000 to tons.....		
2	4,000 " 5,000 ".....	3	13,550	2	4,000 " 5,000 ".....		
3	3,000 " 4,000 ".....	3	10,750	3	3,000 " 4,000 ".....		
4	2,000 " 3,000 ".....	13	29,950	4	2,000 " 3,000 ".....		
5	1,000 " 2,000 ".....	75	97,700	5	1,000 " 2,000 ".....		
6	Under 1,000 ".....	56	13,460	6	Under 1,000 ".....	61	12,215
	Total.....	151	171,114		Total.....	61	12,215

WELLAND

1	250 to 1,900 tons.....	112	118,725	1	250 to 1,250 tons.....	29	18,800
2	200 " 249 ".....	5	1,050	2	200 " 249 ".....	7	1,650
3	150 " 199 ".....	3	500	3	150 " 199 ".....	3	450
4	100 " 149 ".....	3	375	4	100 " 149 ".....	7	700
5	50 " 99 ".....	11	820	5	50 " 99 ".....	4	230
6	Under 50 ".....	31	880	6	Under 50 ".....	2	45
	Total.....	165	122,350		Total.....	52	21,875

ST. LAWRENCE

1	250 to 1,667 tons.....	114	115,147	1	250 to 1,226 tons.....	75	34,250
2	200 " 249 ".....	4	860	2	200 " 249 ".....	7	1,450
3	150 " 199 ".....	4	660	3	150 " 199 ".....	43	5,620
4	100 " 149 ".....	11	1,350	4	100 " 149 ".....	48	5,700
5	50 " 99 ".....	29	1,985	5	50 " 99 ".....	28	2,195
6	Under 50 ".....	43	960	6	Under 50 ".....	5	115
	Total.....	205	120,962		Total.....	206	24,330

RIDEAU, OTTAWA AND

1	250 to 370 tons.....	4	1,260	1	250 to 380 tons.....	5	1,520
2	200 " 249 ".....			3	510 " 249 ".....	3	510
3	150 " 199 ".....	5	860	3	150 " 199 ".....	32	5,310
4	100 " 149 ".....	5	580	4	100 " 149 ".....	32	3,840
5	50 " 99 ".....	12	680	5	50 " 99 ".....	22	1,500
6	Under 50 ".....	31	535	6	Under 50 ".....	21	370
	Total.....	57	3,915		Total.....	115	13,050

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passed through the following canals during the Season of Navigation in 1914.

MARIE CANAL.

UNITED STATES.							
Class	Steam Vessels.	No.	Tonnage.	Class	Sailing Vessels.	No.	Tonnage.
1	5,000 " 6,498 tons.....	71	385,848	1	5,000 to tons.....		
2	4,000 " 5,000 ".....	79	354,650	2	4,000 " 5,000 ".....		
3	3,000 " 4,000 ".....	103	356,200	3	3,000 " 4,000 ".....	1	3,150
4	2,000 " 3,000 ".....	32	86,400	4	2,000 " 3,000 ".....	1	2,100
5	1,000 " 2,000 ".....	16	27,550	5	1,000 " 2,000 ".....		
6	Under 1,000 ".....	28	9,550	6	Under 1,000 ".....	6	1,925
	Total.....	329	1,220,19	8	Total.....	8	7,175

CANAL.

1	250 to 2,000 tons.....	61	67,950	1	250 " 900 tons.....	14	6,625
2	200 " 249 ".....	3	600	2	200 " 249 ".....	4	800
3	150 " 199 ".....	3	475	3	150 " 199 ".....	3	475
4	100 " 149 ".....	5	550	4	100 " 149 ".....	6	600
5	50 " 99 ".....	11	720	5	50 " 99 ".....	2	160
6	Under 50 ".....	39	535	6	Under 50 ".....	6	130
	Total.....	122	70,830		Total.....	35	8,790

CANAL.

1	250 to 1,565 tons.....	25	24,973	1	250 to 700 tons.....	11	3,860
2	200 " 249 ".....	3	640	2	200 " 249 ".....	3	640
3	150 " 199 ".....	6	980	3	150 " 199 ".....		
4	100 " 149 ".....			4	100 " 149 ".....	78	8,050
5	50 " 99 ".....	6	405	5	50 " 99 ".....	23	2,010
6	Under 50 ".....	5	105	6	Under 50 ".....		
	Totals.....	45	27,103		Total.....	115	14,560

CHAMBLY CANALS.

1	250 to tons.....			1	250 to tons.....		
2	200 " 249 ".....			2	200 " 249 ".....		
3	150 " 199 ".....			3	150 " 199 ".....	6	960
4	100 " 149 ".....			4	100 " 149 ".....	82	14,810
5	50 " 99 ".....	2	130	5	50 " 99 ".....	38	30,365
6	Under 50 ".....	1	30	6	Under 50 ".....	1	35
	Total.....	3	160		Total.....	127	46,170

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APPENDIX

DOMINION CANALS

The canal systems of the Dominion, under government control in connection with lakes and navigable rivers, are as follows:—

First—The through route between Montreal and the head of Lake Superior (14 feet minimum depth of water.)

	Miles.
1. Lachine canal.....	8½
Lake St. Louis and river St. Lawrence.....	16
2. Soulanges canal.....	14
Lake St. Francis and river St. Lawrence.....	31
3. Cornwall canal.....	11¼
River St. Lawrence.....	5
4. Farran's Point canal.....	1½
River St. Lawrence.....	9½
5. Rapide Plat canal.....	3¾
River St. Lawrence.....	4
6. Galops canal.....	7¾
River St. Lawrence and lake Ontario.....	228
7. Welland canal.....	26¾
Lake Erie, Detroit river, lake St. Clair, lake Huron, &c.....	574
8. Sault Ste. Marie canal.....	1¼
Lake Superior to Port Arthur.....	272
Total.....	1,214
To Duluth.....	1,336
Chicago.....	1,240

Second.—Ottawa to lake Champlain.

1. Grenville. 2. Carillon. 3. St. Anne's. 4. Chambly. 5. St. Ours canals.

Third.—Ottawa to Kingston and Perth.

1. Rideau canal.

Fourth.—Lake Ontario at Trenton to lake Huron at mouth of river Severn.

1. Trent canal (not completed).

Fifth.—Ocean to Bras d'Or lakes.

1. St. Peter's canal.

RIVER ST. LAWRENCE AND LAKES.

The river St. Lawrence with the system of canals established on its course above Montreal, and the lakes Ontario, Erie, St. Clair, Huron and Superior, with connecting canals, afford a course of water communication extending from the Straits of Belle Isle to Port Arthur, at the head of lake Superior, a distance of 2,217 statute miles. The distance to Duluth is 2,339 statute miles. The distance to Chicago, 2,243 miles.

From the straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 1,003 miles. From Quebec to Montreal, the distance is 160 miles. Owing to the shallowness of the waters on a portion of the river between these two places, particularly through lake St. Peter, vessels drawing more than from ten to twelve feet were formerly barred from passage for the greater part of the season of navigation. In 1826, the question of deepening the channel was first definitely mooted, but it was not until 1844 that any dredging operations were begun. In that year, the deepening of a new straight channel was commenced, but the scheme was abandoned in 1847. In 1851 the deepening of the present channel was begun. At that time the depth of the channel at low water was 10 feet 6 inches. By the year 1869, this depth had been increased to 20 feet, by 1882 to 25 feet, and by the close of 1888 the depth of 27½ feet, at low water, was attained for a distance of 108 miles from Montreal to a point within tidal influence. This work is now being continued by the government of Canada, which in 1888, under the provisions of the Act 51 Vic., ch. 5, of that year, assumed the indebtedness. The channel has a minimum width of 300 feet, extending to 550 feet at points of curvature. The channel is lighted and buoyed.

Navigation, which is closed by ice during the winter months, opens about the end of April.

Montreal has by this work been placed at the head of ocean navigation, and here the canal systems of the river St. Lawrence begin, overcoming the various rapids by which the river channel upwards is obstructed, and giving access through the St. Lawrence canals, the Welland canal, the great lakes and the Sault Ste. Marie canal, to the head of lake Superior.

The difference in level between the point on the St. Lawrence, near Three Rivers, where tidal influence ceases, and lake Superior is about 600 feet.

The Dominion canals, constructed between Montreal and lake Superior are the Lachine, Soulanges, Cornwall, Farran's Point, Rapide Plat, Galops, Murray, Welland and Sault Ste. Marie. Their aggregate length is 74 miles; total lockage (or height directly overcome by locks), 553¼ feet. The number of locks through which a vessel would pass in its passage from Montreal, at the head of ocean navigation, to the head of lake Superior is 48. The Soulanges canal takes the place of the Beauharnois canal; the latter may be abandoned for navigation purposes.

Communication between lakes Huron and Superior is obtained by means of the Canadian Sault Ste. Marie canal, and also by the St. Mary's Falls canal, situated on the United States side of the river St. Mary. Both these canals are free of toll.

It is important to note that the enlargement of the canals on the main route between Montreal and lake Erie comprises locks of the following minimum dimensions: Length, 270 feet; width, 45 feet; depth of water on sills, 14 feet. The length of the vessels to be accommodated is limited to 255 feet. At Farran's in the canal of that name, the lock is 800 feet long. A similar lock is built at Iroquois on the Galops canal, the object being to pass a full tow at one lockage.

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LACHINE CANAL.

First construction commenced.....	1821
" completed.....	1825
First enlargement commenced.....	1843
" completed.....	1848
Second enlargement commenced.....	1873
" completed.....	1901
Length of canal.....	8½ statute miles.
Number of locks.....	5
Dimensions of locks.....	270 feet by 45 feet.
Total rise of lockage.....	45
Depth of water on sills at two locks.....	18
" at three locks.....	14
Average width of new canal.....	150

The old lift locks, 200 feet by 45 feet, are still available, with 9 feet of water on mitre sills.

The canal consists of one channel, with two distinct systems of locks, the old and the enlarged. There are two lock entrances at each end.

The canal extends from the city of Montreal to the town of Lachine, overcoming the St. Louis rapids, the first of the series of rapids which bars the ascent to the river St. Lawrence. They are 1,006 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Construction commenced.....	1892
Open for traffic.....	1899
Length of canal.....	14 statute miles.
Number of locks, lift.....	4
" guard.....	1
Dimensions of locks.....	280 feet by 45 feet.
Total rise of lockage.....	84
Depth of water on sills.....	15
Breadth of canal at bottom.....	100
" " water surface.....	164
Number of arc lights.....	219 of 2,000 c.p. each.

The canal extends from Cascade point to Coteau landing, overcoming the Cascade rapids, Cedar rapid and Coteau rapids.

From the head of the Lachine to the foot of the Soulanges, the distance is sixteen miles.

CORNWALL CANAL.

First commenced, 9 feet.....	1844
" opened.....	1847
Enlargement commenced.....	1897
" completed.....	1900
Length of canal.....	11 statute miles.
Number of locks.....	6
Dimensions of locks.....	270 feet by 75 feet.
Total rise of lockage.....	48
Depth of water on sills.....	14
Breadth of canal at bottom.....	90
" " water surface.....	154

The old lift locks, 200 ft by 55 feet, are also available, with nine feet of water on mitre sills.

From the head of the Soulanges to the foot of the Cornwall canal there is a stretch through lake St. Francis of 31 miles, which is being made navigable for vessels drawing fourteen feet.

The Cornwall canal extends past the Long Sault rapids from the town of Cornwall to Dickinson's landing.

WILLIAMSBURG CANALS.

The Farran's Point, Rapide Plat, and Galops canals are collectively known as the Williamsburg canals.

FARRAN'S POINT CANAL.

First commenced, 9 feet.....	1844
Opened.....	1847
Enlargement commenced.....	1897
" completed.....	1900
Length of canal.....	1½ miles.
Number of locks.....	1
New lock.....	800 feet by 45 feet.
Old lock.....	200 " "
Total rise of lockage.....	3½ feet.
Depth of water on sills of new lock.....	14 "
Depth of water on sills of old lock.....	9 "
Breadth of canal at bottom.....	90 "
Breadth of canal at water surface.....	154 "

From the head of the Cornwall canal to the foot of Farran's Point canal, the distance on the river St. Lawrence is five miles. The latter canal enables vessels ascending the river to avoid Farran's Point rapid, passing the full tow at one lockage. Descending vessels run the rapids with ease and safety.

RAPIDE PLAT CANAL.

First commenced, 9 feet.....	1844
" opened.....	1847
Enlargement commenced.....	1884
" completed.....	1897
Length of canal.....	3⅔ miles.
Number of locks.....	2
Dimensions of locks.....	270 feet by 45 feet.
Total rise in lockage.....	11½ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	152 "

The old lift lock, 200 by 45 feet, is also available, with nine feet of water on mitre sills.

From the head of Farran's Point canal to the foot of Rapide Plat canal there is a navigable stretch of 9½ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

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GALOPS CANAL.

First commenced, 9 feet.....	1844
Opened.....	1846
Enlargement commenced.....	1888
" completed.....	1903
Length of canal.....	7 $\frac{3}{4}$ miles.
Number of locks.....	3
Dimension of locks (one of which is a guard lock).....	800 by 50. 270 by 45. 303 by 45.
Total rise of lockage.....	15 $\frac{1}{2}$ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	144 "

From the head of Rapide Plat canal to Iroquois, at the foot of the Galops canal, the St. Lawrence is navigable 4 $\frac{1}{2}$ miles. The canal enables vessels to overcome the rapids at Pointe aux Iroquois, Point Cardinal and the Galops.

MURRAY CANAL.

Construction begun.....	1882
Completed.....	1890
Length between eastern and western pier heads.....	5 1-6 miles.
Breadth at bottom.....	80 feet.
Breadth at water surface.....	124 "
Depth below lowest known lake level.....	11 "
No locks.	

This canal extends through the Isthmus of Murray, giving connection westward between the head waters of the Bay of Quinte and lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

Main line from Port Dalhousie, lake Ontario, to Port Colborne, lake Erie.

	Old Line.	Enlarged or New Line.					
Length of canal.....	27 $\frac{1}{2}$ miles.	26 $\frac{3}{4}$ miles.					
Pairs of guard-gates (formerly 3).....	2	1					
Number of locks (lift.....	26	25					
guard.....	1	1					
Dimensions.....	<table> <tr> <td>1 lock 270 x 45</td> <td rowspan="4">} 270 feet x 45 feet.</td> </tr> <tr> <td>1 lock 200 x 45</td> </tr> <tr> <td>1 (tidal) 230 x 45</td> </tr> <tr> <td>24 locks 150 x 26 ft. 6 in.</td> </tr> </table>	1 lock 270 x 45	} 270 feet x 45 feet.	1 lock 200 x 45	1 (tidal) 230 x 45	24 locks 150 x 26 ft. 6 in.	
1 lock 270 x 45	} 270 feet x 45 feet.						
1 lock 200 x 45							
1 (tidal) 230 x 45							
24 locks 150 x 26 ft. 6 in.							
Total rise of lockage.....	326 $\frac{3}{4}$ feet	326 $\frac{3}{4}$ feet.					
Depth of water on sills.....	10 $\frac{1}{4}$ "	14 "					
Construction commenced, 8 feet.....		1824					
" completed.....		1833					
Enlargement commenced, 14 feet.....		1872					
" completed.....		1887					

WELLAND RIVER BRANCHES.

Length of canal—

Port Robinson cut to river Welland.....	2,622 feet.
From the canal at Welland to the river, via lock at Aqueduct.....	300 “
Chippewa cut to river Niagara.....	1,020 “
Number of locks—one at Aqueduct and one at Port Robinson.....	2
Dimensions of locks.....	150 by 26½ feet.
Total lockage from the canal at Welland down river Welland.....	10 feet.
Depth of water on sills.....	9 “ 10 inches.

GRAND RIVER FEEDER.

Length of canal.....	21 miles.
Number of locks.....	2
Dimensions of locks.....	1 of 150 by 26½ feet. 1 of 300 by 45 “ 28 “
Total rise of lockage.....	10 feet.
Depth of water on sills.....	9 “

PORT MAITLAND BRANCH.

Length of canal.....	1¾ miles.
Number of locks.....	1
Dimensions of locks.....	185 feet by 45 feet.
Total rise of lockage.....	7 “
Depth of water on sills.....	7½ “

The Welland canal has two entrances from lake Ontario, at Port Dalhousie, one for the old, the other for the new canal.

From Port Dalhousie to Allanburg, 11¾ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburg to Port Colborne, a distance of 15 miles, there is only one channel, the old canal having been enlarged.

From the head of the Welland canal there is a deep water navigation through lake Erie, the Detroit river, Lake St. Clair, the St. Clair river, Lake Huron and river St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through lake Superior to Port Arthur is 274 miles, and to Duluth 397 miles.

SAULT STE. MARIE CANAL.

Construction commenced.....	1888
Opened for traffic.....	1895
Length of canal, between the extreme ends of the entrance piers.....	7,472 feet.
Number of locks.....	1
Dimensions of locks.....	900 “ by 60 feet.
Depth of water on sills (at lowest known water level).....	18 “ 3 inches.
Total rise or lockage.....	18 “
Breadth of canal at bottom.....	141 “ 8 inches.
Breadth at surface of water.....	150 “

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This canal has been constructed through St. Mary's island, on the north side of the rapids of the river St. Mary, and, with that river, gives communication on Canadian territory between lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

MONTREAL, OTTAWA AND KINGSTON:

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine canal, the navigation section of the lower river Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the river Rideau and the Rideau canal to Kingston, on lake Ontario—a total distance of 245 $\frac{3}{8}$ miles.

After leaving the Lachine canal the works constructed to overcome difficulties of navigation are:—

Ottawa River Canals.

The Ste. Anne's lock	Grenville canal.
Carillon canal.	Rideau canal.

The total lockage (not including that of the Lachine canal) is 509 feet (345 rise, 164 fall)—and the number of locks is 55.

The following table exhibits the intermediate distances from Montreal harbour:—

Sections of Navigation.	Inter- mediate Distance.	Total Distance from Montreal.
	Miles.	Miles.
The Lachine canal	8 $\frac{1}{2}$	
From Lachine to Ste. Anne's lock	15	23 $\frac{1}{2}$
Ste. Anne's lock and piers	$\frac{1}{8}$	23 $\frac{3}{8}$
Ste. Anne's lock to Carillon canal	27	50 $\frac{3}{8}$
The Carillon canal	$\frac{3}{8}$	51 $\frac{3}{8}$
The Carillon to Grenville canal	6 $\frac{1}{4}$	57 $\frac{7}{8}$
The Grenville canal	5 $\frac{1}{2}$	63 $\frac{1}{2}$
From the Grenville canal to entrance of Rideau navigation	56	119 $\frac{1}{2}$
Rideau navigation ending at Kingston	126 $\frac{1}{4}$	245 $\frac{3}{8}$

STE. ANNE'S LOCK.

Construction commenced	1814
“ completed	1816
Rebuilt of wood	1833
“ in masonry	1843

	Old Lock.	New Lock.
Length of canal	$\frac{1}{8}$ mile	$\frac{1}{8}$ mile.
Number of locks	1	1
Dimensions of locks	190 x 45 feet.	200 x 45 feet.
Total rise of lockage	3 feet.	3 feet.
Depth of water on sills	6 “	9 “

This work, with guide piers above and below, surmounts the Ste. Anne's rapids between Ile Perrot and the head of the Island of Montreal, at the outlet of that portion of the river Ottawa which forms the lake of Two Mountains, 23 $\frac{1}{2}$ miles from Montreal harbour.

THE CARILLON CANAL.

Construction commenced.....	1819
" completed.....	1833
Enlargement commenced.....	1871
" completed.....	1887
Length of canal.....	$\frac{3}{4}$ mile.
Number of locks.....	2
Dimensions of locks.....	200 x 45 feet.
Total rise or lockage.....	16 feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	110 "

This canal overcomes the Carillon rapids.

From Ste. Anne's lock to the foot of the Carillon canal there is a navigable stretch of 27 miles, through the lake of Two Mountains and the river Ottawa.

By the construction of the Carillon dam across the river Ottawa the water at that point is raised 9 feet, enabling the river above to be used for navigation.

GRENVILLE CANAL.

Construction commenced.....	1819
" completed.....	1833
Enlargement commenced.....	1871
" completed.....	1887
Length of canal.....	$5\frac{3}{4}$ miles.
Number of locks.....	5
Dimensions of locks.....	200 x 45 feet
Total rise or lockage.....	$43\frac{3}{4}$ feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	40 to 50 ft.
Breadth of canal at surface of water.....	50 to 80 "

This canal, by which the Long Sault rapids are avoided, is about 56 miles below the city of Ottawa, up to which point the river Ottawa affords unimpeded navigation.

RIDEAU NAVIGATION.

Construction commenced.....	1826
" completed.....	1832

The Rideau system connects the river Ottawa, at the city of Ottawa, with the eastern end of Lake Ontario, at Kingston

Length of navigation waters.....	126 $\frac{1}{4}$ miles.
Number of locks going from Ottawa to Kingston.....	35 ascending. 14 descending.
Total lockage.....	457 $\frac{1}{2}$ feet. 292 $\frac{1}{2}$ rise and 165 $\frac{1}{4}$ fall at low water.
Dimensions of locks.....	134 x 33 feet.
Depth of water on sills.....	5 feet.
Navigation depth through the several reaches.....	5 "
Breadth of canal reaches at bottom.....	60 ft. in earth. 54 feet in rock.
Breadth of canal at surface of water.....	80 feet in earth.

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PERTH BRANCH.

Construction commenced.....	1883
" completed.....	1892
Length of canal.....	7 miles.
Number of locks.....	2
Dimensions of locks.....	134 feet x 33 feet.
Total rise or lockage.....	26 "
Depth of water on sills.....	5 " 6 inches.
Length of dam.....	200 "
Breadth of canal at bottom.....	40 " in rock.
	60 " in clay.
Breadth of canal at surface of water.....	80 "

The Perth branch of the Rideau canal affords communication between Beveridge's bay, on lake Rideau and the town of Perth.

The summit level of the Rideau system is at upper lake Rideau, but several of the descending reaches are also supplied by waters which have been made tributary to them. The following description gives the source of supply:—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the river Cataragui. The supply of water for the canal is derived from the reserves given in detail below.

These may be divided into three systems, viz.:—

1. The summit level, supplied by the Wolfe lake system.
2. The eastern descending level to Ottawa, supplied by the river Tay system, discharging into lake Rideau.
3. The southwest descending level to Kingston, supplied by the Mud lake system formerly known as the Devil lake system, discharging into lake Openicon.

Lake Openicon receives the waters of Buek lake and Rock lake.

All these waters on the descending level, supplemented by those of lake Loughboro', flow into Cranberry lake, which, discharging through Round Tail outlet, forms the river Cataragui. The river, rendered navigable by dams at various points, affords a line of navigation to Kingston.

RICHELIEU AND LAKE CHAMPLAIN.

This system, commencing at Sorel, at the confluence of the rivers St. Lawrence and Richelieu, 46 miles below Montreal, extends along the river Richelieu, through the St. Ours lock to the basin of Chambly; thence by the Chambly canal, to St. Johns, and up the river Richelieu to lake Champlain. The distance from Sorel to the boundary line is 81 miles.

At Whitehall, the southern end of lake Champlain is entered, and connection is obtained with the river Hudson, by which the city of New York is directly reached. From the boundary line to New York the distance is 330 miles.

The following table shows the distances between Sorel and New York:—

Section of Navigation.	Interme- diate Distance.	Total Distances.
	Miles.	Miles.
Sorel to St. Ours lock.....	14	14
St. Ours lock to Chambly canal.....	32	46
Chambly canal.....	12	58
Chambly canal to boundary line.....	23	81
Boundary line to Champlain canal.....	111	192
Champlain canal to junction with Erie canal.....	66	258
Erie canal, from junction to Albany.....	7	265
Albany to New York.....	146	411

ST. OURS LOCK DAM.

Construction commenced.....	1844
“ completed.....	1849
Length.....	$\frac{1}{8}$ mile.
Number of locks.....	1
Dimensions of lock.....	200 feet by 45 feet.
Total rise of lockage.....	5 “
Depth of water on sills.....	7 feet at low water.
Length of dam in eastern channel.....	300 “
Length of dam in western channel.....	690 “

At St. Ours, 14 miles from Sorel, the river Richelieu is divided by a small island into two channels. The St. Ours lock is in the eastern channel.

There is a navigable depth in the Richelieu of 7 feet between St. Ours lock and Chambly basin, a distance of 32 miles.

CHAMBLY CANAL.

Construction commenced.....	1831
“ completed.....	1843
Length of canal.....	12 miles.
Number of locks.....	9
Dimensions of locks:—	
Guard lock, No.1, at St. Johns.....	122 feet.
Lift “ 2.....	124 “
“ “ 3, 4, 5, 6.....	118 “
“ “ 7, 8, 9 combined.....	125 “
Total rise or lockage.....	74 “
Depth of water on sills.....	6 $\frac{1}{2}$ “
Breadth of canal at bottom.....	36 “
Breadth of canal at surface of water.....	60 “

This canal succeeds the 32 miles of navigable water between St. Ours lock and Chambly basin. The canal overcomes the rapids between Chambly and St. Johns.

TRENT CANAL.

The term ‘Trent canal’ is applied to a series of water stretches, which do not, however, form a connected system of navigation, and which, in their present condition, are efficient only for local use. By various works this local use has been extended, and by others, now in progress and contemplation, this will become a through route between lake Ontario and lake Huron.

The series is composed of a chain of lakes and rivers, extending from Trenton, at the mouth of the river Trent, on the bay of Quinté, lake Ontario, to lake Huron.

Many years ago the utilizing of these waters for the purpose of through water communication between lake Huron and lake Ontario was projected.

The course, as originally contemplated and modified, is as follows:—

Through the river Trent, Rice lake, the river Otonabee and lakes Clear, Stony, Lovesick, Deer, Buckhorn, Chemong, Pigeon, Sturgeon and Cameron to lake Balsam, the summit water, about 155 miles from Trenton; from lake Balsam by a canal and the river Talbot to lake Simcoe; thence by the river Severn to Georgian bay, lake Huron; the total distance being about 200 miles of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial Government in 1837, was deferred. By certain works, however, below specified, sections of these waters have been made practicable for navigation, and the whole scheme

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is now being carried out. A branch of the main route, extending from Sturgeon lake south, affords communication with the town of Lindsay, and, through lake Scugog to Port Perry, a distance of 174 miles from Trenton.

The following table gives the distance of navigable and unnavigable reaches:

From Trenton, bay of Quinté to Nine Mile rapids:—		
Nine Mile rapids to Percy landing.....	19½	9
Percy landing to Heeley's Falls dam.....	—	14½
Heeley's Falls dam to Peterborough.....	51¾	—
Peterborough to Lakefield.....	—	9½
Lakefield to a point across Balsam lake....	61	—
	<hr/>	<hr/>
	132¼	33

Total distance, bay of Quinté to a point across Balsam lake 165½

From Sturgeon point on Sturgeon lake, 48¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of lake Scugog..... 27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young's point, Burleigh rapids, Lovesick, Buckhorn rapids, Bobcaygeon, Fenelon falls and Rosedale; also dams at Lakefield, Young's point, Burleigh falls, Lovesick, Buckhorn, Bobcaygeon and Fenelon falls. By these works there is afforded communication between Lakefield, 9½ miles from Peterborough, and Balsam lake, the headwaters of the system; opening up a total of about 160 miles of direct and lateral navigation.

At Lakefield, 9½ miles from Peterborough, the dam at the head of the Nine mile rapids of the river Otonabee maintains navigation on Lake Katchewanoe up to Young's point.

At Young's point, 5 miles from Lakefield, the dam between Lake Katchewanoe and Clear lake controls the water level through Clear and Stony lakes up to the foot of the Burleigh canal.

At Burleigh rapids, 10 miles from Young's point, a canal, about 2¼ miles in length, passes the Burleigh and Lovesick rapids, and gives communication between Stony lake and Deer bay.

At Buckhorn rapids, 7 miles from Burleigh rapids, there is a canal about one-fourth of a mile long.

At Bobcaygeon, 15¾ miles from Buckhorn rapids, a dam, 553 feet long, controls the water level to Fenelon falls.

At Fenelon falls, 15 miles from Bobcaygeon, a canal about one-third of a mile in length connects Sturgeon lake with Cameron lake.

The following is a list of the locks, with their dimensions:—

1	Lock at Rosedale (maintained by the Ontario government), 100' x 30' x 4' 6" to 6' 6" depth water on mitre sill.		
2	Locks at Fenelon... 134'x33'x5' 0" to 7' 6" deep water on mitre sill		
1	" Lindsay... 134'x33'x5' 0" to 7' 6"	"	"
1	" Bobcaygeon 134'x33'x5' 8" to 7' 0"	"	"
1	" Buckhorn... 134'x33'x5' 0" to 9' 0"	"	"
1	" Lovesick... 134'x33'x5' 0" to 9' 4"	"	"
2	" Burleigh... 134'x33'x6' 0" to 8' 0"	"	"
1	" Young's pt. 134'x33'x5' 0" to 14' 0"	"	"
1	" Peterborough 134'x33'x5' 0" to 10' 0"	"	"
1	" Hastings... 134'x33'x7' 0" to 10' 6"	"	"
1	" Chisholms... 134'x33'x5' 0" to 8' 6"	"	"

ST. PETER'S CANAL, CAPE BRETON.

Construction commenced.....	1854
“ completed.....	1869
Enlargement begun.....	1875
“ completed.....	1881
Length of canal about 2,600 feet.	
Breadth at water line.....	50 feet.
Lock.....	One tidal lock, 4 pairs of gates.
Dimensions.....	200 feet by 48 feet.
Depth of water on sills.....	18 feet at lowest water.
Depth through canal.....	19 “
Extreme rise and fall of tide in St. Peter's bay.....	7 “

This canal connects St. Peter's bay on the northern side of Cape Breton, Nova Scotia, with the Bras d'Or lakes. It crosses an isthmus half a mile in width and gives access to the Atlantic.....

BEAUHARNOIS CANAL.

Construction begun.....	1842
“ completed.....	1845
Length of canal.....	12 statute miles.
Number of locks.....	9
Dimensions of locks.....	200 feet by 45 feet
Total rise or lockage.....	82½ “
Depth of water on sills.....	9 “
Breadth of canal at bottom.....	80 “
Breadth of canal at water surface.....	120 “

As the new Soulanges canal is now opened for navigation, the Beauharnois canal is abandoned for navigation purposes.

EARLIER CANALS.

A system of three canals preceded the Beauharnois. These were:—

COTEAU DU LAC CANAL.

Construction.....	1779
“ completed.....	1780

SPLIT ROCK CANAL.

Construction commenced.....	1779
“ completed.....	1780

CASCADE POINT CANAL.

Construction commenced.....	1782
“ completed.....	1783

The locks were 20 x 6 feet, and provided for a draft of 2 feet. In 1814 the work of widening them to 12 feet was begun, and finished in 1817.

SESSIONAL PAPER No. 20a

Two canals were also constructed off Burlington bay, Ontario. They were:

BURLINGTON BAY CANAL.

Construction commenced.....	1825
“ completed.....	1832

DESJARDINS CANAL.

Construction commenced.....	1826
“ completed.....	1837

Neither of these canals required locks. They have for many years been abandoned. The depth of water provided in the first instance was $7\frac{1}{2}$ feet.

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