

DEPARTMENT OF RAILWAYS AND CANALS

84098

Historical File Copy

CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1912 ✓

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OTTAWA

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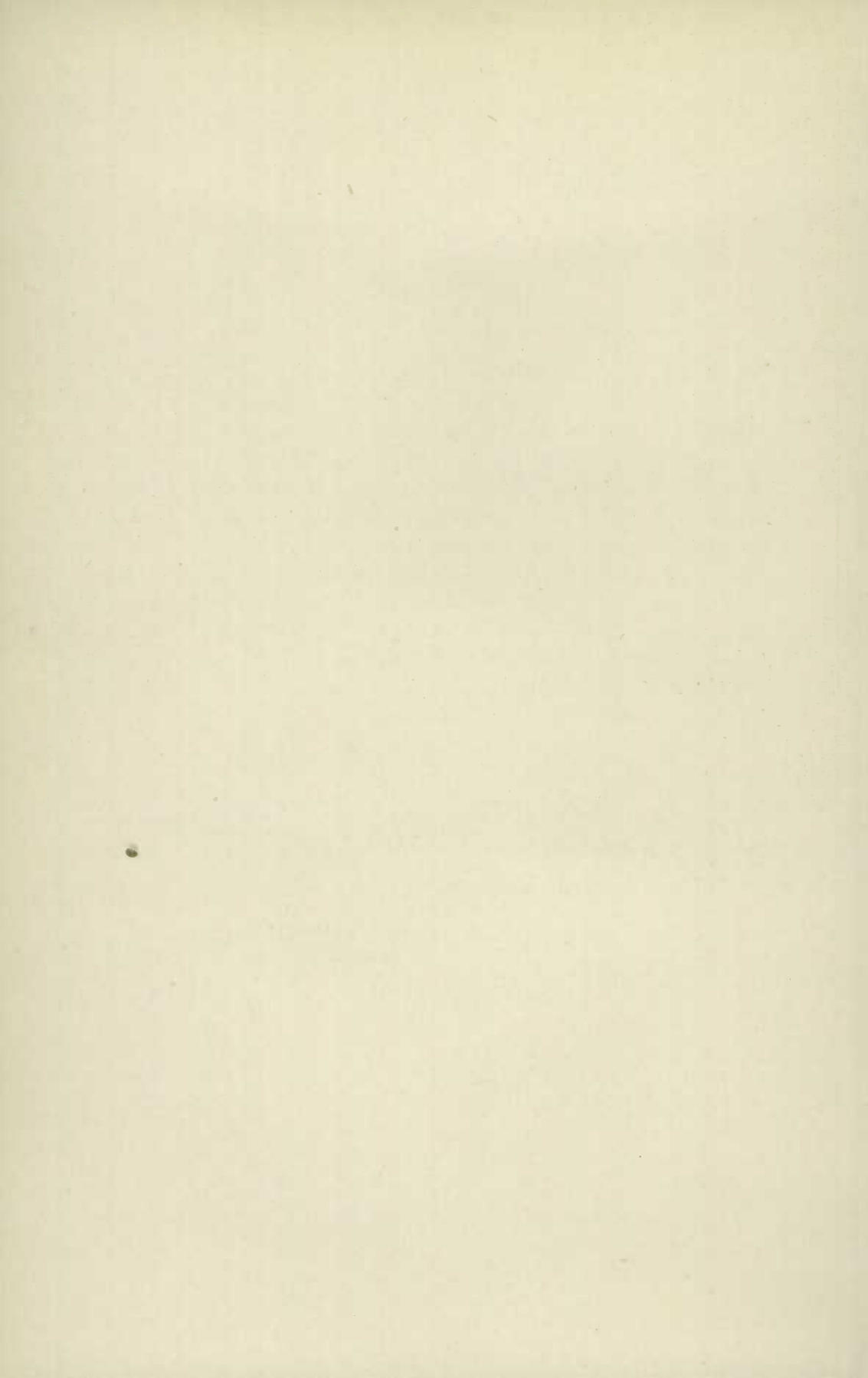
To Field Marshal His Royal Highness PRINCE ARTHUR WILLIAM PATRICK ALBERT, Duke of Connaught and of Strathearn; Earl of Sussex, (in the Peerage of the United Kingdom), Prince of the United Kingdom of Great Britain and Ireland; Duke of Saxony; Prince of Saxe-Cobourg and Gotha; Knight of the Most Noble Order of the Garter; Knight of the Most Ancient and Most Noble Order of the Thistle; Knight of the Most Illustrious Order of Saint Patrick; a Member of the Most Honourable Privy Council; Great Master of the Most Honourable Order of the Bath; Knight Grand Commander of the Most Exalted Order of the Star of India; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George; Knight Grand Commander of the Most Eminent Order of the Indian Empire; Knight Grand Cross of the Royal Victorian Order; Personal Aide-de-Camp to His Majesty the King; 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, 1912.

All of which is respectfully submitted.

F. COCHRANE,
Minister of Railways and Canals.



To the Honorable 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, 1912.

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 15, 1913.

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

SIR,—I have the honour to submit to you herewith Canal Statistics for the year ended December 31, 1912.

The total volume of traffic through the canals of the Dominion was 47,587,245 tons, distributed as follows:—

| | Tons. | Increase. | Decrease. |
|-----------------------|------------|-----------|-----------|
| Sault Ste. Marie..... | 39,669,655 | 8,717,946 | |
| Welland..... | 2,851,915 | 314,286 | |
| St. Lawrence..... | 3,477,188 | 371,480 | |
| Chambly..... | 618,415 | 18,586 | |
| St. Peter's..... | 74,809 | | 489 |
| Murray..... | 170,081 | 6,624 | |
| Ottawa..... | 392,350 | 72,279 | |
| Rideau..... | 160,133 | | 12,094 |
| Trent..... | 77,150 | 19,860 | |
| St. Andrew's..... | 95,549 | 48,414 | |
| Total..... | 47,587,245 | 9,569,475 | 12,583 |

It will be observed that the increment for the year 1912, as compared with 1911, was 9,556,892 tons. This was equal to 25.1 per cent.

It must not be assumed that the net business of the canals amounted to 47,587,245 tons. There is duplication to the extent of several million tons, and unavoidably so. For example, all traffic between Fort William and Montreal is first credited to the canal at Sault Ste. Marie, then to the Welland canal, and finally to the St. Lawrence canals. In the same way, freight shipped from Ottawa to New York finds a place first in the returns of the Ottawa River canals, next the Lachine canal, and lastly in the Chambly canal. This situation is not essentially different from that which arises with regard to railway traffic, and, as has been said, is inseparable from the statistical system which has long been in vogue. In dealing with the question of the average freight rate on the inland waters of Canada on a page further along, the actual net tonnage will be indicated.

The following statement shows the growth of traffic through the canals of Canada during the past decade:—

| | | |
|-----------|------------|-------|
| 1903..... | 9,203,817 | Tons. |
| 1904..... | 8,256,236 | " |
| 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 | " |

It will be seen that the expansion for the ten year period between 1903 and 1912 was equal to 417 per cent.

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The following comparative statement of traffic will show on what canals the growth has taken place during the past four years :—

| — | 1909. | 1910. | 1911. | 1912. |
|------------------------|------------|------------|------------|------------|
| Sault Ste. Marie | 27,861,245 | 36,395,687 | 30,951,709 | 39,669,655 |
| Welland | 2,025,951 | 2,326,290 | 2,537,629 | 2,851,915 |
| St. Lawrence | 2,410,629 | 2,760,752 | 3,105,708 | 3,477,188 |
| Chambly | 752,117 | 669,299 | 599,829 | 618,415 |
| St. Peter's | 79,850 | 85,951 | 75,298 | 74,809 |
| Murray | 102,291 | 177,941 | 163,457 | 170,081 |
| Ottawa | 336,939 | 385,261 | 320,071 | 392,350 |
| Rideau | 91,774 | 134,831 | 172,227 | 160,133 |
| Trent | 59,952 | 46,263 | 57,290 | 77,150 |
| St. Andrew's | | 8,283 | 47,135 | 95,549 |

Details of traffic, showing the tonnage of commodities, will be found in tables constituting the body of this report. Comparing the years 1911 and 1912, following was the tonnage by classes and canals :—

| Canals. | Agricultural Products. | Animal Products. | Manu- factures. | Products of Forest. | Products of Mines. | Total. |
|------------------------|------------------------|------------------|--------------------|---------------------|--------------------|------------|
| 1911. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| Sault Ste. Marie | 3,219,929 | 978 | 854,516 | 56,853 | 26,819,433 | 30,951,709 |
| Welland | 1,089,665 | 574 | 539,865 | 250,423 | 657,162 | 2,537,629 |
| St. Lawrence | 1,003,090 | 9,943 | 557,992 | 551,155 | 983,528 | 3,105,708 |
| Chambly | 41,903 | 315 | 25,370 | 396,704 | 135,537 | 599,829 |
| St. Peter's | 16,538 | 2,153 | 11,828 | 7,120 | 37,659 | 75,298 |
| Murray | 1,109 | 113 | 143,399 | 1,622 | 17,214 | 163,457 |
| Ottawa | 9,779 | 2,467 | 65,452 | 202,797 | 39,576 | 320,071 |
| Rideau | 6,084 | 2,684 | 114,937 | 34,350 | 14,172 | 172,227 |
| Trent | 951 | 397 | 12,551 | 31,342 | 12,049 | 57,290 |
| St. Andrew's | 82 | | 33,153 | 13,773 | 127 | 47,135 |
| Total | 5,389,070 | 10,624 | 2,350,063 | 1,546,139 | 28,716,457 | 38,030,353 |
| 1912. | | | | | | |
| Sault Ste. Marie | 4,530,792 | 372 | 975,303 | 54,114 | 34,109,074 | 39,669,655 |
| Welland | 1,205,912 | 678 | 625,569 | 227,684 | 792,072 | 2,851,915 |
| St. Lawrence | 1,119,567 | 9,375 | 464,091 | 578,760 | 1,305,395 | 3,477,188 |
| Chambly | 19,706 | 338 | 11,600 | 425,313 | 161,458 | 618,415 |
| St. Peter's | 15,427 | 2,996 | 7,583 | 11,161 | 37,642 | 74,809 |
| Murray | 448 | 37 | 101,511 | 706 | 67,379 | 170,081 |
| Ottawa | 5,278 | 2,880 | 20,958 | 226,600 | 136,634 | 392,350 |
| Rideau | 3,995 | 3,151 | 18,814 | 28,642 | 105,531 | 160,133 |
| Trent | 2,514 | 361 | 3,459 | 67,489 | 3,327 | 77,150 |
| St. Andrew's | 37 | | 50 | 14,153 | 81,299 | 95,549 |
| Total | 6,903,676 | 20,188 | 2,228,948 | 1,634,622 | 36,799,811 | 47,587,245 |

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The ratio which each of the foregoing classes bore to the total volume of traffic during the past three years is shown in the following statement:—

| | 1910. | 1911. | 1912. |
|----------------------------|-----------|-----------|-----------|
| | Per cent. | Per cent. | Per cent. |
| Agricultural products..... | 10.2 | 14.2 | 14.51 |
| Animal | 1.2 | 1 | .04 |
| Manufactures..... | 5.2 | 6.2 | 4.68 |
| Produce of forests..... | 3.9 | 4.0 | 3.43 |
| Produce of mines..... | 79.5 | 75.5 | 77.34 |

CANADIAN AND AMERICAN TRAFFIC.

Until the year 1908 a separation was not made as between Canadian and American traffic. Since that date a record has been kept of the country of origin, as far as the canals of Canada are concerned.

The facts with respect to vessel tonnage and freight tonnage during the past five years are given in the following table:—

| 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 | 12,490,673 | 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 | 33,106,994 | 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 |

The proportions of freight tonnage originating in Canada and the United States during the five years for which the facts are available, have been as follows:—

| 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 |

The large and growing difference between the traffic of Canada and the traffic of the United States through the canals of Canada, arises almost wholly at Sault Ste. Marie. For example, in 1912 the proportion of strictly Canadian traffic which passed through the Canadian canal at Sault Ste. Marie was 10.3, and the traffic of that canal represented 83 per cent of the total for the whole Dominion. Of the American traffic which passed through the Canadian canal at Sault Ste. Marie in 1912, iron ore constituted over 87 per cent. In other words, out of 35,579,293 tons of American traffic at Sault Ste. Marie, 31,141,063 tons was made up of iron ore.

The situation changes at the Welland. In 1912, out of a total of 2,851,915 tons, Canadian traffic aggregated 1,553,116 tons, or 54 per cent. The St. Lawrence canals

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during the same period showed 2,340,143 tons of Canadian business, out of a total of 3,477,188, or 67 per cent.

The facts with regard to vessel tonnage will be found on a succeeding page. The proportions in 1912 were : Canadian, 29·36 per cent.; American, 70·64 per cent.

TRANSPORTATION OF CANADIAN WHEAT.

The rapid settlement of the Western provinces has created a steadily deepening interest in the movement of Canadian wheat. From 1895 down to 1909 a separation of Canadian and American products was not made in Canal Statistics; but since the latter year a careful record has been made of the facts in that regard. The following shows the volume of Canadian wheat brought down through the Canadian canal at Sault Ste. Marie:—

| | Bushels. |
|------------|------------|
| 1895 | 4,518,334 |
| 1896 | 19,314,234 |
| 1897 | 17,925,834 |
| 1898 | 9,746,600 |
| 1899 | 12,759,634 |
| 1900 | 9,292,034 |
| 1901 | 9,639,534 |
| 1902 | 27,912,500 |
| 1903 | 32,233,934 |
| 1904 | 29,794,100 |
| 1905 | 25,983,100 |
| 1906 | 34,389,300 |
| 1907 | 49,399,967 |
| 1908 | 58,574,034 |
| 1909 | 48,047,833 |
| 1910 | 51,774,833 |
| 1911 | 63,641,000 |
| 1912 | 83,743,034 |

*For the first time represents Canadian wheat only. The figures of preceding years include American wheat which passed through the Canadian canal.

The foregoing figures do not represent the total volume of Canadian wheat which came down from the Northwest in 1912. They have reference wholly to the number of bushels which passed through the Canadian canal at Sault Ste. Marie. There came through the American canal at that point 23,020,833 bushels. It was also ascertained from the Customs Department that 10,724,498 bushels of Canadian wheat went out from Duluth in 1912 in bond. Of this latter quantity 7,646,634 bushels had been accounted for in the totals of the two canals at Sault Ste. Marie, leaving 3,078,264 to be added to the figures just given. The total quantity of Canadian wheat moved by water in 1912 would therefore be 109,842,031 bushels, as compared with 65,622,481 bushels moved in 1911.

Without reference to which of the two canals was used at Sault Ste. Marie, the account with respect to Canadian wheat might be presented in this form:—

| | |
|---------------------------|--------------------|
| From Fort William..... | 99,117,233 bushels |
| From Duluth, in bond..... | 10,724,798 do |
| Total | 109,842,031 do |

The account is still incomplete. Canadian flour to the amount of 2,828,980 barrels passed through the Canadian and American canals at Sault Ste. Marie, and, allowing five bushels of wheat to the barrel, this would mean an addition of 14,144,900 bushels, bringing the final total of Canadian waterborne wheat up to 123,986,931 bushels.

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An analysis of the distribution of Canadian wheat after it had passed through the Canadian and American canals at Sault Ste. Marie, was this year made from the ships' reports filed at both offices. For several years past the facts had been gathered only with respect to the Canadian canal. In 1912 copies were procured of all ships' reports taken at the American canal; so that more comprehensive figures are this year made available. Taking first the Canadian canal, following was the distribution of Canadian wheat in 1912 :—

| | Bushels. |
|-------------------------------|------------|
| Fort William to Montreal..... | 13,726,166 |
| “ Georgian bay..... | 17,648,334 |
| “ other Canadian ports..... | 19,676,100 |
| “ Buffalo..... | 25,045,806 |
| Duluth to Montreal..... | 283,500 |
| “ Buffalo..... | 5,714,367 |
| “ Georgian bay..... | 1,418,767 |
| “ other Canadian ports..... | 230,000 |
| Total..... | 83,743,034 |

Through the American canal at Sault Ste. Marie the distribution of Canadian wheat in 1912 was as follows :—

| | Bushels. |
|-------------------------------|------------|
| Fort William to Montreal..... | 1,202,933 |
| “ Georgian bay..... | 1,852,834 |
| “ other Canadian ports..... | 782,600 |
| “ Buffalo..... | 19,182,466 |
| Total..... | 23,020,833 |

Adding 3,078,264 bushels of Canadian wheat from Duluth, which could not be classified, owing to the form in which the American records are kept at Sault Ste. Marie, the total of 109,842,131 is accounted for.

Joining the two accounts, the distribution of Canadian wheat for 1912 assumes the following shape :—

| Canadian Wheat. | Bushels. | Per cent. |
|-------------------------------|-------------|-----------|
| Fort William to Montreal..... | 14,929,099 | 13.6 |
| “ Georgian bay..... | 19,501,168 | 17.8 |
| “ other Canadian ports..... | 20,458,700 | 18.6 |
| “ Buffalo..... | 44,228,266 | 40.2 |
| Duluth to Montreal..... | 283,500 | .2 |
| “ Georgian bay..... | 1,418,767 | 1.3 |
| “ other Canadian ports..... | 230,000 | .2 |
| “ Buffalo..... | 5,714,367 | 5.2 |
| “ unclassified..... | 3,078,164 | 2.9 |
| Total..... | 109,842,031 | |

The “other Canadian Ports” referred to in the above statement are ports between Georgian bay and Lake Ontario.

It will be seen that exactly fifty per cent of all the Canadian wheat which came down by water in 1912, followed wholly Canadian channels.

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In order that a comparison may be made with the facts in preceding years, the following table is brought down to the end of 1912 :—

| Canadian Wheat. | 1909. | 1910. | 1911. | 1912. |
|--|------------|------------|------------|-------------|
| | Bushels. | Bushels. | Bushels. | Bushels. |
| Fort William to Montreal..... | 10,517,266 | 13,185,370 | 12,761,666 | 14,929,099 |
| " " " Georgian bay..... | 13,384,400 | 12,753,200 | 9,881,234 | 19,501,168 |
| " " " other Canadian ports..... | 10,149,633 | 9,603,400 | 11,880,666 | 20,458,700 |
| " " " Buffalo..... | 12,841,334 | 15,693,363 | 27,945,600 | 44,228,266 |
| Duluth to Montreal..... | 529,000 | 315,000 | | 283,500 |
| " Buffalo..... | 528,200 | 224,500 | 710,334 | 5,714,367 |
| " Georgian bay..... | 28,000 | | 461,509 | 1,418,767 |
| " other Canadian ports..... | 79,000 | | | 230,000 |
| " unclassified..... | | | | 3,078,164 |
| Total..... | 48,047,833 | 51,774,833 | 63,641,000 | 109,842,031 |
| 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 |

The following statement of percentages presents the foregoing tables in a convenient form for purposes of comparison :—

| Canadian Wheat. | 1909. | 1910. | 1911. | 1912. |
|--|-----------|-----------|-----------|-----------|
| | Per cent. | Per cent. | Per cent. | Per cent. |
| Fort William to Montreal..... | 21.9 | 25.5 | 20.1 | 13.6 |
| " " " Georgian bay..... | 27.9 | 24.6 | 15.6 | 17.8 |
| " " " other Canadian ports..... | 21.1 | 18.5 | 18.7 | 18.6 |
| " " " Buffalo..... | 26.7 | 30.3 | 43.8 | 40.2 |
| Duluth to Canadian ports..... | 1.3 | .6 | .7 | 1.7 |
| " American ports..... | 1.1 | .5 | 1.1 | 5.2 |
| " unclassified..... | | | | 2.9 |

In a succeeding paragraph facts will be presented which may explain in some measure the conditions which have operated in the movement of Canadian wheat.

FREIGHT RATES BY WATER.

In Canal Statistics for 1911, it was intimated that plans had been perfected for the ascertaining of the average rate per ton per mile on the inland waters of Canada. These plans involved the recording of the freight rate on each ship's report filed at the various canal offices. As an alternative those operators who wished to do so were permitted to send a monthly statement to Ottawa of tonnage, mileage and gross freight earnings. Ship owners were also required to send in at the close of the season a report showing :—

- Total tons carried.
- Total ton mileage of loaded vessels.
- Gross receipts from freight.

On the whole, and having regard to the difficulties which are inseparable from the inauguration of new undertakings of that character, the results were satisfactory. For example, out of a net Canadian tonnage of 6,942,278, definite information was received with regard to the mileage and freight earnings on 6,292,661 tons. St. Peters and St. Andrews canals were left out of the scheme for the year 1912, and they accounted for 170,358 tons: so that the actual net Canadian tonnage affected was 6,771,920.

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Returns were thus received in relation to 93 per cent of Canadian business. These returns covered all classes of traffic, and it might reasonably be assumed that had every ton been accounted for, the result would not have been altered.

The Canadian returns applied to 6,292,661 tons of freight, to 3,286,187,160 ton miles, and to gross freight earnings amounting to \$6,378,893.43.

From American shipping companies reports were received covering 26,030,661 tons, out of a total net tonnage of 36,840,812. These reports had reference to all classes of commodities, and were thoroughly typical of the whole business on inland waters of Canada. It may be confidently asserted that absolutely complete returns would not have materially affected the final calculation of the average rate per ton per mile. The number of ton miles accounted for amounted to 21,799,392,809, and the gross earnings on American freight to \$14,617,368.60.

Using the factors which have been indicated--the ton mileage and the gross earnings from freight--the results are as follows:--

Canadian traffic:--

| | |
|---------------------------|--------------|
| Average rate per ton..... | 91.04 cents. |
| “ “ per mile..... | 0.194 “ |

American traffic:--

| | |
|---------------------------|--------------|
| Average rate per ton..... | 56.62 cents. |
| “ “ per mile..... | 0.067 “ |

Without an explanation, the difference between the Canadian and American rate per ton per mile will not be understood. Of the 36,840,812 tons of American traffic through the canals of Canada in 1912, no less than 31,134,251 tons, or nearly 85 per cent, consisted of iron ore. Upbound coal accounted for a further 2,945,441 tons, or 8 per cent. In fact, if iron and coal were eliminated from the total account, the volume of Canadian traffic would exceed the American.

The transportation of iron ore and coal is a special feature of the trade of the Great Lakes. Most of the ore is carried by the vessels of the Pittsburg Steamship Company and the rate in 1912 was 55 cents per ton from the head of Lake Superior to ports on Lake Erie. These vessels are owned and operated by the iron interests of Pittsburg, and do not carry other commodities than ore and coal--ore down and coal up. For this upbound coal, without regard to ownership of the vessels, the rate last year was 30 cents per ton. Thus, while wheat was being carried to Buffalo at as high a rate as 2.616 cents per ton per mile, iron ore was passing over the same route at .063. Coal was being moved upward at the still lower rate of .046 per ton per mile. In a word, any analysis of freight rates on the inland waters of Canada would be misleading which failed to recognize, and to separate for special treatment, this overwhelming movement of ore and coal under the conditions indicated.

The movement of Canadian wheat during the season of 1912 has been discussed in a preceding division of this report. There remains the matter of the freight rate on that important commodity.

Special care was taken during the year to ascertain with accuracy the rates which were charged on waterborne wheat. The facts in that regard were carefully tabulated. They yielded the following results:--

Fort William to Buffalo:

| | |
|-----------------------|-----------|
| Per ton per mile..... | .103 cent |
| Per bushel..... | 2.863 “ |

Fort William to Georgian bay:

| | |
|-----------------------|-----------|
| Per ton per mile..... | .163 cent |
| Per bushel..... | 2.629 “ |

Fort William to other Canadian ports:

| | |
|-----------------------|-----------|
| Per ton per mile..... | .115 cent |
| Per bushel..... | 2.384 “ |

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Fort William to Montreal:

| | |
|-----------------------|----------|
| Per ton per mile..... | 160 cent |
| Per bushel..... | 5.774 " |

The lowest rate prevailed in May, and the highest in December. The rates per ton per mile and per bushel in these months were as follow:

| | MAY. | | DECEMBER. | |
|---------------------------------|------------------|-------------|-------------------|-------------|
| | Per ton per mile | Per Bushel. | Per ton per mile. | Per Bushel. |
| | cent. | cents. | cent. | cents. |
| Fort William to Buffalo..... | 106 | 2.719 | 150 | 3.905 |
| " " " Georgian bay..... | 012 | 1.835 | 259 | 3.967 |
| " " " Other Canadian ports..... | 099 | 2.012 | 232 | 4.403 |
| " " " Montreal..... | 147 | 5.444 | 193 | 7.129 |

There was not any wheat actually brought down from Fort William to Montreal in December; and the rates in the foregoing table are for November. The largest volume of wheat moved between Fort William and Montreal occurred in October, when the average rates were .184 per ton per mile and 6.149 cents per bushel. For the same month the rates from Fort William to Buffalo were .084 per ton per mile, and 2.259 cents per bushel. The maximum rate of the season between Fort William and Montreal was in effect in November, and was 8 cents per bushel.

To measure the conditions which influenced the movement of Canadian wheat to Montreal or Buffalo, it is necessary to know the freight rate on wheat from Buffalo to the Atlantic seaboard during 1912. It was officially ascertained from the Buffalo Chamber of Commerce, under date of 14th February, 1913, that these rates per bushel were: May to end of September, on lake wheat for export, 4½ cents; in October 5½ cents; after fifteenth November, six cents.

Thus, the all water rate from Fort William to Montreal in May was 5.444 cents per bushel, and the combined water and rail rate from Fort William to the American seaboard (say New York) was 7.219 cents. In November, the water rate from Fort William to Montreal was 7.129 cents per bushel, and the combined water and rail rate from Fort William to the American seaboard, via Buffalo, was 8.616 cents. The apparent difference in favour of Montreal was 1.765 cents per bushel in May, and 1.487 cents in November, so far as the rates of freight were concerned.

There remains to be presented the facts with respect to traffic by way of Fort William and Georgian bay ports. The average rate for the season was 2.629 cents per bushel. It was officially ascertained that the rail rates from Georgian bay to Montreal were as follows:—

| | |
|------------------------------------|----------------|
| C.P.R..... | 6c. per bushel |
| G.T.R., Jan. 1st to June 30th..... | 5c. " " |
| " July 1st to Sept. 30th..... | 4c. " " |
| " Oct. 1st to Dec. 31st..... | 5c. " " |

Speaking broadly, it might be assumed that the combined water and rail rate is adjusted to practically equal the all-water rate.

In Canal Statistics for 1911 the causes which operated to divert a large percentage of Canadian wheat from Canadian to American channels, despite the lower transportation cost between Fort William and Montreal, were discussed. Among them were:

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The availability of ocean tonnage at New York, the consideration of time in making delivery at foreign ports, and the rates of marine insurance. It is obvious that these causes must have continued to operate effectively in 1912.

RAIL AND WATER RATES.

The question is frequently, and quite naturally, asked: How do freight rates by water compare with freight rates by rail? It has always seemed to me, as the officer of this Department in charge of transportation statistics, that data should be available which would permit such a comparison to be fairly made; but the question will never be fully and satisfactorily answered until carriers by water are required to report in precisely the way railways are asked to do.

This year, for the first time, accurate information has been obtained with regard to the average rate per ton per mile on the waterborne traffic of the Great Lakes. That rate, so far as Canadian business was concerned, was found to be .194 cent. It is pointed out, however, that this rate does not take cognizance of the special conditions under which traffic on the inland waters of Canada is conducted, and that the contribution of Government should be taken into the reckoning. There is pertinency in such a contention. It would seem, at all events, to be proper to include the interest charge on the capital cost of the canals and the annual outlay by Government for up-keep. The facts in that regard are definitely known. This plan omits all expenditures for harbours, lighthouses, dredging, buoying, &c., which might be included; but, whether they should be included or not, the matter is ruled out for the time being by reason of the fact that the sum of such expenditures is not definitely known.

The capital cost of the canals connected with the inland waters of Canada was, up to the 31st of March last, \$103,400,588.64. The details will be found on a succeeding page. The interest on this capital sum, at 3½ per cent, would be \$3,619,021. The cost of maintenance of the Canadian canal system for the year ended 31st March, 1912, was \$1,725,737.46. These sums added together give a total of \$5,344,758.46. Assuming, as may be fairly done, that the entire Canadian business through the canals of Canada last year was on the basis of the ascertained rate, by a simple calculation it may be demonstrated that the contribution to the freight rate by Government amounted to 76.99 cents per ton, or .140 cent per ton per mile. The sum would then stand as follows:—

| | Ton. | Ton per Mile. |
|------------------------------|----------|---------------|
| | Cent. | Cent. |
| Actual freight rate | 91.04 | .194 |
| Government contribution..... | 76.99 | .140 |
| Total..... | \$1.6803 | .334 |

It has been ascertained through official channels that the rail rate of the Canadian Pacific on wheat from Fort William to Montreal is 12 cents per bushel. The distance is 995 miles. This rate would thus be equal to \$4 per ton, or .402 cent per ton per mile. The average water rate on a bushel of wheat from Fort William to Montreal in 1912 was 5.774 cents, or \$1.92 per ton. The addition of the Government contribution of .140 per ton per mile to the water rate between Fort William and Montreal would be equal to \$1.72 per ton. Adding \$1.92 and \$1.72 together, we have a total water rate of \$3.64 per ton, as compared with \$4 per ton by rail.

The average rate per ton per mile of all the railways of Canada for the year ended June 30, 1912, was .757 cent. It is therefore manifest that water rates, plus the

3 GEORGE V., A. 1913

Government contribution to canal service, were lower than rail rates in 1912. It is also equally clear, from a study of the transportation problem as a whole, that there are other factors than the freight rate which operate to direct the movement of traffic in any particular channel.

INSURANCE RATES.

For the season of 1912 the insurance rates in force on the inland waters of Canada were as follows :—

On the insurable value of the hull, covering all risks from the head of the lakes down to the foot of Lake Erie, $5\frac{1}{4}$ per cent. An additional one per cent was charged on vessels moving as far east as Ogdensburg, and a further one per cent was payable from Ogdensburg to Montreal. Thus the rate on a vessel voyaging from Fort William to Montreal was $7\frac{1}{4}$ per cent. A still further charge of one-half per cent was imposed on vessels outside of the Lakes Protective Association of Cleveland, or the Canadian Lake Protective Association.

GENERAL STATISTICS.

The following tabular statements will afford general information with respect to the business of the canals of Canada since 1887 :—

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 | 50,747 | 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 | 2,242,298 | 3,031,736 |
| 1893 | 351,706 | 1,344,822 | 214,076 | 141,602 | 247,329 | 385,769 | 54,912 | 806,773 | 868,923 | 2,678,966 | 3,546,989 |
| 1894 | 299,155 | 1,140,606 | 204,175 | 89,614 | 231,172 | 363,107 | 46,029 | 568,866 | 780,522 | 2,162,793 | 2,942,715 |
| 1895 | 294,824 | 1,070,046 | 286,191 | 91,177 | 362,637 | 608,778 | 62,285 | 590,140 | 975,937 | 2,360,141 | 3,336,078 |
| 1896 | 293,353 | 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 | 268,790 | 187,960 | 669,142 | 4,369,314 | 108,787 | 968,298 | 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 | 507,291 | 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 | 190,248 | 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 | 6,888,790 | 9,203,817 |
| 1904 | 606,737 | 2,047,499 | 511,887 | 276,578 | 699,784 | 2,778,993 | 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 | 1,137,146 | 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 | 17,502,826 |
| 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 | 27,376,399 | 33,720,748 |
| 1910 | 2,312,740 | 3,861,272 | 600,144 | 661,436 | 3,323,822 | 29,530,163 | 995,749 | 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 |

* 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 Vessels. |
|--------|----------------------------------|-----------|---------------------------------------|---------|--|---------|---------------------------------------|---------|-----------|-----------|--------------|--------------------|
| | 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 | 1,566,278 | 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 | ..... | ..... | 5,899 | 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 | 32,456 | 925 | 3,691 | 42,290 | 345,980 | 2,151,675 | 2,156,896 | 4,308,571 | 23,575 |
| 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 | 22,198 |
| 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 | 1,907,886 | 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 | 246,316 | 9,153 | 7,331 | 238,172 | 343,922 | 3,147,095 | 3,181,816 | 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 | 3,381,683 | 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 | 22,501 |
| 1910 | 3,891,613 | 3,504,463 | 315,656 | 122,688 | 95,151 | 89,618 | 287,555 | 627,046 | 4,587,975 | 4,345,815 | 8,931,790 | 25,337 |
| 1911 | 3,907,073 | 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 | 1,033 | 180,735 | 781,450 | 5,265,352 | 4,971,983 | 10,237,335 | 27,371 |

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

UNITED STATES VESSELS.

20a-21

| 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 Vessels. |
|--------|----------------------------------|---------|---------------------------------------|---------|--|------------|---------------------------------------|---------|-----------|------------|--------------|--------------------|
| | 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 | 98,849 | 251,645 | 315,935 | 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 | 336,661 | 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 | 50,201 | 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 | 138,554 | 17,712 | 262,240 | 216,542 | 32,295 | 185,730 | 441,927 | 444,752 | 886,679 | 4,427 |
| 1896 | 11,496 | 19,093 | 195,228 | 21,953 | 357,205 | 292,559 | 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 | 233,524 | 32,880 | 308,878 | 305,464 | 32,331 | 336,094 | 586,875 | 683,889 | 1,270,764 | 4,264 |
| 1899 | 17,217 | 18,044 | 172,897 | 50,002 | 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 | 11,387 | 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 | 1,756,948 | 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 | 1,736,187 | 1,689,414 | 106,401 | 335,836 | 2,121,810 | 2,114,665 | 4,236,475 | 6,695 |
| 1904 | 19,122 | 16,890 | 275,721 | 39,935 | 1,464,316 | 1,475,085 | 68,081 | 305,697 | 1,818,240 | 1,837,665 | 3,655,905 | 6,253 |
| 1905 | 19,743 | 19,444 | 364,985 | 81,876 | 2,359,494 | 1,701,704 | 101,536 | 466,459 | 2,836,758 | 2,259,483 | 5,096,241 | 7,085 |
| 1906 | 34,306 | 15,324 | 356,259 | 78,561 | 2,738,623 | 1,928,151 | 115,675 | 418,436 | 3,244,863 | 2,440,452 | 5,685,315 | 7,319 |
| 1907 | 57,549 | 72,018 | 301,591 | 72,048 | 4,739,953 | 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 | 586,103 | 3,685,519 | 4,839,320 | 8,524,139 | 7,489 |
| 1909 | 263,592 | 109,407 | 442,176 | 200,292 | 4,178,378 | 10,429,314 | 213,750 | 621,903 | 5,098,196 | 11,361,126 | 16,459,322 | 9,996 |
| 1910 | 119,222 | 50,498 | 428,702 | 305,330 | 3,509,417 | 14,488,565 | 299,462 | 676,101 | 6,356,803 | 15,420,494 | 21,777,297 | 11,462 |
| 1911 | 49,778 | 12,643 | 626,897 | 576,313 | 3,348,936 | 12,057,384 | 709,084 | 850,487 | 4,734,695 | 13,496,927 | 18,231,622 | 10,370 |
| 1912 | 50,296 | 15,518 | 763,426 | 470,330 | 3,778,534 | 16,011,911 | 614,311 | 931,864 | 7,206,567 | 17,429,623 | 24,636,190 | 11,785 |

SESSIONAL PAPER No. 20a

CANAL STATISTICS

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 | 495,546 | 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 | 2,526 | 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 | 3,081 | 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 | 3,146,807 | 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 | 1,803,288 | 1,692 | 3,734,349 | 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 | 9,961,251 | 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 | 3,345,619 | 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 | 4,080,362 | 35,579,293 | 39,669,655 | 6,200 | 236 | |

SESSIONAL PAPER No. 20a

CAPITAL EXPENDITURE.

The statement following brings the capital expenditure on the canals of the Dominion down to March 31, 1912. 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 the fire of the Ordinance Office, Montreal, in 1852. The details are as follows:—

| 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..... | 637,214 66 | 79,255 76 | 716,470 42 |
| Cornwall..... | 1,945,624 73 | 5,297,179 48 | 7,242,804 21 |
| Culbute..... | 382,776 46 | | 382,776 46 |
| Lachine..... | 2,589,532 85 | 10,352,146 14 | 12,941,678 99 |
| 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..... | 4,085,889 21 | | 4,085,889 21 |
| Sault-Ste-Marie..... | 4,941,557 07 | | 4,941,557 07 |
| Soulanges..... | 7,515,623 18 | | 7,515,623 18 |
| Ste. Anne's..... | 134,456 51 | 1,035,759 12 | 1,170,215 63 |
| St. Laurence River and Canals..... | 18,442 85 | 3,451,470 56 | 3,469,913 41 |
| St. Ours..... | 121,537 65 | 4,306 28 | 125,843 93 |
| St. Peter's..... | 648,547 14 | | 648,547 14 |
| Tay..... | 489,599 23 | | 489,599 23 |
| Trent..... | 11,302,045 89 | | 11,302,045 89 |
| Welland..... | 7,693,824 03 | 21,209,415 83 | 28,903,239 86 |
| Williamsburg | Farran's Point..... | 877,090 57 | 10,488,811 69 |
| | Galops..... | 6,118,927 32 | |
| | Rapide Plat..... | 2,158,242 00 | |
| | Williamsburg..... | 1,320,655 54 | |
| St. Andrews Lock..... | 1,533,759 57 | | 1,533,759 57 |
| Total..... | 48,309,777 18 | 55,090,811 46 | 103,400,588 64 |

The cost of maintenance for the fiscal year 1912, was \$1,725,737.46.

I have the honor to be, sir,

Your obedient servant,

J. L. PAYNE,

Comptroller of Statistics.

CANAL STATISTICS

FOR

SEASON OF NAVIGATION, 1912

GRAIN PASSED DOWN WELLAND.

The quantity of barley, corn, oats, pease, rye and wheat passed down the Welland canal, from ports west of Port Colborne for a period of thirty-one 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 | 151,557 |
| 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..... | 295,599 | 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..... | 151,506 | 13,732 | 83,370 |
| 1902..... | 208,215 | 22,787 | 81,164 |
| 1903..... | 351,936 | 29,062 | 111,828 |
| 1904..... | 198,246 | 23,711 | 102,523 |
| 1905..... | 341,431 | 42,061 | 129,270 |
| 1906..... | 404,935 | 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 |

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence canals to Montreal, has increased from 351,936 tons in 1903 to 961,855 tons in 1912, and the quantity passed down the Welland canal from United States ports to United States, has increased from 111,828 to 117,195 tons the same years.

3 GEORGE V., A. 1913

The quantity of barley, buckwheat, corn, oats, pease, 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. |
|-----------|---------|
| 1898..... | 293,391 |
| 1899..... | 209,170 |
| 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..... | ..... |
| 1911..... | 241,134 |
| 1912..... | 462,444 |

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. |
|-----------|---------|
| 1898..... | 575,097 |
| 1899..... | 372,291 |
| 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 |

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

QUANTITY OF GRAIN TO SEA BOARD BY COMPETING ROUTES.

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

| | |
|-----------------------------|---------|
| For 1911..... | Tons. |
| 1912..... | 836,924 |
| | 964,187 |
| Showing an increase of..... | 127,263 |

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

| | |
|-----------------------------|---------|
| For 1911..... | 241,134 |
| 1912..... | 462,444 |
| Showing an increase of..... | 221,310 |

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The quantity of grain passed down the Welland canal in Canadian and United States vessels to Kingston and Prescott for fifteen years is as follows :—

In Canadian vessels there were in :

| | Tons. |
|---|---------|
| 1898, 166 cargoes, with an aggregate quantity of..... | 224,021 |
| 1899, 162 " " | 221,306 |
| 1900, 325 " " | 183,200 |
| 1901, 112 " " | 132,558 |
| 1902, 131 " " | 175,514 |
| 1903, 170 " " | 218,840 |
| 1904, 115 " " | 174,121 |
| 1905, 167 " " | 239,418 |
| 1906, 205 " " | 344,605 |
| 1907, 255 " " | 427,813 |
| 1908, 355 " " | 598,941 |
| 1909, 308 " " | 550,276 |
| 1910, 383 " " | 679,358 |
| 1911, 421 " " | 728,223 |
| 1912, " " | 796,858 |

In the United States vessels there were in :—

| | Tons. |
|---|---------|
| 1898, 339 cargoes, with an aggregate quantity of..... | 464,852 |
| 1899, 167 " " | 205,571 |
| 1900, 259 " " | 163,575 |
| 1901, 135 " " | 123,229 |
| 1902, 135 " " | 136,652 |
| 1903, 219 " " | 273,986 |
| 1904, 118 " " | 150,359 |
| 1905, 235 " " | 273,344 |
| 1906, 178 " " | 269,800 |
| 1907, 263 " " | 413,087 |
| 1908, 271 " " | 330,514 |
| 1909, 174 " " | 272,291 |
| 1910, 182 " " | 295,714 |
| 1911, 173 " " | 281,916 |
| 1912, " " | 330,958 |

One hundred and sixty-two Canadian and 49 American vessels took cargoes of 343,733 tons through to Montreal intact in 1908 ; 87 Canadian and 9 American of 135,582 in 1907 ; 74 Canadian and 10 American of 108,734 tons in 1906 ; 96 Canadian and 18 American of 180,206 in 1905 ; 56 Canadian and 16 American of 116,095 tons in 1904 ; 56 Canadian and 18 American of 99,582 tons in 1903 ; 19 Canadian and 17 American of 34,804 tons in 1902 ; 23 Canadian and 2 American of 17,303 tons in 1901, 15 of 7,924 tons in 1900, 2 of 558 tons in 1899, 7 of 2,426 in 1898, 7 of 2,324 in 1897, 3 of 1,176 in 1896, 4 of 1,344 tons in 1905, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 934 tons, and 3 in 1891 of 1,441 tons. Three vessels lightened a portion of their cargoes in 1901, 9 in 1900, 11 in 1899, 25 in 1898, 11 in 1897, 16 in 1896, 6 in 1895, 19 in 1894, 34 in 1893, 25 in 1892, and 44 in 1891 ; 222 vessels discharged the whole of their cargoes at Kingston in 1901, 540 in 1900, 316 in 1899, 473 in 1898, 359 in 1897, 335 in 1896, 169 in 1895, 188 in 1894, 369 in 1893, 220 in 1892, and 293 in 1891.

3 GEORGE V., A. 1913

The quantity of grain transhipped at Port Colborne in 1909 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..... | | | 39,040 | 49,628 | 8,202 |

WELLAND CANAL.

The total quantity of freight passed on the Welland canal during the season of 1912 was 2,851,915 tons ; of this quantity 65,228 tons was way or local freight.

There were 2,026,193 tons of freight passed eastward, and 825,722 passed westward.

East and West bound Through Freight.

The total quantity of through freight passed through the whole length of the Welland canal during the season of 1912 was 2,786,687 tons.

Of this quantity 2,008,863 tons were east bound and 777,824 west bound freight.

Of the east bound through freight, Canadian vessels carried 1,415,697 tons and United States vessels carried 593,116 tons ; and of the west bound through freight Canadian vessels carried 473,531 tons and United States vessels carried 304,293 tons, or a total of 1,889,228 tons for Canadian and 897,459 tons for American vessels.

ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1912 was 3,477,188 tons ; of this quantity 2,518,307 tons passed eastward and 958,881 passed westward.

East and West bound Through Freight.

The total quantity of through freight was 2,653,223 tons ; of this quantity 2,085,540 tons were east bound and 567,683 tons were west bound.

Way Freight.

Of the total quantity of (way) or local freight 432,767 were east bound and 391,198 tons west bound freight.

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

The total quantity of through freights 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. |
|-------|--------------------------|--------------------------------|
| | Tons. | Tons. |
| 1898 | 538,108 | 4,436 |
| 1899 | 354,933 | 5,991 |
| 1900 | 288,251 | 6,217 |
| 1901 | 184,420 | 13,714 |
| 1902 | 250,475 | 25,289 |
| 1903 | 390,786 | 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 | 1,291,973 | 233,335 |
| 1912 | 1,559,963 | 236,979 |

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. |
| 1898 | 277,023 | 210,516 | 487,539 |
| 1899 | 225,491 | 135,038 | 360,529 |
| 1900 | 218,960 | 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 |

The total quantity of freight passed through the Welland canal from United States ports to United States ports shows a decrease of 69,599 tons as compared with the previous year ; and a decrease of 71,783 tons as compared with 1898.

3 GEORGE V., A. 1913

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 1912, inclusive.

| Fiscal Year. | Aggregate | Total quantity | Quantity |
|------------------------------|------------------------|---|---|
| | Number of Trips. | transported on the Welland canal. | 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..... | 2,882 | 1,016,165 | 533,957 |
| 1891..... | 2,594 | 975,013 | 553,800 |
| 1892..... | 2,615 | 955,554 | 541,965 |
| 1893..... | 2,843 | 1,294,823 | 631,667 |
| 1894..... | 2,412 | 1,098,221 | 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 |

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The total quantity of freight passed through the several divisions of the Canadian canal system during the season of 1912, 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. | 372 | 54,114 | 975,303 | 34,109,074 | 4,530,792 | 39,669,655 |
| Welland. | 678 | 227,684 | 625,569 | 797,072 | 1,205,912 | 2,851,915 |
| St. Lawrence. | 9,375 | 578,760 | 464,091 | 1,305,395 | 1,119,567 | 3,477,188 |
| Chambly. | 338 | 425,313 | 11,600 | 161,458 | 19,706 | 618,415 |
| St. Peter's. | 2,996 | 11,161 | 7,583 | 37,642 | 15,427 | 74,809 |
| Murray. | 37 | 706 | 101,511 | 67,379 | 448 | 170,081 |
| Ottawa. | 2,880 | 226,600 | 20,958 | 136,634 | 5,278 | 392,350 |
| Rideau. | 3,151 | 28,642 | 18,814 | 105,531 | 3,995 | 160,133 |
| Trent. | 361 | 67,489 | 3,459 | 3,327 | 2,514 | 77,150 |
| St. Andrew's. | | 14,153 | 60 | 81,299 | 37 | 95,549 |

The total quantity of freight moved on the Welland canal was 2,851,915 tons, of which 1,205,912 tons were agricultural products.

On the St. Lawrence canals the total quantity of freight moved was 3,477,188 tons, of which 1,119,567 were agricultural products, and 464,091 tons were manufactures.

On the Ottawa canals the total quantity of freight moved was 392,350 tons : of this quantity 226,600 tons were the produce of the forest.

3 GEORGE V., A. 1913

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 1911 and 1912.

| | TRAFFIC FOR 1912. | | TOTAL TRAFFIC FOR. | | INCREASE. | DECREASE. |
|-----------------------------------|----------------------|-----------------|--------------------|-----------------|-------------|-----------|
| | United States Canal. | Canadian Canal. | Season of 1912. | Season of 1911. | Amount. | Amount. |
| Vessels..... No. | 14,916 | 7,856 | 22,772 | 18,672 | 4,100 | |
| Lockages..... " | 9,888 | 6,200 | 16,088 | 13,293 | 2,795 | |
| Tonnage registered..... net tons. | 30,947,133 | 25,832,244 | 56,779,377 | 41,682,739 | 15,096,638 | |
| " freight..... " | 32,824,815 | 39,069,655 | 72,494,470 | 53,475,260 | 19,019,210 | |
| Passengers..... No. | 29,595 | 37,549 | 67,144 | 79,289 | | 12,145 |
| Coal hard..... net tons. | 1,702,543 | 434,224 | 2,136,767 | 2,047,206 | 89,561 | |
| " soft..... " | 10,289,852 | 2,511,217 | 12,801,069 | 13,228,474 | | 427,405 |
| Flour..... brls. | 6,263,721 | 2,388,710 | 8,652,431 | 7,272,433 | 1,379,998 | |
| Wheat..... bush. | 56,254,517 | 117,679,934 | 173,934,451 | 97,226,895 | 76,707,556 | |
| Grain (excluding wheat). " | 32,107,673 | 37,116,343 | 69,224,016 | 37,714,824 | 31,509,192 | |
| Manufactured & pig iron.net tons. | 413,658 | 284,589 | 698,247 | 399,821 | 298,426 | |
| Salt..... brls. | 558,123 | 90,503 | 648,626 | 621,031 | 27,595 | |
| Copper..... net tons. | 108,891 | 16,963 | 126,854 | 132,526 | | 5,662 |
| Iron ore..... " | 15,169,217 | 31,141,063 | 46,310,280 | 30,737,300 | 11,572,980 | |
| Lumber ft. B. M..... | 645,025,000 | 31,982,500 | 677,007,500 | 465,930,425 | 211,077,075 | |
| Silver ore..... net tons. | | | | | | |
| Building stone..... " | 2,282 | | 2,282 | 2,100 | 182 | |
| Unclassified freight..... " | 928,762 | 700,762 | 1,629,524 | 1,631,120 | | 1,596 |

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

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

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

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

The average number of vessels passing per day through the two canals for the season of 1912 was ninety-six.

A—TABLE showing the total tonnage of the undermentioned articles moved Up and Down

| 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 | 193,749 | 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 | ..... | 1,344 | 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 | 327,394 | 10,830 | 27,728 | 1,549 | 20,876 |
| 1891..... | 13,517 | 198,658 | 185,180 | 8,113 | 52,959 | 65,888 | 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..... | 44,014 | 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 | 163,509 | 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 | ..... | 13,184 |
| 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 |

* Fiscal. † Apples, meals of all kinds, pease, potatoes.

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through the Welland canal, during a period of forty-two years, ended December 31, 1912

| HEAVY GOODS. | | | | | | | |
|--------------|------------------|-------------|--------------------|--|---------|---------|---------|
| Total. | Railway Iron. | Other Iron. | Sugar and Salt. | Iron and 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 | 43,357 |
| 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 | 19 | 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 |
| 306,432 | ..... | 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 | 240,349 |
| 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 | 953,693 |

3 GEORGE V., A. 1913

B.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland canal during a series of forty-two years, ended December 31, 1912.

VEGETABLE FOOD.

| Years. | Flour. | Wheat. | Corn. | Barley. | Oats. | Rye. | Other Articles. † | Total. |
|--------|--------|---------|---------|---------|---------|--------|----------------------|-----------|
| | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Pons. | 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 | 13,588 | 248,894 | 169,185 | 10,216 | 2,810 | 2,405 | 1,833 | 448,931 |
| 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 | | 1,418 | 417,853 |
| 1881 | 9,655 | 121,393 | 103,075 | 252 | | 6 | 1,371 | 235,752 |
| 1882 | 12,205 | 205,876 | 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 | 114,090 | 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 | 67,756 | 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 | 349,060 |
| 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 | 180,921 | 55,432 | 36,072 | 1,711 | 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 | 730,751 | 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 |

* Fiscal. † Apples, meal all kinds, 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-two years, ended December 31, 1912.

| 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 | 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 | | 120,790 | 15,100 | 227,187 |
| 1885 | 124 | 53,233 | 63,229 | 732 | 882 | | 1 | 118,203 | | 1,594 | | 198,416 | 15,029 | 215,039 |
| 1886 | 7,591 | 53,258 | 94,048 | | 4,790 | | 13,201 | 172,888 | 156 | 3,328 | 1 | 180,964 | 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 | 184,563 |
| 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 | | 60,462 | 198,358 | | 297 | | 188,518 | | 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 | | 165,143 | | 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 | 14,243 | 145,787 | | 953 | | 46,024 | | 46,977 |
| 1901 | 17,165 | 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-two years, ended December 31, 1912—*Concluded.*

| 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. |
| 1903..... | 6,082 | 15,439 | 108,917 | 11,433 | 6,112 | 4,174 | 13,568 | 165,725 | 459 | | | 113,072 | | 113,536 |
| 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 | | 9,632 | 162,930 | | 1 | | 73,464 | | 73,465 |
| 1906..... | 15,215 | 13,410 | 135,240 | 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 | 7,148 | 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 | | | 8,571 | 161,925 | | | | 201,893 | | 201,893 |
| 1911..... | 2,852 | 4,950 | 116,706 | | | | 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 |

* Apples, meal all kinds, pease, potatoes.

SESSIONAL PAPER No. 20a

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 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911 and 1912.

| ARTICLES. | CANADIAN VESSELS. | | | | UNITED STATES VESSELS. | | | | TOTAL. | |
|--------------------------------|-------------------|-----------|------------|------------|------------------------|----------|-------|----------|-----------------|----------|
| | Steam. | | Sail. | | Stead. | | Sail. | | Steam and Sail. | |
| | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. |
| | 197 | 103,802 | 114 | 59,022 | 163 | 182,497 | 48 | 22,319 | 522 | 367,640 |
| 1901. | Tons. | Tons. | Tons. | Tons. | Tons. | | | | | |
| Wheat..... | 57,641 | 58,973 | 31,955 | 1,241 | 149,810 | | | | | |
| Corn..... | 7,350 | 4,689 | 55,717 | | 67,756 | | | | | |
| Barley..... | | | 7,119 | | 7,119 | | | | | |
| Oats..... | 944 | | 27,197 | | 28,141 | | | | | |
| Pease..... | | | | | | | | | | |
| Rye..... | 2,961 | | | | 2,961 | | | | | |
| Coal..... | 1,960 | 362 | 357 | | 2,679 | | | | | |
| Miscellaneous merchandise..... | 71,300 | 32,312 | 12,874 | 7,469 | 123,955 | | | | | |
| Shingles, woodenware, &c..... | 18 | | | | 18 | | | | | |
| Sawed lumber..... Ft. B.M. | 6,533,423 | 4,060,251 | 11,089,806 | 13,092,940 | 34,776,420 | | | | | |
| Square timber..... Cub. ft. | 362,441 | 204,682 | 9,384 | 149,531 | 726,038 | | | | | |
| Firewood..... Cords | 165 | 264 | | | 429 | | | | | |
| Staves..... No. | | | | | | | | | | |
| | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. |
| | 196 | 90,791 | 122 | 73,958 | 191 | 201,339 | 52 | 22,097 | 561 | 388,185 |
| 1902. | Tons. | Tons. | Tons. | Tons. | Tons. | | | | | |
| Wheat..... | 82,954 | 85,973 | 52,889 | 221,816 | | | | | | |
| Corn..... | 148 | 1,388 | 66,111 | 67,647 | | | | | | |
| Barley..... | | | 7,418 | 7,418 | | | | | | |
| Oats..... | 1,200 | 43 | 9,963 | 11,206 | | | | | | |
| Pease..... | | | | | | | | | | |
| Rye..... | 3,808 | | 271 | 4,079 | | | | | | |
| Coal..... | 3,977 | 25,732 | 13,497 | 8,332 | 51,538 | | | | | |
| Miscellaneous merchandise..... | 33,111 | 8,723 | 38,351 | 1,594 | 81,779 | | | | | |
| Shingles, woodenware, &c..... | 47 | 28 | 4 | 79 | | | | | | |
| Sawed lumber..... Ft. B.M. | 13,218,960 | 3,256,187 | 25,437,287 | 19,540,426 | 61,452,860 | | | | | |
| Square timber..... Cub. ft. | 370,718 | 557,689 | | 115,000 | 1,043,407 | | | | | |
| Firewood..... Cords | 56 | 40 | | | 96 | | | | | |
| Staves..... No. | | 14,000 | | | 14,000 | | | | | |
| | 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 | 39,473 | 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, &c..... | | 54 | | | 54 | | | | | |
| Sawed lumber..... Ft. B.M. | 12,841,532 | 1,625,955 | 17,871,652 | 14,793,677 | 47,072,736 | | | | | |
| Square timber..... Cub. ft. | 572,000 | 660,000 | | 84,200 | 1,316,200 | | | | | |
| Firewood..... Cords | | 210 | 9 | | 219 | | | | | |
| Staves..... No. | | 641,000 | | | 641,000 | | | | | |

3 GEORGE V., A. 1913

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland canal in Canadian and united States Vessels, &c.—Continued.

| ARTICLES. | CANADIAN VESSELS. | | | | AMERICAN 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 |
| 1904. | Tons. | | Tons. | | Tons. | | Tons. | | Tons. | |
| Wheat..... | 116,794 | | 33,302 | | 14,269 | | | | 164,365 | |
| Corn..... | 12,768 | | 7,814 | | 95,362 | | | | 116,444 | |
| Barley..... | 2,619 | | 824 | | 23,728 | | | | 27,171 | |
| Oats..... | | | | | 16,261 | | | | 16,261 | |
| Pease..... | | | | | 3 | | | | 3 | |
| Rye..... | | | | | | | | | | |
| Coal..... | 1,925 | | 7,187 | | 17,133 | | 7,668 | | 33,913 | |
| Iron ore..... | 34,907 | | | | 1,925 | | | | 36,832 | |
| Miscellaneous merchandise..... | 29,567 | | | | 60,548 | | | | 90,115 | |
| Shingles, woodenware, &c..... | | | | | | | | | | |
| 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..... s Cords. | | | | | 717 | | | | 717 | |
| Staves..... | 634,000 | | | | | | | | 634,000 | |
| | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. |
| | 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 | |
| Barley..... | 8,225 | | 2,570 | | 21,535 | | 3,742 | | 36,072 | |
| Oats..... | | | | | 76 | | | | 76 | |
| Pease..... | | | | | 1,711 | | | | 1,711 | |
| Rye..... | 18,756 | | 35,324 | | 28,330 | | 8,678 | | 91,088 | |
| Coal..... | 14,358 | | 8,023 | | | | | | 22,381 | |
| Iron ore..... | 29,375 | | 7,485 | | 74,975 | | 3,126 | | 114,961 | |
| Merchandise..... | | | 2,748,941 | | 2,325 | | | | 2,325 | |
| Shingles, woodenware, &c..... | 2,867,147 | | | | 38,290,831 | | 12,479,698 | | 54,589,200 | |
| Sawed lumber..... Ft. B. M. | 355,000 | | 951,524 | | | | | | 538,000 | |
| Square timber..... Cub. ft. | | | 183,000 | | 900 | | | | 900 | |
| Firewood..... Cords. | | | | | | | | | | |
| | 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, &c..... | 16 | | 37 | | 851 | | | | 904 | |
| Sawed lumber..... Ft. B. M. | 3,471,514 | | 235,624 | | 25,711,196 | | 10,769,755 | | 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 | |

SESSIONAL PAPER No. 20a

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

| ARTICLES. | CANADIAN VESSELS. | | | | AMERICAN VESSELS. | | | | TOTAL. | |
|-------------------------------|-------------------|----------|------------|------------|-------------------|----------|-------|----------|-----------------|----------|
| | Steam. | | Sail. | | Steam. | | Sail. | | Steam and Sail. | |
| | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. | No. | Tonnage. |
| | 375 | 290,509 | 148 | 81,070 | 408 | 397,616 | 76 | 36,921 | 1,007 | 806,116 |
| 1907. | Tons. | Tons. | Tons. | Tons. | 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, &c..... | | | 2,222 | 2,222 | | | | | | |
| Sawed lumber..... Ft. B.M. | | | 14,395,124 | 11,201,446 | 25,596,570 | | | | | |
| Square timber..... Cub. ft. | 558,090 | 323,000 | | | 881,090 | | | | | |
| 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 | 183,101 | 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..... | 39,733 | 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 | | | | | |
| | 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 | 14,782 | 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 | | | | | |

D.—STATEMENT showing the Quantity of Through Freight passed Down the Welland canal in Canadian and United States Vessels, &c—*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. |
| | 596 | 599,416 | 142 | 88,963 | 249 | 285,704 | 14 | 13,563 | 1,001 | 987,646 |
| 1910. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | |
| Wheat | 481,624 | 22,200 | 77,040 | 580,864 | | | | | | |
| Corn | 15,759 | 214,221 | 229,980 | | | | | | | |
| Barley | 17,159 | 576 | 3,840 | 21,575 | | | | | | |
| Oats | 135,743 | 490 | 136,233 | | | | | | | |
| Pease | | 123 | 123 | | | | | | | |
| Rye | | | | | | | | | | |
| Coal | 216,779 | 114,671 | 29,646 | 894 | 361,990 | | | | | |
| Merchandise | 39,149 | 15,231 | 21,818 | 20,466 | 96,664 | | | | | |
| 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. | 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 | | | | | | | | | | |
| 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 | | | | | |
| | 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. | 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 | 2,008,863 | | | | | |

SESSIONAL PAPER No. 20a

WELLAND CANAL THROUGH FREIGHT—RECAPITULATION.

WELLAND CANAL—WEST BOUND FREIGHT.

The total quantity of Through Freight passed Up the Welland canal in Canadian and United States Vessels during the Season of Navigation in 1912, is as follows :—

| Summary. | Tons. | Tons. |
|--|---------|---------|
| In Canadian steam vessels..... | 473,531 | |
| " sail vessels..... | | |
| Total quantity in Canadian vessels .. | | 473,531 |
| In United States steam vessels..... | 302,043 | |
| " sail vessels..... | 2,250 | |
| Total in United States vessels..... | | 304,293 |
| Grand total freight passed Up the Welland canal in Canadian and United States vessels..... | | 777,824 |

STATEMENT of the Quantity of Through Freight passed Up and Down the Welland canal during the Season of Navigation in 1912.

| Summary. | Tons. | Tons. |
|--|------------------------|----------------------|
| In Canadian steam vessels up..... | 473,531 | |
| " " down..... | 1,259,440 | |
| Total in Canadian steam vessels..... | | 1,732,971 |
| In Canadian sail vessels up..... | | |
| " " down..... | 156,257 | |
| Total in Canadian sail vessels..... | | 156,257 |
| Total quantity in Canadian vessels..... | | 1,889,228 |
| In United States steam vessels up..... | 302,043 | |
| " " down..... | 541,665 | |
| Total in United States steam vessels | | 843,708 |
| In United States sail vessels up | 2,250 | |
| " " down..... | 51,501 | |
| Total in United States sail vessels..... | | 53,751 |
| Total quantity in United States vessels..... | | 897,459 |
| Total in Canadian and United States vessels..... | | 2,786,687 |
| | Down or East Bound. | Up or West Bound. |
| In Canadian vessels..... | 1,415,697 | 473,531 |
| In United States vessels..... | 593,166 | 304,293 |
| Total | 2,008,863 | 777,824 |

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 1900 to 1912.

| Articles. | 1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1806. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| <i>Class 3.</i> | | | | | | | | | | | | | |
| Cement and water lime..... | | | | | 35 | | | | | 5,652 | 484 | | |
| Clay, lime and sand..... | 15 | | | | | 22 | | | | | | | |
| Iron, railway..... | | | 50 | | 8,170 | 10 | | | | | | | |
| " pig..... | 508 | | | | | | | | | | | 1,901 | |
| " all other..... | 4,292 | 1,178 | 5,785 | 2,542 | 1,651 | 384 | 269 | 124 | 553 | 12,689 | 7,154 | 34,540 | 28,996 |
| Steel..... | 5,420 | | | | 16 | 48 | | | | | | | |
| Stone, for cutting..... | | | | | | | | | | | | | |
| Apples..... | | | | | 1 | | | 9,936 | | | | | |
| Barley..... | 1,288 | | | 2,206 | 9,697 | 43,607 | 21,196 | 105,984 | 24,318 | 19,143 | 20,000 | 14,853 | 20,572 |
| Corn..... | 109,359 | 14,319 | 1,719 | 123,864 | 55,021 | 84,204 | 55,559 | | 10,454 | 17,137 | 77,612 | 134,239 | 7,345 |
| Flaxseed..... | | 4,065 | | 3,643 | 212 | 15,694 | 80,570 | 49,159 | 27,500 | 19,634 | 6,607 | 11,696 | 15,413 |
| Flour..... | 1,595 | 1,400 | 6,755 | 16,151 | 24,662 | 14,571 | 9,174 | 3,730 | 5,028 | 21,905 | 27,081 | 44,588 | 38,026 |
| Meal, all kinds..... | | 35 | | 348 | 57 | 270 | 60 | | 156 | | 10,323 | 3,967 | |
| Oats..... | 8,925 | 1,584 | 1,442 | 2,438 | | 21,404 | 37,164 | 66,941 | 28,081 | 65,624 | 129,900 | 147,180 | 164,581 |
| Oil cake..... | | 1,083 | | 462 | 7,846 | 9,229 | | | | | | | |
| Pease..... | 115 | | | 63 | | | | | | 30 | | 20 | 10 |
| Rye..... | 3,078 | 2,561 | 4,079 | 4,260 | | 1,711 | 1,405 | 2,266 | 6,662 | 120 | | | 714 |
| Salt..... | | 50 | | 132 | 615 | 168 | 75 | 143 | 419 | | | | 931 |
| Seed, all kinds..... | | | | | | | | 20 | | | | | |
| Hay, pressed..... | | 246 | | | | | | | | | | | |
| Tobacco, raw..... | | 23 | | | | | | | | | | | |
| Wheat..... | 121,896 | 132,702 | 200,975 | 226,746 | 133,528 | 190,505 | 289,611 | 450,446 | 686,626 | 550,775 | 562,149 | 541,174 | 768,633 |
| All other agricultural products, vegetables..... | | | | | | | | | | 5,876 | | | |
| Hides, skins, horns and hoofs..... | | | | | 10 | | 2 | | | | | | |
| Horses..... | | | | | | | | | | | | | |
| Lard and lard oil..... | | 1,155 | | | | 2,847 | 4,810 | | | | | | |
| Meats, all kinds..... | | 114 | | | | | | | | | | | 41 |
| Pork..... | | 34 | | | | | | | 524 | | | | |
| Tallow..... | | | | 3 | | 53 | | | | | | | |
| All other agricultural products, animal..... | | | | | 1 | | | | | 366 | | | |
| Total, class 3..... | 256,491 | 161,849 | 220,805 | 382,858 | 241,522 | 384,727 | 499,895 | 688,749 | 790,321 | 718,951 | 841,310 | 934,158 | 1,045,262 |

| <i>Class 4.</i> | | | | | | | | | | | | | |
|--------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|-----------|
| Agricultural implements | | 1,785 | 13 | 58 | 17 | | | | | | | | |
| Ashes | 25 | 3 | | 2 | 16 | | | | | | | | |
| Bricks | | | | | | | | 1,548 | | | | | |
| Crockery | | | | | | 93 | | | | | | | |
| Furniture | 1 | 5 | | 3 | 6 | | 6 | | | 2 | | | |
| Glass, all kinds | 6 | 1 | | 15 | 3 | 21 | 11 | 4 | | | | | |
| Molasses | | | 54 | 240 | | 820 | | | | | | | |
| Nails | | | | 19 | | 64 | | | 3 | | | | |
| Oil | 15,647 | 14,987 | 12,091 | 14,619 | 12,848 | 20,700 | 19,995 | 22,111 | 30,002 | 31,149 | 26,932 | 45,930 | 52,871 |
| Paint | | 17 | | 5 | | | | | | | | | |
| Pitch and tar | | | | | | 53 | | 101 | | | | | |
| Rags | | | | 4 | | | | | | | | | |
| Resin | | | | 20 | | | | | | | | | |
| Soda ash | | 4 | | | | 72 | 72 | 15 | | | | | |
| Sugar | | 112 | | | | 2,019 | | | | 173 | 345 | 1,177 | 3,475 |
| Tin | | | | | 87 | 53 | | | | | | | |
| Tobacco | | | | | | 204 | | | | | | | |
| White lead | 16 | | | | | | | | | | | | |
| Whisky, beer and other spirits | 11 | 32 | | 2 | 766 | 635 | 614 | 1,224 | 1,056 | 525 | 959 | 581 | 1,739 |
| Merchandise not enumerated | 92 | 2,420 | 419 | 582 | 713 | 851 | 466 | 2,294 | 2,126 | 10,418 | 9,224 | 11,254 | 13,601 |
| Total, class 4 | 15,798 | 19,366 | 12,577 | 15,569 | 14,456 | 25,572 | 21,164 | 25,749 | 34,730 | 42,265 | 37,462 | 58,942 | 71,686 |
| <i>Class 5.</i> | | | | | | | | | | | | | |
| Barrels, empty | 182 | 66 | 15 | | | | | | | | | | |
| Hoops | | | | | | | | | | | | | |
| Sawed lumber | 15,760 | 2,635 | 1,085 | | | 3,957 | | 100 | | | | 300 | |
| Staves, pipe and barrel | | | | | 394 | | | 2,400 | | | | | |
| " West India and pipe | | | | | | | | | | | | | |
| Timber, square, in vessels | | | | | 1,544 | 1,260 | 1,500 | 4,180 | | | | | |
| " in rafts | | | | | | | | | 900 | 1,800 | 1,360 | 5,560 | |
| Woodenware | | | 17 | | | | | | | | | | |
| Total, class 5 | 15,942 | 3,205 | 1,117 | | 1,938 | 5,217 | 4,000 | 4,180 | | 900 | 1,800 | 1,660 | 5,560 |
| <i>Special class.</i> | | | | | | | | | | | | | |
| Coal | | | | | | 29,351 | 29,172 | 70,489 | 42,075 | 175,115 | 289,567 | 298,873 | 424,988 |
| Iron ore | | | 15,976 | | 17,362 | 3,837 | | | | 1,824 | | | 12,467 |
| Stones, all kinds | | | | | | | | | 1,272 | | | | |
| Totals, special class | | | 15,976 | | 17,362 | 33,188 | 29,172 | 70,489 | 43,367 | 176,939 | 289,567 | 298,873 | 437,455 |
| Grand total | 28,231 | 184,420 | 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 |

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 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1909, 1910, 1911 and 1912.

| Articles. | 1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1909. | 1910. | 1911. | 1912. |
|---|-------|-------|--------|--------|-------|-------|--------|--------|--------|--------|--------|---------|
| | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| <i>Class 3.</i> | | | | | | | | | | | | |
| Bricks..... | 49 | 196 | 22 | 80 | 115 | 132 | | 556 | | | | |
| Brimstone..... | | 5 | 20 | 23 | 12 | | | | | | | |
| Cement and water lime..... | 1,931 | 2,916 | 178 | 3,924 | 39 | 181 | 88 | 13 | 400 | 17,565 | 8,625 | 40,074 |
| Clay, lime and sand..... | 4 | 2 | 1 | 181 | | | | 100 | | | | |
| Cotton, raw..... | | | | 23 | | | | | | | | |
| Fish..... | 8 | 8 | | 8 | 4 | | | 39 | | | | |
| Gypsum..... | | | | | | | | | | | | |
| Iron, railway..... | 74 | 748 | 11,735 | 39,641 | 283 | 126 | 7,289 | 4,119 | | | | |
| " pig..... | 3 | | 558 | 273 | | 312 | 680 | 7,655 | 7,231 | 2,060 | 2,300 | 2,598 |
| " all other..... | 1,428 | 4,950 | 2,904 | 5,845 | 3,782 | 3,633 | 8,235 | 6,987 | | 540 | | |
| Salt..... | 48 | 75 | 4 | 87 | 99 | 150 | 17 | | | | | |
| Steel..... | | 3 | 11 | 332 | 58 | 192 | 111 | 2,561 | 35,153 | | 22,352 | 66,544 |
| Stone for cutting..... | | | | | 41 | | | | | | | |
| Flour..... | | 16 | | | | 18 | | | | | | |
| Hay..... | | | | | | | | 30 | 255 | | | |
| Meals..... | | | | 17 | 25 | | | | | 1,113 | | |
| Oats..... | | | | | | | | | | | | |
| Potatoes..... | | | | | | | | | | | | |
| Seeds, all kinds..... | 218 | 302 | 58 | 325 | 164 | 35 | 17 | | | | | |
| Tobacco, raw..... | | | 1 | 2 | | | | | | | | |
| Agricultural products, not enumerated, vegetable..... | | 1 | 1 | | | 127 | | | | | | |
| Hides and skins..... | | | 16 | 6 | | | | | | | | |
| Horses..... | | | | | | | | | | | | |
| Lard and lard oil..... | | | 11 | | | 28 | 20 | 1 | | | | |
| Meats, other than pork..... | | | | 1 | 25 | | | 15 | | | | |
| Pork..... | 1 | | | | | | | | | | | |
| Wool..... | | | | | | | | | | | 150 | 150 |
| All other articles not enumerated..... | | | | | | | | | | | | |
| Total, class 3..... | 3,764 | 9,222 | 15,520 | 50,768 | 4,647 | 4,934 | 16,457 | 22,076 | 43,039 | 21,278 | 34,427 | 109,366 |

| <i>Class 4.</i> | | | | | | | | | | | | |
|---------------------------------|-------|--------|--------|---------|--------|--------|--------|---------|---------|---------|---------|---------|
| Agricultural implements..... | | | | | | | 5 | | | | | |
| Ashes, pot and pearl..... | | | | 2 | | | | | | | | |
| Crockery and earthenware..... | 5 | | | 32 | 291 | 155 | 294 | 456 | | | | |
| Dye woods, &c..... | | | | | 2 | | | 2 | | | | |
| Furniture..... | 1 | | | 1 | 5 | 2 | 1 | 35 | | 90 | | |
| Glass, all kinds..... | 456 | 612 | 1,384 | 1,207 | 1,671 | 1,641 | 2,519 | 3,334 | | | | |
| Manilla..... | | | | | 24 | 93 | | 37 | | 15 | | |
| Marble..... | | | | | | | | 35 | | | | |
| Molasses..... | | 1 | | 6 | | 1 | | 50 | | | | |
| Nails..... | 80 | 675 | 1,292 | 2,878 | 1,009 | 3,061 | 4,011 | 3,331 | | | | |
| Oil, in barrels..... | 74 | 83 | 14 | 16 | 1,418 | 120 | 148 | 155 | 1 | 80 | 667 | 15 |
| Paint..... | 12 | 69 | 97 | 158 | 202 | 367 | 412 | 295 | | | | |
| Pitch and tar..... | 21 | 27 | 27 | 58 | 198 | 5 | 239 | | | | | |
| Rags..... | | | 1 | 29 | | 15 | | 50 | | | | |
| Resin..... | | | | 1 | | | | 25 | | | | |
| Soda ash..... | 63 | 169 | 201 | 264 | 387 | 28 | 310 | 37 | | | | |
| Stone, wrought..... | | | | | | 1 | | 5 | | | | |
| Sugar..... | 430 | 810 | 1,314 | 204 | 52 | 1,168 | 1,153 | 6,046 | 40 | 3,024 | | 1,275 |
| Tin..... | 117 | 338 | 506 | 209 | 362 | 928 | 1,365 | 1,173 | | | | |
| Turpentine..... | | 1 | 2 | 1 | | | | 1 | | | | |
| White lead..... | 4 | 11 | 37 | 80 | 82 | 80 | 394 | 283 | | | | |
| Whiting..... | 39 | 49 | 61 | 22 | 33 | 158 | 93 | 18 | | | | |
| Whisky, beer, &c..... | 295 | 131 | 182 | 452 | 432 | 384 | 483 | 1,040 | 220 | 1,187 | 163 | 867 |
| Merchandise not enumerated..... | 744 | 1,516 | 1,049 | 3,674 | 6,200 | 15,360 | 11,707 | 16,498 | 21,359 | 15,129 | 12,090 | 12,352 |
| Total, class 4..... | 2,447 | 4,492 | 6,169 | 9,294 | 13,379 | 23,566 | 23,116 | 33,049 | 21,620 | 19,510 | 12,920 | 14,509 |
| <i>Class 5.</i> | | | | | | | | | | | | |
| Barrels, empty..... | | | | | | | | 54,906 | | | | |
| Firewood in vessels..... | | | 3,600 | 40,026 | 40,425 | 43,982 | | 2,307 | | | | |
| Pulpwood..... | | | | | | | | 101,989 | 122,867 | 121,572 | 182,682 | 113,104 |
| Lumber, sawn, in vessels..... | | | | | | | | | 3,984 | | 3,306 | |
| Railway ties in vessels..... | | | | 611 | | | | | | | | |
| Woodenware..... | 1 | | | | | | | 5 | | | | |
| Total, class 5..... | | | 3,600 | 40,637 | 40,425 | 43,982 | 57,218 | 104,326 | 126,851 | 121,572 | 185,988 | 113,104 |
| <i>Special Class.</i> | | | | | | | | | | | | |
| Coal..... | | | | | | 10,200 | | | | | | |
| Iron ore..... | | | | | | 2,861 | | | | | | |
| Total, special class..... | | | | | | 13,961 | | | | | | |
| Grand total..... | 6,211 | 13,714 | 25,289 | 100,699 | 71,512 | 72,482 | 96,791 | 159,451 | 191,510 | 172,360 | 233,335 | 236,979 |

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 1900 to 1912, inclusive.

| Articles. | 1900. | 1901. | 1902. | 1903. | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. | 1910. | 1911. | 1912. |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <i>Class 3.</i> | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| Bricks | | | | | | | | | | | | | |
| Cement and water lime | 18 | | | | | | | | | | 2,000 | | |
| Fish | | | | | | | | 20 | | | | 91 | |
| Iron, railway | | | | | | | | | | | | | |
| " all other | 714 | | 30 | | | 1 | 27 | 30 | | | | 1,863 | 300 |
| Salt | | 105 | | | | | | | | | | | |
| Steel | 3,110 | | | | | | 2 | 509 | 9,086 | | | | |
| Stone for cutting | | | | | | | | | | | | | |
| Apples | | | | | | | | | | | | | |
| Barley | 2,402 | 7,119 | 7,418 | 11,433 | 16,621 | 9,197 | 9,266 | 2,812 | 7,148 | 4,224 | 3,840 | | 2,160 |
| Corn | 60,545 | 55,531 | 66,111 | 108,917 | 60,964 | 93,622 | 135,240 | 124,474 | 99,830 | 100,967 | 126,938 | 116,705 | 91,254 |
| Flour | 7,966 | 17,168 | 13,785 | 6,082 | 8,556 | 24,954 | 15,215 | 18,898 | 17,694 | | 11,859 | 2,852 | 9,878 |
| Hay, pressed | | | | | | 200 | | | | | | | |
| Meal, all kinds | 14,244 | 14,016 | 12,675 | 13,546 | 13,076 | 9,606 | 10,668 | 21,976 | 21,353 | | 8,621 | 7,665 | 12,569 |
| Marble | | | | | | 87 | | | | | | | |
| Nails | | | | | | 1 | | | | | | | |
| Oil cake | 2,705 | 1,302 | 110 | 740 | 16,497 | 228 | | 114 | | | | | |
| Oats | 39,706 | 26,344 | 10,006 | 6,112 | 3 | 10,892 | 11,323 | 4,741 | 2,070 | | | | 1,400 |
| Pease | 4 | | | 22 | | 76 | | 11 | 25 | 40 | 63 | 123 | 150 |
| Potatoes | | | | | | | | | | | | | |
| Rye | 2,149 | | | 4,174 | | | | 2 | 2 | | | | |
| Flax seed | | | | 1,594 | | | 756 | | | 15,452 | | | |
| Seeds, all kinds | | | 10 | 27 | | 43 | 3 | 17 | | | | | |
| Tobacco | | 23 | | | | | | | | | | | |
| Wheat | 18,771 | 23,557 | 32,639 | 15,436 | 14,269 | 15,483 | 13,410 | 21,802 | 24,651 | 17,940 | 10,717 | 4,950 | 15,911 |
| Agricultural products, vegetable | 6 | 10 | | 1 | | | 1 | 7 | | 22,620 | | 19 | 37 |
| Hides and skins, &c. | | | | | | | | | 21 | 315 | 233 | | |
| Horses | 4 | | | 2 | | | | | | | | | |
| Lard and lard oil, &c. | 1,588 | 1,680 | 2,413 | | | | 22 | 86 | | | | | |
| Meats, other than pork | | | | | | | | | | | | | |
| Pork | 117 | 970 | 632 | 152 | 379 | 273 | 268 | 429 | | | | | |
| Sheep | | | | | | | | | 190 | | | | |
| Tallow | 631 | 119 | | | | | | | | | | | |
| Wool | | 3 | 752 | 482 | 134 | 21 | 89 | 30 | | 157 | 233 | 9 | |
| Total, class 3 | 154,680 | 147,947 | 146,581 | 168,720 | 130,301 | 163,301 | 196,301 | 196,061 | 182,085 | 161,738 | 164,564 | 134,054 | 133,659 |

| Class 4. | | | | | | | | | | | | |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Agricultural implements | | | 399 | | 396 | 552 | 494 | | 2 | 254 | | |
| Crockery and earthenware | | | | | | | | 5 | | | | |
| Furniture | 3 | 17 | | | | 1 | | | | | | 2 |
| Marble | 4 | | | | | | | | | | | |
| Molasses | 57 | | | | | | | 3 | | | | |
| Nails | | | | | | | | 8 | 15 | | 8 | 45 |
| Oil, in barrel | 17 | 22 | 1,594 | 2,000 | 1 | | | 1 | 1 | | | 2 |
| Paint | 36 | | | | 17 | 42 | 1 | | | | | |
| Rags | | | | 4 | | 4 | | | | | | |
| Soda ash | | | | | | | | | | | | |
| Stone, wrought | | | | | | | | | | | | |
| Sugar | 154 | 448 | 280 | | 53 | 53 | 840 | 26,075 | | 1,196 | | 26,303 |
| White lead | | | | | | 7 | | | | | | 11,078 |
| Whiting | | | | | | | | 4 | | | | |
| Whisky, beer and all other spirits | 1 | 1 | | 3 | | | | 21 | | | 122 | 230 |
| Merchandies | 7,889 | 3,327 | 1,928 | 2,010 | 1,554 | 2,008 | 2,324 | 41,621 | 1,857 | 5,866 | 67,860 | 64,059 |
| | | | | | | | | 30 | | | | 137 |
| | 8,164 | 3,805 | 4,218 | 4,017 | 2,021 | 2,666 | 3,660 | 67,768 | 1,857 | 7,316 | 67,890 | 90,639 |
| | | | | | | | | | | | | 78,698 |
| Class 5. | | | | | | | | | | | | |
| Empty barrels | | | | | | | | | | | | |
| Firewood, in vessels | | | | | | | | | | | | |
| Lumber, sawn, in vessels | 5 | 282 | | | | 3 | 2 | 1 | | | | |
| Masts and spars, in vessels | | | 4 | | 717 | 2,700 | 3,609 | 1,980 | 3,509 | | 1,531 | 2,046 |
| Hop poles | 55,128 | 38,085 | 72,806 | 48,337 | 30,194 | 15,726 | 27,701 | 14,314 | 21,571 | 24,327 | 11,738 | 30,191 |
| Railway ties, in vessels | | | | | | | | | | | | 2,394 |
| Shingles | | | | | 154 | | | | | | | 26,614 |
| Split posts | | | | | 652 | 2,248 | | 2,151 | 478 | | | |
| Staves, salt barrels | | | | | | 62 | 53 | 70 | | | | |
| Timber, square, in vessels | | | | | | 12 | | | | | 25 | |
| Woodenware, &c. | | | | | | | 1,500 | | | | | |
| | | | | | | | | | | 125 | | 723 |
| Total, class 5 | | | | | | | | | | 2,932 | 1,583 | 2,270 |
| | 55,133 | 38,367 | 72,810 | 48,337 | 31,717 | 20,751 | 32,865 | 18,516 | 25,558 | 27,384 | 14,877 | 32,237 |
| | | | | | | | | | | | | 32,001 |
| Special class. | | | | | | | | | | | | |
| Coal | | | | | | | | | | | | |
| Sand | | | | | | | | | | | | |
| Kryolite | 992 | 357 | 501 | | 1,100 | 3,346 | 4,400 | 110,347 | | 400 | 201,893 | 223,942 |
| Iron ore | | | | | | | | | | | | 166,419 |
| | | | | | | | | 2,734 | | | | |
| Total, special class | | | | | | | | 1,316 | | | 1,552 | 4,483 |
| | | | | | | | | | | | | 4,979 |
| Grand total | 992 | 357 | 501 | | 1,100 | 3,346 | 4,400 | 114,397 | | 400 | 203,445 | 228,425 |
| | 218,960 | 190,476 | 224,110 | 221,074 | 165,337 | 190,547 | 237,226 | 396,743 | 209,518 | 193,838 | 450,776 | 485,355 |
| | | | | | | | | | | | | 415,756 |

3 GEORGE V., A. 1913

L.—STATEMENT of the quantity of Grain Transhipped to the following Ports for the season of 1912.

| Ports. | Wheat. | Oats. | Barley. | Corn. | Other grain. | Total. | Total. |
|------------------|-----------|-----------|----------|----------|--------------|------------|---------|
| | Bushels. | Bushels. | Bushels. | Bushels. | Bushels. | Bushels. | Tons. |
| Kingston. | 7,401,867 | 4,012,177 | 560,542 | 145,143 | 334 | 12,120,063 | 307,790 |
| Prescott. | 14,000 | ..... | ..... | ..... | ..... | 14,000 | 420 |
| Ogdensburg. .... | ..... | ..... | ..... | 49,000 | ..... | 49,000 | 1,372 |
| Total bushels | 7,415,867 | 4,012,177 | 560,542 | 194,143 | 334 | 12,183,063 | |
| Total tons. | 222,476 | 68,307 | 13,453 | 5,436 | 10 | | 309,582 |

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M.—The quantity of Coal passed through the Welland canal during a series of years from 1885 to 1912 inclusive, 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. |
|-----------|--|-------|--|-------|---|---------|---------|
| | 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 | 223,445 |
| 1897..... | | 4 | 165,143 | | 1,277 | 9,799 | 176,223 |
| 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 |

3 GEORGE V., A. 1913

N.—STATEMENT showing the quantity of Coal passed through the whole length of the St. Lawrence canals during the season of 1885 to 1912, 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. | 9,360 | 903,237 | 912,597 |

SESSIONAL PAPER No. 20a

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

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. |
|---------------------|---|---|--|
| 1901. | Tons. | Tons. | Tons. |
| Barley..... | | | |
| Corn..... | 14,319 | 4,328 | 49,609 |
| Oats..... | 1,584 | 853 | 25,704 |
| Pease..... | | | |
| Rye..... | 2,961 | | |
| Wheat..... | 132,702 | 8,051 | 9,657 |
| Total, grain..... | 151,566 | 13,732 | 83,370 |
| Other articles..... | 32,854 | 128,614 | 91,799 |
| Total..... | 184,420 | 142,346 | 175,169 |
| 1902. | | | |
| Barley..... | | | 7,418 |
| Corn..... | 1,719 | 10,335 | 55,583 |
| Oats..... | 1,412 | | 9,764 |
| Pease..... | | | |
| Rye..... | 4,079 | | |
| Wheat..... | 200,075 | 12,452 | 8,389 |
| Total, grain..... | 208,215 | 22,787 | 81,165 |
| Other articles..... | 42,260 | 32,946 | 179,914 |
| Total..... | 250,475 | 55,733 | 261,078 |
| 1903. | | | |
| Barley..... | 2,206 | 1,017 | 11,433 |
| Corn..... | 116,223 | 13,846 | 80,689 |
| Oats..... | 2,438 | | 5,315 |
| Pease..... | 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 |
| Pease..... | | | 3 |
| Rye..... | | | |
| Wheat..... | 133,528 | 18,908 | 11,929 |
| Total, grain..... | 198,246 | 23,711 | 102,523 |
| Other articles..... | 77,031 | 80,092 | 138,475 |
| Total..... | 375,277 | 103,803 | 240,998 |

3 GEORGE V., A. 1913

O.—STATEMENT showing the Quantity of Through Freight passed down the Welland canal, &c.—*Continued.*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. |
|---------------------|-----------------------------------|---|--|
| 1905. | Tons. | Tons. | Tons. |
| Barley..... | 43,607 | 2,628 | 9,197 |
| Corn..... | 84,204 | 3,095 | 93,622 |
| Oats..... | 21,404 | 3,776 | 16,892 |
| Pease..... | | | 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 |
| Pease..... | | 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 |
| 1907. | | | |
| Barley..... | 9,936 | 492 | 2,812 |
| Corn..... | 106,299 | 31,901 | 133,493 |
| Oats..... | 67,063 | 1,565 | 4,741 |
| Pease..... | | | 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 |
| Pease..... | | | 40 |
| Rye..... | 6,662 | 3 | 2 |
| Wheat..... | †686,626 | 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 |

SESSIONAL PAPER No. 20a

O.—STATEMENT showing Quantity of Through Freight passed down the Welland canal, &c.—*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. |
|---------------------|---|---|--|
| 1909. | Tons. | Tons. | Tons. |
| Barley..... | 19,143 | | 4,008 |
| Corn..... | 17,137 | 22,798 | 100,967 |
| Oats..... | 65,624 | 2,872 | 6,639 |
| Pease..... | 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 | |
| Pease..... | | | 123 |
| Rye..... | | | |
| Wheat..... | 502,149 | 7,908 | 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 |
| 1911. | | | |
| Barley..... | 14,331 | 291 | |
| Corn..... | 134,239 | 22,988 | 116,705 |
| Oats..... | 147,180 | 16,153 | |
| Pease..... | | | |
| 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 | |
| Pease..... | 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 |

TABLE 1.—COMPARATIVE STATEMENT of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation 1911 and 1912.

| | 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. |
| 1911. | | | | | | | | | | | | | |
| Sault Ste. Marie..... | 644,899 | 1,585,279 | 22,157 | 915,601 | 2,236,880 | 23,269,870 | 2,070,307 | 206,716 | 4,974,243 | 25,977,466 | 30,951,709 | 3,177,581 | 27,774,128 |
| Welland..... | 318,764 | 827,392 | 190,101 | 693 | 309,603 | 175,752 | 24,451 | 690,873 | 842,919 | 1,694,710 | 2,537,629 | 1,296,480 | 1,241,149 |
| St. Lawrence..... | 629,642 | 1,086,547 | 328,732 | 38,085 | 194 | 12 | 392 | 1,022,104 | 958,960 | 2,146,748 | 3,103,708 | 2,063,861 | 1,041,847 |
| Chambly..... | 399,728 | 12,647 | 31,465 | | | | | 155,989 | 431,193 | 168,636 | 599,829 | 443,846 | 155,983 |
| St. Peters..... | 26,177 | 46,121 | | | | | | | 29,177 | 46,121 | 75,298 | 75,298 | |
| Murray..... | 152,964 | 6,798 | 15 | | | | | 3,680 | 152,979 | 10,478 | 163,457 | 159,409 | 4,048 |
| Ottawa..... | 53,453 | 221,029 | | 41,340 | | | 4,249 | | 57,702 | 262,369 | 320,071 | 312,209 | 7,802 |
| Rideau..... | 77,378 | 84,931 | | | | | | 10,018 | 77,378 | 94,849 | 172,227 | 159,738 | 12,489 |
| Trent..... | 23,908 | 33,382 | | | | | | | 23,908 | 33,382 | 57,290 | 57,290 | |
| St. Andrews..... | 40,603 | 6,532 | | | | | | | 40,603 | 6,532 | 47,135 | 47,135 | |
| Grand total.... | 2,370,516 | 3,910,558 | 572,470 | 995,719 | 2,546,677 | 23,445,634 | 2,099,399 | 2,089,380 | 7,569,062 | 30,441,291 | 38,030,353 | 7,792,907 | 30,237,446 |
| 1912. | | | | | | | | | | | | | |
| Sault Ste. Marie..... | 770,976 | 2,162,521 | 16,883 | 857,777 | 1,807,181 | 32,253,916 | 1,326,457 | 473,944 | 3,921,497 | 35,748,158 | 38,669,655 | 4,090,362 | 35,579,293 |
| Welland..... | 440,946 | 975,826 | 137,305 | 3,699 | 235,437 | 180,319 | 12,034 | 866,349 | 825,722 | 2,096,193 | 2,851,915 | 1,553,116 | 1,298,799 |
| St. Lawrence..... | 678,046 | 1,371,077 | 280,448 | 48,306 | 201 | 500 | 196 | 1,098,424 | 958,881 | 2,518,307 | 3,477,188 | 2,340,143 | 1,137,045 |
| Chambly..... | 5,939 | 9,378 | 432,324 | | | | | 170,774 | 438,263 | 180,152 | 618,415 | 447,702 | 170,713 |
| St. Peters..... | 33,575 | 40,934 | | | | | | 300 | 33,575 | 41,234 | 74,809 | 74,809 | 300 |
| Murray..... | 162,155 | 5,429 | 300 | | | | 866 | 1,331 | 163,321 | 6,760 | 170,081 | 167,520 | 2,561 |
| Ottawa..... | 53,092 | 283,637 | | 51,886 | | | 3,735 | | 56,827 | 335,523 | 392,350 | 383,515 | 8,835 |
| Rideau..... | 78,570 | 68,986 | | 170 | | | | 12,407 | 78,570 | 82,563 | 160,133 | 146,963 | 13,170 |
| Trent..... | 29,101 | 48,049 | | | | | | | 29,101 | 48,049 | 77,150 | 77,150 | |
| St. Andrews..... | 88,044 | 7,505 | | | | | | | 88,044 | 7,505 | 95,549 | 95,549 | |
| Grand total.... | 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 | 9,376,529 | 38,210,716 |

TABLE 2.—STATEMENT showing the Number, Tonnage and Nationality of Vessels passed through the several Canals during the season of Navigation in 1912.

| VESSELS. | TOTAL NUMBER 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. | |
| CANADIAN VESSELS. | | | | | | | | | | | | |
| <i>Steam and Sail.</i> | | | | | | | | | | | | |
| Sault Ste. Marie..... | 2,643 | 1,360,637 | 1,334,448 | 178,172 | 17,625 | 1,008 | ..... | 170,567 | 233,772 | 1,710,384 | 1,585,845 | 3,296,229 |
| Welland..... | 1,946 | 660,299 | 622,599 | 240,100 | 1,222 | 6,717 | 1,053 | 5,599 | 277,466 | 912,715 | 902,250 | 1,814,965 |
| St. Lawrence..... | 9,201 | 1,600,803 | 1,484,099 | 162,802 | ..... | 10 | ..... | 604 | 248,184 | 1,764,219 | 1,732,283 | 3,496,502 |
| Chambly..... | 486 | 17,815 | 18,053 | 5,353 | ..... | ..... | ..... | 4,629 | 22,868 | 22,682 | 22,682 | 45,550 |
| St. Peters..... | 1,205 | 44,813 | 43,546 | ..... | ..... | ..... | ..... | 160 | 160 | 44,813 | 43,706 | 88,519 |
| Murray..... | 1,010 | 229,437 | 115,434 | 24,824 | ..... | 2,172 | ..... | 3,696 | 10,739 | 260,129 | 126,173 | 386,302 |
| Ottawa..... | 2,662 | 235,730 | 242,613 | ..... | 2,139 | ..... | ..... | 269 | ..... | 235,999 | 244,752 | 480,751 |
| Rideau..... | 2,960 | 96,732 | 99,111 | 6,156 | 190 | ..... | ..... | 6,500 | ..... | 102,888 | 105,801 | 208,689 |
| Trent..... | 3,998 | 106,952 | 101,903 | ..... | ..... | ..... | ..... | ..... | ..... | 106,952 | 101,903 | 208,855 |
| St. Andrews..... | 1,260 | 104,385 | 206,588 | ..... | ..... | ..... | ..... | ..... | ..... | 104,385 | 106,588 | 210,973 |
| Total Canadian..... | 27,371 | 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 |
| UNITED STATES VESSELS. | | | | | | | | | | | | |
| Sault Ste. Marie..... | 5,213 | 10,104 | 902 | 114,132 | 427,591 | 5,486,876 | 15,812,674 | 601,928 | 81,808 | 6,213,040 | 16,322,975 | 22,536,015 |
| Welland..... | 959 | 1,278 | 1,323 | 126,462 | 1,882 | 268,637 | 106,210 | 4,691 | 264,052 | 401,068 | 463,467 | 864,535 |
| St. Lawrence..... | 1,805 | 24,815 | 10,649 | 351,208 | 20,389 | 22,824 | 2,937 | 61 | 413,450 | 398,908 | 447,425 | 846,333 |
| Chambly..... | 3,319 | 97 | 1,352 | 170,749 | ..... | ..... | ..... | ..... | 172,237 | 170,846 | 173,589 | 344,435 |
| St. Peters..... | 8 | 304 | 210 | ..... | 56 | ..... | ..... | 56 | ..... | 360 | 266 | 626 |
| Murray..... | 75 | 419 | 152 | 875 | 234 | 197 | 90 | 477 | 317 | 1,968 | 793 | 2,761 |
| Ottawa..... | 397 | 12,786 | 536 | ..... | 20,178 | ..... | ..... | 7,098 | ..... | 19,884 | 20,714 | 40,598 |
| Rideau..... | 9 | 493 | 394 | ..... | ..... | ..... | ..... | ..... | ..... | 493 | 394 | 887 |
| Trent..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| St. Andrews..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Total United States..... | 11,785 | 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 |
| Grand Total Canadian and United States..... | 39,156 | 4,507,599 | 4,183,822 | 1,380,833 | 491,506 | 5,788,441 | 16,012,964 | 795,046 | 1,731,314 | 12,471,919 | 22,401,606 | 34,873,525 |

TABLE 3.—STATEMENT showing the Number, Tonnage and Nationality of Vessels

| VESSELS. | Total Number | FROM CANADIAN TO CANADIAN PORTS. | | FROM CANADIAN TO UNITED STATES PORTS. | |
|--|-----------------|--|-----------|---|---------|
| | | Up. | Down. | Up. | Down. |
| SAULTE STE. MARIE CANAL. | | | | | |
| Canadian vessels, steam..... | 2,492 | 1,343,837 | 1,321,483 | 178,172 | 17,127 |
| " " sail..... | 151 | 16,800 | 12,965 | ..... | 498 |
| Total Canadian..... | 2,643 | 1,360,637 | 1,334,448 | 178,172 | 17,625 |
| United States vessels, steam..... | 5,190 | 9,108 | 196 | 114,132 | 425,059 |
| " " sail..... | 23 | 996 | 706 | ..... | 2,532 |
| Total United States..... | 5,213 | 10,104 | 902 | 114,132 | 427,591 |
| Grand Total, Sault Ste. Marie canal .. | 7,856 | 1,370,741 | 1,335,350 | 292,304 | 445,216 |
| WELLAND CANAL. | | | | | |
| Canadian vessels, steam..... | 1,613 | 596,464 | 556,626 | 208,828 | 1,222 |
| " " sail..... | 333 | 63,835 | 65,883 | 31,272 | ..... |
| Total Canadian..... | 1,946 | 660,299 | 622,509 | 240,100 | 1,222 |
| United States vessels, steam..... | 867 | 1,278 | 1,323 | 108,019 | 1,294 |
| " " " sail..... | 92 | ..... | ..... | 18,443 | 588 |
| Total United States..... | 959 | 1,278 | 1,323 | 126,462 | 1,882 |
| Grand Total, Welland canal..... | 2,905 | 661,577 | 623,832 | 366,562 | 3,104 |
| ST. LAWRENCE CANALS. | | | | | |
| Canadian vessels, steam..... | 4,382 | 952,126 | 854,302 | 150,621 | ..... |
| " " sail..... | 4,819 | 648,677 | 629,797 | 12,181 | ..... |
| Total Canadian..... | 9,201 | 1,600,803 | 1,484,099 | 162,802 | ..... |
| United States vessels, steam..... | 1,164 | 3,244 | 3,146 | 332,353 | 63 |
| " " " sail..... | 641 | 21,571 | 7,503 | 18,855 | 20,326 |
| Total United States..... | 1,805 | 24,815 | 10,649 | 351,208 | 20,389 |
| Grand Total, St. Lawrence canals. . . | 11,006 | 1,625,618 | 1,494,748 | 514,010 | 20,389 |
| CHAMBLY CANAL. | | | | | |
| Canadian vessels, steam..... | 279 | 13,945 | 14,154 | 142 | ..... |
| " " sail..... | 207 | 3,570 | 3,899 | 5,211 | ..... |
| Total Canadian..... | 486 | 17,515 | 18,053 | 5,353 | ..... |
| United States vessels, steam..... | 1 | 97 | ..... | ..... | ..... |
| " " sail..... | 3,318 | ..... | 1,352 | 170,749 | ..... |
| Total United States..... | 3,319 | 97 | 1,352 | 170,749 | ..... |
| Grand total, Chamby canal..... | 3,705 | 17,612 | 19,405 | 176,102 | ..... |
| ST. PETERS CANAL. | | | | | |
| Canadian vessels, steam..... | 353 | 19,725 | 16,775 | | |
| " " sail..... | 852 | 25,088 | 26,771 | | |
| Total Canadian..... | 1,205 | 44,813 | 43,546 | | |

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passed through the several canals, during the Season of Navigation in 1912.

| FROM UNITED STATES TO UNITED STATES PORTS. | | FROM UNITED STATES TO CANADIAN PORTS. | | TONS. | | TOTAL TONS. |
|--|------------|---|---------|-----------|------------|-------------|
| Up. | Down. | Up. | Down. | Up. | Down. | |
| 1,008 | | 170,118 | 232,887 | 1,693,135 | 1,571,497 | 3,264,632 |
| | | 449 | 585 | 17,249 | 14,348 | 31,597 |
| 1,008 | | 170,567 | 233,772 | 1,710,384 | 1,585,845 | 3,296,229 |
| 5,486,165 | 15,809,670 | 596,682 | 81,608 | 6,206,087 | 16,316,533 | 22,522,620 |
| 711 | 3,004 | 5,246 | 200 | 6,953 | 6,442 | 13,395 |
| 5,486,876 | 15,812,674 | 601,928 | 81,808 | 6,213,040 | 16,322,975 | 22,536,015 |
| 5,487,884 | 15,812,674 | 772,495 | 315,580 | 7,923,424 | 17,908,820 | 25,832,244 |
| 6,335 | 1,053 | 5,599 | 242,162 | 817,226 | 801,063 | 1,618,289 |
| 382 | | | 35,304 | 95,489 | 101,187 | 196,676 |
| 6,717 | 1,053 | 5,599 | 277,466 | 912,715 | 902,250 | 1,814,965 |
| 263,106 | 187,767 | 3,515 | 238,290 | 375,918 | 428,674 | 804,592 |
| 5,531 | 8,443 | 1,176 | 25,762 | 25,150 | 34,793 | 59,943 |
| 268,637 | 196,210 | 4,691 | 264,052 | 401,068 | 463,467 | 864,535 |
| 275,354 | 197,263 | 10,290 | 541,518 | 1,313,783 | 1,365,717 | 2,679,500 |
| 10 | | | 221,197 | 1,102,757 | 1,075,499 | 2,178,256 |
| | | 604 | 26,987 | 661,462 | 656,784 | 1,318,246 |
| 10 | | 604 | 248,184 | 1,764,219 | 1,732,283 | 3,496,502 |
| 22,649 | 2,752 | 61 | 375,439 | 358,307 | 381,400 | 739,707 |
| 175 | 185 | | 38,011 | 40,601 | 66,025 | 106,626 |
| 22,824 | 2,937 | 61 | 413,450 | 398,908 | 447,425 | 846,333 |
| 22,834 | 2,937 | 665 | 661,634 | 2,163,127 | 2,179,708 | 4,342,835 |
| | | | | 14,087 | 14,154 | 28,241 |
| | | | 4,629 | 8,781 | 8,528 | 17,309 |
| | | | 4,629 | 22,868 | 22,682 | 45,550 |
| | | | | 97 | | 97 |
| | | | 172,237 | 170,749 | 173,589 | 344,338 |
| | | | 172,237 | 170,846 | 173,589 | 344,435 |
| | | | 176,866 | 193,714 | 196,271 | 389,985 |
| | | | | 19,725 | 16,775 | 36,500 |
| | | | 160 | 25,088 | 26,931 | 52,019 |
| | | | 160 | 44,813 | 43,706 | 88,519 |

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TABLE 3—STATEMENT showing the Number, Tonnage, and Nationality of Vessels

| VESSELS. | Total Number | FROM CANADIAN TO CANADIAN PORTS. | | FROM CANADIAN TO UNITED STATES PORTS. | |
|---------------------------------------|-----------------|--|---------|---|--------|
| | | Up. | Down. | Up. | Down. |
| ST. PETER'S CANAL— <i>Con.</i> | | | | | |
| United States vessels, steam..... | 2 | 176 | 13 | | |
| " " sail..... | 6 | 128 | 197 | | 56 |
| Total United States..... | 8 | 304 | 210 | | 56 |
| Grand total, St. Peter's canals..... | 1,213 | 45,117 | 43,756 | | 56 |
| MURRAY CANAL. | | | | | |
| Canadian vessels, steam..... | 834 | 205,664 | 94,153 | 22,135 | |
| " " sail..... | 176 | 23,773 | 21,281 | 2,689 | |
| Total Canadian..... | 1,010 | 229,437 | 115,434 | 24,824 | |
| United States vessels, steam..... | 65 | 419 | 131 | 441 | 81 |
| " " sail..... | 10 | | 21 | 434 | 153 |
| Total United States..... | 75 | 419 | 152 | 875 | 234 |
| Grand total, Murray canal..... | 1,085 | 229,856 | 115,856 | 25,699 | 234 |
| OTTAWA CANALS. | | | | | |
| Canadian vessels, steam..... | 1,007 | 97,961 | 104,438 | | 841 |
| " " sail..... | 1,655 | 137,769 | 138,175 | | 1,298 |
| Total Canadian..... | 2,662 | 235,730 | 242,613 | | 2,139 |
| United States, vessels, steam..... | | | | | |
| " " sail..... | 397 | 12,786 | 536 | | 20,178 |
| Total United States..... | 397 | 12,786 | 536 | | 20,178 |
| Grand total, Ottawa canals..... | 3,059 | 248,516 | 243,149 | | 22,317 |
| RIDEAU CANAL. | | | | | |
| Canadian vessels, steam..... | 2,257 | 65,614 | 68,385 | 6,156 | 190 |
| " " sail..... | 703 | 31,118 | 30,726 | | |
| Total Canadian..... | 2,960 | 96,732 | 99,111 | 6,156 | 190 |
| United States vessels steam..... | | | | | |
| " " sail..... | 9 | 493 | 394 | | |
| Total United States..... | 9 | 493 | 394 | | |
| Grand total, Rideau canal..... | 2,969 | 97,225 | 99,505 | 6,156 | 190 |
| TRENT VALLEY CANALS. | | | | | |
| Canadian vessels, steam..... | 3,227 | 76,848 | 73,392 | | |
| " " sail..... | 771 | 30,104 | 28,511 | | |
| Total Canadian..... | 3,998 | 106,952 | 101,903 | | |
| United States vessels, steam..... | | | | | |
| " " sail..... | | | | | |
| Total United States..... | | | | | |
| Grand total, Trent Valley canals..... | 3,998 | 106,952 | 101,903 | | |

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passed through the several Canals during the Season of Navigation in 1912—*Con.*

| FROM UNITED STATES TO UNITED STATES PORTS. | | FROM UNITED STATES TO CANADIAN PORTS. | | TONS. | | TOTAL TONS. |
|--|-------|---|--------|---------|---------|-------------|
| Up. | Down. | Up. | Down. | Up. | Down. | |
| | | | | | | |
| | | | | 176 | 13 | 189 |
| | | 56 | | 184 | 253 | 437 |
| | | 56 | | 360 | 266 | 626 |
| | | 56 | 160 | 45,173 | 43,972 | 89,145 |
| | | | | | | |
| 2,172 | | 3,593 | 9,739 | 233,564 | 103,892 | 337,456 |
| | | 103 | 1,000 | 26,565 | 22,281 | 48,846 |
| 2,172 | | 3,696 | 10,739 | 260,129 | 126,173 | 386,302 |
| 197 | 90 | 267 | 293 | 1,324 | 595 | 1,919 |
| | | 210 | 24 | 644 | 198 | 842 |
| 197 | 90 | 477 | 317 | 1,968 | 793 | 2,761 |
| 2,369 | 90 | 4,173 | 11,056 | 262,097 | 126,966 | 389,063 |
| | | | | | | |
| | | 269 | | 98,230 | 105,279 | 203,509 |
| | | | | 137,769 | 139,473 | 277,242 |
| | | 269 | | 235,999 | 244,752 | 480,751 |
| | | | | | | |
| | | 7,098 | | 19,884 | 20,714 | 40,598 |
| | | 7,098 | | 19,884 | 20,714 | 40,598 |
| | | 7,367 | | 255,883 | 265,466 | 521,349 |
| | | | | | | |
| | | | 6,500 | 71,770 | 75,075 | 146,845 |
| | | | | 31,118 | 30,726 | 61,844 |
| | | | 6,500 | 102,888 | 105,801 | 208,689 |
| | | | | | | |
| | | | | 493 | 394 | 887 |
| | | | | 493 | 394 | 887 |
| | | | 6,500 | 103,381 | 106,195 | 209,576 |
| | | | | | | |
| | | | | 76,848 | 70,392 | 150,240 |
| | | | | 30,104 | 28,511 | 58,615 |
| | | | | 106,952 | 101,993 | 208,855 |
| | | | | | | |
| | | | | 106,952 | 101,903 | 208,855 |

3 GEORGE V., A. 1913

TABLE 3.—STATEMENT showing the Number, Tonnage and Nationality of Vessels passed

| VESSELS. | Total Number | FROM CANADIAN TO CANADIAN PORTS. | | FROM CANADIAN TO UNITED STATES PORTS. | |
|-------------------------------------|-----------------|--|---------|---|-------|
| | | Up. | Down. | Up. | Down. |
| ST. ANDREWS CANAL. | | | | | |
| Canadian vessels, steam..... | 743 | 48,748 | 50,126 | | |
| " " sail..... | 517 | 55,637 | 56,462 | | |
| Total Canadian..... | 1,260 | 104,385 | 106,588 | | |
| United States vessels, steam..... | | | | | |
| " " sail..... | | | | | |
| Total United States..... | | | | | |
| Grand total, St. Andrews canal..... | 1,260 | 104,385 | 106,588 | | |

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through the several Canals during the Season of Navigation in 1912—*Concluded.*

| FROM UNITED STATES TO UNITED STATES PORTS. | | FROM UNITED STATES TO CANADIAN PORTS. | | TONS. | | TOTAL TONS. |
|--|-------|---|-------|---------|---------|-------------|
| Up. | Down. | Up. | Down. | Up. | Down. | |
| | | | | 48,748 | 50,126 | 98,874 |
| | | | | 55,637 | 56,462 | 112,099 |
| | | | | 104,385 | 106,588 | 210,973 |
| | | | | | | |
| | | | | | | |
| | | | | 104,385 | 106,588 | 210,973 |

TABLE 4.—Comparative Statement of all the canals for the Years ending December 31, 1911 and 1912.

| Articles. | 1911. | 1912. | Increase. | Decrease. |
|-------------------------------------|------------|------------|-----------|-----------|
| <i>Class No. 1.</i> | Tons. | Tons. | Tons. | Tons. |
| Canadian vessels—Steam | 7,286,949 | 8,062,842 | 775,893 | ..... |
| " Sail | 1,885,243 | 2,174,493 | 289,250 | ..... |
| United States vessels—Steam | 17,517,229 | 24,069,124 | 6,551,895 | ..... |
| " " Sail | 714,393 | 567,066 | ..... | 147,327 |
| Total, Class No. 1 | 27,403,814 | 34,873,525 | 7,617,038 | 147,327 |
| <i>Class No. 2.</i> | No. | No. | No. | No. |
| Passengers | 304,904 | 292,267 | ..... | 12,637 |
| <i>Class No. 3.</i> | Tons. | Tons. | Tons. | Tons. |
| Barley | 145,576 | 206,789 | 61,213 | ..... |
| Buckwheat | 84 | 253 | 169 | ..... |
| Corn | 451,597 | 148,218 | ..... | 303,379 |
| Oats | 657,878 | 762,302 | 104,424 | ..... |
| Rye | 3,701 | 13,263 | 9,562 | ..... |
| Flax | 97,334 | 224,848 | 125,514 | ..... |
| Pease | 163 | 228 | 65 | ..... |
| Wheat | 3,528,185 | 5,122,696 | 1,594,511 | ..... |
| Flour | 366,870 | 342,636 | ..... | 24,234 |
| Hay | 73,013 | 35,420 | ..... | 37,593 |
| Other mill products | 41,683 | 27,894 | ..... | 13,189 |
| Fruit and vegetables | 12,740 | 10,836 | ..... | 1,904 |
| Potatoes | 8,839 | 8,293 | ..... | 546 |
| Live stock | 3,135 | 1,692 | ..... | 1,443 |
| Poultry, game and fish | 2,062 | 2,710 | 648 | ..... |
| Dressed meats | 712 | 346 | ..... | 366 |
| Other packing house products | 1,266 | 2,403 | 1,137 | ..... |
| Hides and leather | 236 | 493 | 257 | ..... |
| Wool | 1,319 | 1,075 | ..... | 244 |
| All other animal products | 10,901 | 11,469 | 568 | ..... |
| Total, Class No. 3 | 5,408,694 | 6,923,864 | 1,898,068 | 382,898 |
| <i>Class No. 4.</i> | | | | |
| Agricultural implements | 41,291 | 42,116 | 825 | ..... |
| Cement, bricks, lime | 654,629 | 537,093 | ..... | 117,536 |
| Household goods and furniture | 2,977 | 2,958 | ..... | 13 |
| Iron, pig and bloom | 61,119 | 99,251 | 38,132 | ..... |
| Iron and steel, all other | 418,169 | 458,762 | 40,593 | ..... |
| Petroleum and other oils | 194,105 | 144,205 | ..... | 49,900 |
| Sugar | 59,979 | 41,338 | ..... | 18,641 |
| Salt | 29,984 | 23,071 | ..... | 6,913 |
| Wines, liquors and beer | 22,293 | 31,632 | 9,429 | ..... |
| Merchandise not enumerated | 874,613 | 848,522 | ..... | 26,091 |
| Total, Class No. 4 | 2,359,063 | 2,228,948 | 88,979 | 219,094 |
| <i>Class No. 5.</i> | | | | |
| Pulpwood | 823,494 | 762,156 | ..... | 61,338 |
| Sawed lumber | 596,588 | 723,935 | 127,347 | ..... |
| Squared timber | 42,924 | 58,484 | 15,560 | ..... |
| Shingles | 12,422 | 6,851 | ..... | 5,571 |
| Other woods | 70,711 | 83,196 | 12,485 | |
| Total, Class No. 5 | 1,546,139 | 1,634,622 | 155,392 | 66,909 |

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TABLE 4.—Comparative Statement of all the canals for the Years ending December 31, 1911 and 1912—*Concluded.*

| Articles. | 1911. | 1912. | Increase. | Decrease. |
|-------------------------|--------------|--------------|--------------|--------------|
| <i>Class No. 6.</i> | <i>Tons.</i> | <i>Tons.</i> | <i>Tons.</i> | <i>Tons.</i> |
| Hard coal..... | 1,246,273 | 1,178,917 | ..... | 67,356 |
| Soft coal..... | 4,668,843 | 3,786,969 | ..... | 881,874 |
| Coke..... | 14,160 | 12 | ..... | 14,148 |
| Copper ore..... | 16,556 | 40,322 | 23,766 | ..... |
| Iron ore..... | 22,715,838 | 31,219,646 | 8,503,808 | ..... |
| Other ore..... | 6,849 | 57,951 | 51,192 | ..... |
| Sand and cement..... | 47,938 | 515,994 | 468,056 | ..... |
| Total, Class No. 6..... | 28,716,457 | 39,799,811 | 9,046,732 | 963,378 |
| Grand Total..... | 38,030,353 | 47,587,245 | 11,189,171 | 1,632,279 |

Net increase 9,556,892 tons.

TABLE 5.—STATEMENT of Traffic on the Undermentioned Canals during the Season of Navigation in 1912.

| 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 | 3,264,632 | 1,618,289 | 2,178,256 | 28,241 | 36,500 | 337,456 | 203,509 | 146,845 | 150,240 | 98,874 |
| " Sail | 31,597 | 196,676 | 1,318,246 | 17,309 | 52,019 | 48,846 | 277,242 | 61,844 | 58,615 | 112,099 |
| United States vessels. Steam | 22,522,620 | 804,592 | 739,707 | 97 | 189 | 1,919 | ..... | ..... | ..... | ..... |
| " Sail | 13,395 | 59,943 | 106,626 | 344,338 | 437 | 842 | 40,598 | 887 | ..... | ..... |
| Total, Class No. 1. | 25,832,244 | 2,679,500 | 4,342,835 | 389,985 | 89,145 | 389,063 | 521,349 | 209,576 | 208,855 | 210,973 |
| <i>Class No. 2.</i> | No. | No. | No. | No. | No. | No. | No. | No. | No. | No. |
| Passengers. | 37,549 | 1,317 | 106,492 | 2,422 | 1,210 | 20,679 | 27,271 | 20,534 | 73,861 | 902 |
| <i>Class No. 3.</i> | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| Barley. | 157,957 | 25,241 | 23,557 | ..... | ..... | ..... | ..... | 30 | 4 | ..... |
| Buckwheat. . . . . | ..... | ..... | 7 | ..... | ..... | ..... | 4 | 5 | 237 | ..... |
| Corn. . . . . | ..... | 121,333 | 26,707 | 28 | 40 | ..... | 32 | 78 | ..... | ..... |
| Oats. | 395,708 | 185,546 | 176,756 | 562 | 3,004 | ..... | 66 | 524 | 131 | 5 |
| Rye. | 11,831 | 714 | 716 | ..... | ..... | ..... | ..... | 1 | 1 | ..... |
| Flax. | 191,401 | 16,366 | 16,941 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Peas. . . . . | ..... | 150 | 23 | ..... | 1 | ..... | ..... | ..... | ..... | ..... |
| Wheat. | 3,530,398 | 795,989 | 793,731 | 219 | ..... | ..... | 94 | 735 | 1,530 | ..... |
| Flour. | 238,871 | 45,807 | 54,321 | 1,092 | 1,574 | ..... | 385 | 471 | 99 | 16 |
| Hay. | 1,304 | ..... | 13,217 | 14,935 | 1,544 | 34 | 3,148 | 1,072 | 161 | 5 |
| Other mill products. | 3,105 | 14,539 | 7,163 | 411 | 1,083 | 10 | 761 | 643 | 179 | ..... |
| Fruit and vegetables. | 100 | 72 | 5,742 | 2,391 | 1,449 | 404 | 320 | 344 | 14 | ..... |
| Potatoes. | 117 | 15 | 686 | 68 | 6,732 | ..... | 466 | 85 | 113 | 11 |
| Live stock. | 22 | ..... | 603 | 217 | 24 | ..... | 540 | 20 | 266 | ..... |
| Poultry game and fish. | 16 | 66 | 83 | 10 | 2,450 | ..... | 37 | 34 | ..... | ..... |
| Dressed meats. . . . . | ..... | 41 | 65 | 6 | 21 | ..... | ..... | 201 | 1 | ..... |
| Other packing house products. . . . . | ..... | ..... | 766 | 95 | 469 | ..... | 345 | 728 | ..... | ..... |
| Hides and leather. | 20 | 140 | 285 | 9 | ..... | ..... | ..... | 37 | 2 | ..... |
| Wool. | 312 | 431 | 317 | 1 | ..... | ..... | ..... | 14 | ..... | ..... |
| All other animal products. | 2 | ..... | 7,251 | ..... | 23 | 37 | 1,947 | 2,117 | 92 | ..... |
| Total, Class No. 3. | 4,531,164 | 1,206,590 | 1,128,942 | 20,044 | 18,423 | 485 | 8,158 | 7,146 | 2,875 | 37 |

| Class No. 4. | | | | | | | | | | |
|-------------------------------|-------------------|------------------|------------------|----------------|---------------|----------------|----------------|----------------|---------------|---------------|
| Agricultural implements | 20,380 | 20,385 | 163 | 109 | 9 | | 148 | 876 | 41 | 5 |
| Cement, bricks, lime | 211,008 | 146,829 | 78,696 | 2,118 | 1,140 | 91,728 | 2,331 | 1,631 | 1,612 | |
| Household goods and furniture | 1 | 100 | 1,624 | 133 | 56 | 23 | 341 | 540 | 128 | 12 |
| Iron, pig and bloom | 45,533 | 14,638 | 6,491 | 476 | 79 | | 1,065 | 904 | 66 | |
| Iron and steel, all other | 209,056 | 124,353 | 121,291 | 1,555 | 246 | 13 | 1,259 | 983 | 6 | 2 |
| Petroleum and other oils | 6,488 | 76,863 | 57,941 | 152 | 921 | 74 | 754 | 961 | 51 | |
| Sugar | 9,126 | 19,718 | 9,951 | 785 | | 10 | 1,139 | 580 | 29 | |
| Salt | 12,929 | 1,912 | 3,431 | | 1,521 | | 1,471 | 1,807 | | |
| Wines, liquors and beers | 8,041 | 10,460 | 10,838 | 32 | 180 | | 914 | 1,144 | 23 | |
| Merchandise not enumerated | 422,741 | 210,311 | 173,665 | 6,240 | 3,431 | 9,663 | 11,538 | 9,389 | 1,503 | 41 |
| Total, Class No. 4 | 975,303 | 625,563 | 464,091 | 11,600 | 7,583 | 101,511 | 20,958 | 18,814 | 3,459 | 60 |
| Class No. 5. | | | | | | | | | | |
| Pulpwood | 12,372 | 167,985 | 294,125 | 258,268 | | | | 1,269 | 21,315 | 6,822 |
| Sawed lumber | 30,541 | 38,050 | 246,435 | 164,862 | 9,524 | 6 | 206,094 | 23,516 | 2,730 | 2,177 |
| Squared timber | 4,440 | 19,129 | 29,293 | 1,814 | | 400 | 1,603 | 199 | 1,606 | |
| Shingles | 5,570 | 250 | 122 | 34 | 418 | | 120 | 192 | 145 | |
| Other woods | 1,191 | 2,270 | 8,785 | 335 | 1,219 | 300 | 18,783 | 3,466 | 41,693 | 5,154 |
| Total, Class No. 5 | 54,114 | 227,684 | 578,760 | 425,313 | 11,161 | 706 | 226,600 | 28,642 | 69,489 | 14,153 |
| Class No. 6. | | | | | | | | | | |
| Hard coal | 434,224 | 175,495 | 437,334 | 119,928 | 573 | 1,353 | 1,801 | 7,525 | 138 | 566 |
| Soft " | 2,511,217 | 534,201 | 665,981 | 377 | 39,970 | 1,906 | 31,004 | 7,141 | 172 | |
| Coke | | | | | 10 | | | 2 | | |
| Copper ore | 16,963 | | | 23,359 | | | | | | |
| Iron " | 31,141,063 | 66,105 | 12,467 | | | | | 6 | 5 | |
| Other " | 5,607 | 12,671 | 9,572 | 17,794 | 2,089 | | 5,100 | 2,455 | 2,663 | |
| Sand, &c. | | 3,600 | 180,041 | | | 64,140 | 98,729 | 88,402 | 349 | 80,733 |
| Total, Class No. 6 | 34,109,074 | 792,072 | 1,305,395 | 161,458 | 37,642 | 67,379 | 136,634 | 105,531 | 3,327 | 81,299 |
| Grand total | 39,669,655 | 2,851,915 | 3,477,188 | 618,415 | 74,809 | 170,081 | 392,350 | 160,133 | 77,150 | 95,549 |

20a-5

TABLE 6.—SUMMARY Statement of Traffic on the undermentioned canals during the Season of Navigation, ended December 31, 1912, showing the total quantity of each description of property passed through.

| | Sault Ste. Marie. | Welland. | St. Lawrence | Chambly. | St. Peter's. | Murray. | Ottawa. | Rideau. | Trent Valley. | St. Andrew's |
|--|-------------------|-----------|--------------|-----------|--------------|------------|------------|------------|---------------|--------------|
| | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| Vessels of all kinds..... | 25,832,244 | 2,679,500 | 4,342,835 | 389,985 | 89,145 | 389,063 | 521,349 | 209,576 | 208,855 | 210,973 |
| Passengers..... | No. 37,549 | No. 1,317 | No. 106,492 | No. 2,422 | No. 1,240 | No. 20,679 | No. 27,271 | No. 20,534 | No. 73,861 | No. 902 |
| <i>Forest Produce of Wood.</i> | | | | | | | | | | |
| | Tons | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. | Tons. |
| Pulpwood..... | 12,372 | 167,985 | 294,195 | 258,268 | | | | 1,269 | 21,315 | 6,822 |
| Sawed lumber..... | 30,541 | 38,050 | 246,435 | 164,862 | 9,524 | 6 | 206,094 | 23,516 | 2,730 | 2,177 |
| Squared timber..... | 4,440 | 19,129 | 29,233 | 1,814 | | 400 | 1,603 | 199 | 1,606 | |
| Shingles..... | 5,579 | 250 | 122 | 34 | 418 | | 120 | 192 | 145 | |
| Other woods..... | 1,191 | 2,270 | 8,785 | 335 | 1,219 | 300 | 18,783 | 3,466 | 41,693 | 5,154 |
| Total..... | 54,114 | 227,684 | 578,760 | 425,313 | 11,161 | 706 | 226,600 | 28,642 | 67,489 | 14,153 |
| <i>Animals and Produce of Animals.</i> | | | | | | | | | | |
| Live stock..... | 22 | | 603 | 217 | 24 | | 540 | 20 | 266 | |
| Poultry, game and fish..... | 16 | 66 | 88 | 10 | 2,459 | | 37 | 34 | | |
| Dressed meats..... | | 41 | 65 | 6 | 21 | | 11 | 201 | 1 | |
| Other packing house products..... | | | 766 | 95 | 469 | | 345 | 728 | | |
| Hides and leather..... | 20 | 140 | 285 | 9 | | | | 37 | | 2 |
| Wool..... | 312 | 431 | 317 | 1 | | | | 14 | | |
| All other animal products..... | 2 | | 7,251 | | 23 | 37 | 1,947 | 2,117 | 92 | |
| Total..... | 372 | 678 | 9,375 | 338 | 2,996 | 37 | 2,880 | 3,151 | 361 | |
| <i>Agricultural Products.</i> | | | | | | | | | | |
| Barley..... | 157,957 | 25,241 | 23,537 | | | | | 30 | | 4 |
| Buckwheat..... | | | 7 | | | | 4 | 5 | | 237 |
| Corn..... | | 121,333 | 26,707 | 28 | 40 | | 32 | 78 | | |
| Oats..... | 395,708 | 185,546 | 176,756 | 562 | 3,004 | | 66 | 524 | 131 | 5 |
| Rye..... | 11,831 | 714 | 116 | | | | | 1 | | |
| Flax..... | 191,401 | 16,506 | 16,941 | | | | | | | |

| | | | | | | | | | | |
|--|-------------------|------------------|------------------|----------------|---------------|----------------|----------------|----------------|---------------|---------------|
| Peas..... | | 150 | 23 | | 1 | | 2 | 7 | 45 | |
| Wheat..... | 3,530,398 | 795,989 | 793,731 | 219 | | | 94 | 735 | 1,530 | |
| Flour..... | 238,871 | 45,807 | 54,321 | 1,092 | 1,574 | | 385 | 471 | 99 | 16 |
| Hay..... | 1,304 | | 13,217 | 14,935 | 1,544 | 34 | 3,148 | 1,072 | 161 | 5 |
| Other mill products..... | 3,105 | 14,539 | 7,163 | 411 | 1,083 | 10 | 761 | 643 | 179 | |
| Fruit and vegetables..... | 100 | 72 | 5,742 | 2,391 | 1,449 | 404 | 320 | 344 | 14 | |
| Potatoes..... | 117 | 15 | 686 | 68 | 6,732 | | 466 | 85 | 113 | 11 |
| Total..... | 4,530,792 | 1,205,912 | 1,119,567 | 19,706 | 15,427 | 448 | 5,278 | 3,995 | 2,514 | 37 |
| <i>Manufactures.</i> | | | | | | | | | | |
| Agricultural implements..... | 20,380 | 20,383 | 163 | 109 | 9 | | 148 | 876 | 41 | 5 |
| Cement, bricks and lime..... | 211,008 | 146,829 | 78,696 | 2,118 | 1,140 | 91,728 | 2,331 | 1,631 | 1,612 | |
| Household goods and furniture..... | 1 | 100 | 1,624 | 133 | 56 | 23 | 341 | 540 | 128 | 12 |
| Iron—Pig and bloom..... | 75,533 | 14,638 | 6,491 | 476 | 79 | | 1,065 | 903 | 66 | |
| " steel, all other..... | 209,656 | 124,353 | 121,291 | 1,555 | 246 | 13 | 1,257 | 983 | 6 | 2 |
| Petroleum and other oils..... | 6,488 | 76,863 | 57,941 | 152 | 921 | 74 | 754 | 961 | 51 | |
| Sugar..... | 9,126 | 19,718 | 9,951 | 785 | | 10 | 1,139 | 580 | 29 | |
| Salt..... | 12,929 | 1,912 | 3,431 | | 1,521 | | 1,471 | 1,807 | | |
| Wines, liquors and beer..... | 8,041 | 10,460 | 10,838 | 32 | 180 | | 914 | 1,144 | 23 | |
| Merchandise not enumerated..... | 422,741 | 210,311 | 173,665 | 6,240 | 3,431 | 9,663 | 11,538 | 9,389 | 1,503 | 41 |
| Total..... | 975,303 | 625,569 | 464,091 | 11,600 | 7,583 | 101,511 | 20,958 | 18,814 | 3,459 | 60 |
| <i>Products of Mines.</i> | | | | | | | | | | |
| Hard coal..... | 434,224 | 175,495 | 437,334 | 119,928 | 573 | 1,333 | 1,801 | 7,525 | 138 | 566 |
| Soft "..... | 2,511,217 | 534,201 | 665,981 | 377 | 34,970 | 1,906 | 31,004 | 7,141 | 172 | |
| Coke..... | | | | | 10 | | | 2 | | |
| Copper ore..... | 16,963 | | | 23,359 | | | | | | |
| Iron "..... | 31,141,063 | 66,105 | 12,467 | | | | | 6 | 5 | |
| Other "..... | 5,607 | 12,671 | 9,572 | 17,794 | 2,089 | 64,140 | 5,160 | 2,455 | 2,663 | |
| Sand, &c..... | | 3,600 | 180,041 | | | | 98,729 | 88,402 | 349 | 80,733 |
| Total..... | 34,109,074 | 792,072 | 1,305,395 | 161,458 | 37,642 | 67,379 | 136,634 | 105,531 | 3,327 | 81,299 |
| Grand totals (passengers and tonnage of vessels not included).... | 39,669,655 | 2,851,915 | 3,477,168 | 618,415 | 74,809 | 170,081 | 392,350 | 160,133 | 77,150 | 95,549 |

TABLE 7, No. 1.—GENERAL STATEMENT showing the Quality of each Article Transported on the Sault Ste. Marie canal during the Season of Navigation in 1912.

| Articles. | 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. |
| Agricultural implements. | 20,380 | | | | | | | | 20,380 | | 20,380 | 20,380 | |
| All other animal. | | 2 | | | | | | | | 2 | 2 | 2 | |
| Barley. | | 67,593 | | 19,189 | | 69,454 | | 1,721 | | 157,957 | 157,957 | 91,106 | 66,851 |
| Buckwheat. | | | | | | | | | | | | | |
| Cement, bricks, &c. | 202,331 | | 245 | | 4,757 | | 3,675 | | 211,008 | | 211,008 | 200,594 | 10,414 |
| Coal, hard. | 50 | | | | 294,810 | | 139,364 | | 434,224 | | 434,224 | | 434,224 |
| " soft. | 100 | | | | 1,402,754 | | 1,108,363 | | 2,511,217 | | 2,511,217 | | 2,511,217 |
| Coke. | | | | | | | | | | | | | |
| Corn. | | | | | | | | | | | | | |
| Dressed meats. | | | | | | | | | | | | | |
| Flax. | | 38,859 | | 49,895 | | 99,727 | | 2,920 | | 191,401 | 191,401 | 98,345 | 93,056 |
| Flour. | 15 | 178,223 | | | | 41,809 | | 18,824 | 15 | 238,856 | 238,871 | 193,417 | 45,454 |
| Fruits and vegetables. | 100 | | | | | | | | 100 | | 100 | | |
| Hay. | 1,304 | | | | | | | | 1,304 | | 1,304 | 1,304 | |
| Hides and leather. | 20 | | | | | | | | 20 | | 20 | 20 | |
| Household goods. | | 1 | | | | | | | | 1 | 1 | 1 | |
| Iron, pig and bloom. | 45,206 | 3,020 | | | 125 | 5,306 | 21,876 | | 67,207 | 8,326 | 75,533 | 48,226 | 27,307 |
| Iron and steel, all other. | 121,886 | 3,263 | | | 44,198 | 1,400 | 38,309 | | 204,393 | 4,663 | 209,056 | 111,880 | 97,176 |
| Live stock. | 22 | | | | | | | | 22 | | 22 | 22 | |
| Merchandise. | 329,677 | 7,987 | 13,104 | 4,912 | 57,168 | 1,601 | 3,458 | 4,834 | 403,407 | 19,334 | 422,741 | 356,826 | 65,915 |
| Oats. | 1,131 | 329,683 | | 8,480 | | 25,367 | | 31,047 | 1,131 | 394,577 | 395,708 | 380,562 | 15,146 |
| Other mill products. | | 1,130 | | | | | | 1,975 | | 3,105 | 3,105 | 1,130 | 1,975 |
| " packing house products. | | | | | | | | | | | | | |
| " woods. | 666 | 471 | | | | | 54 | | 720 | 471 | 1,191 | 1,064 | 127 |
| Ore, all other. | 360 | 300 | 3,054 | | 1,893 | | | | 5,307 | 300 | 5,607 | 660 | 4,947 |
| " copper. | | | | | | 16,963 | | | | 16,963 | 16,963 | | 16,963 |
| " iron. | | | | | | 30,869,816 | 6,812 | 264,435 | 6,812 | 31,134,251 | 31,141,063 | | 31,141,063 |
| Peas. | | | | | | | | | | | | | |
| Petroleum. | 6,027 | 50 | 211 | | | | 200 | | 6,438 | 50 | 6,488 | 6,214 | 274 |
| Poultry, game and fish. | | 1 | 15 | | | | | | 15 | | 16 | 16 | |
| Potatoes. | | 117 | | | | | | | | 117 | 117 | 117 | |
| Pulpwood. | 12,372 | | | | | | | | 12,372 | | 12,372 | 12,372 | |

| | | | | | | | | | | | | | |
|--------------------------------|---------|-----------|---------|---------|-----------|------------|-----------|---------|-----------|------------|------------|-----------|------------|
| Rye | | 150 | | | | 9,540 | | 2,141 | | 11,831 | 11,831 | 150 | 11,681 |
| Sawed lumber | 542 | 90 | 23,927 | | | 4,716 | 306 | 960 | 848 | 29,693 | 30,541 | 24,459 | 6,082 |
| Shingles | | 36 | | | | 5,468 | | 66 | | 5,570 | 5,570 | 36 | 5,534 |
| Square timber | | | | 400 | | | 4,040 | | 4,440 | | 4,440 | | 4,440 |
| Sugar | 9,126 | | | | | | | | 9,126 | | 9,126 | | 9,126 |
| Salt | 11,666 | | 187 | 1,076 | | | | | 12,929 | | 12,929 | | 11,853 |
| Wheat | | 1,531,518 | 751,374 | | | 1,102,485 | | 145,021 | | 3,530,398 | 3,530,398 | 2,512,291 | 1,018,107 |
| Wines, liquors and beers | 7,974 | | 67 | | | | | | 8,041 | | 8,041 | | 8,041 |
| Wool | 21 | 27 | | | | 264 | | | 21 | 291 | 312 | 48 | 264 |
| Total freight | 770,976 | 2,162,521 | 16,883 | 857,777 | 1,807,181 | 32,253,916 | 1,326,457 | 473,944 | 3,921,497 | 35,748,158 | 39,669,655 | 4,090,362 | 35,579,293 |

SESSIONAL PAPER No. 20a

CANAL STATISTICS

TABLE 7, No. 2.—General Statement showing the Quantity of each Article Transported on the Welland canal during the Season of Navigation in 1912.

| ARTICLES. | From Canadian to Canadian Ports. | | From Canadian to U. 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. |
| Agricultural implements.. | 20,380 | 5 | | | | | | | 20,380 | 5 | 20,385 | 20,385 | |
| All other animal | | | | | | | | | | | | | |
| Barley.. | | 22,375 | | | | 2,160 | | 706 | | 25,241 | 25,241 | 22,375 | 2,866 |
| Buckwheat | | | | | | | | | | | | | |
| Cement, bricks, &c | 145,839 | 450 | 540 | | | | | | 146,379 | 450 | 146,829 | 146,129 | 700 |
| Coal, hard | | | | | 163,461 | | 12,034 | | 175,495 | | 175,495 | | 175,495 |
| " soft | | | | | | 2,958 | | 531,243 | | 534,201 | 534,201 | | 534,201 |
| Coke | | | | | | | | | | | | | |
| Corn | | 2,297 | | | | 91,254 | | 27,782 | | 121,333 | 121,333 | 116 | 121,217 |
| Dressed meats | | 41 | | | | | | | | 41 | 41 | | 41 |
| Flax | | 16,374 | 132 | | | | | | 132 | 16,374 | 16,506 | 16,506 | |
| Flour | | 33,513 | | | | | | 2,416 | | 45,807 | 45,807 | 34,743 | 11,064 |
| Fruits and vegetables | 35 | | | | 37 | | | | 72 | | 72 | 35 | 37 |
| Hay | | | | | | | | | | | | | |
| Hides and leather | 140 | | | | | | | | 140 | | 140 | 140 | |
| Household goods | | 7 | 93 | | | | | | 93 | 7 | 100 | 100 | |
| Iron, pig and bloom | 13,198 | 320 | | | | | 1,120 | 13,198 | 1,440 | 14,638 | 13,518 | 13,518 | 1,120 |
| Iron and steel, all other | 87,773 | 2,672 | 25 | | | 300 | 33,583 | 87,798 | 36,555 | 124,353 | 90,470 | 33,883 | |
| Live stock | | | | | | | | | | | | | |
| Merchandise | 113,468 | 8,279 | 14,522 | | 53,278 | 14,137 | 6,627 | 181,268 | 29,043 | 210,311 | 131,417 | 78,894 | |
| Oats | | 166,530 | | | | 1,400 | 17,616 | | 185,546 | 185,546 | 169,793 | 15,753 | |
| Other mill products | | | | | 5 | 12,564 | 1,970 | 5 | 14,534 | 14,539 | | | 14,539 |
| " packing house products | | | | | | | | | | | | | |
| " woods | | | | | | 2,270 | | | 2,270 | 2,270 | | | 2,270 |
| Ore, all other | | 6,224 | 3,054 | | 3,393 | | | | 6,447 | 6,224 | 12,671 | 7,758 | 4,913 |
| " copper | | | | | | | | | | | | | |
| " iron | | 791 | | | 1,586 | | 63,728 | 1,586 | 64,519 | 66,105 | | | 66,105 |
| Peas | | | | | | 150 | | | 150 | 150 | | | 150 |
| Petroleum | 642 | 33,821 | 50 | | 2 | | 42,348 | 694 | 76,169 | 76,863 | 33,118 | 43,745 | |
| Poultry, game and fish | | | | | 66 | | | | 66 | 66 | | | 66 |
| Potatoes | 15 | | | | | | | | 15 | 15 | | 15 | |
| Pulpwood | 47,718 | | 117,873 | | 2,394 | | | | 167,985 | 167,985 | 167,985 | 167,985 | |
| Rye | | | | | | | | 714 | | 714 | | | 714 |
| Sand | | 3,600 | | | | | | | | 3,600 | 3,600 | 3,600 | |

| | | | | | | | | | | | | | |
|--------------------------|----------------|----------------|----------------|--------------|----------------|----------------|---------------|----------------|----------------|------------------|------------------|------------------|------------------|
| Sawed lumber | | | | 3,449 | | 26,614 | | 7,987 | | 38,050 | 38,050 | 3,449 | 34,601 |
| Shingles | | | | 250 | | | | | | 250 | 250 | 250 | |
| Square timber | | 5,060 | | | | 723 | | 13,346 | | 19,129 | 19,129 | 5,060 | 14,069 |
| Sugar | 4,241 | 2,902 | 122 | | 11,078 | | | 1,375 | 15,441 | 4,277 | 19,718 | 7,921 | 11,797 |
| Salt | 30 | 1,624 | 13 | | | | | 245 | 43 | 1,869 | 1,912 | 1,692 | 220 |
| Wheat | | 667,557 | | | | 15,911 | | 112,521 | | 795,989 | 795,989 | 666,589 | 129,400 |
| Wines, liquors and beers | 7,241 | 1,384 | 676 | | 137 | | | 1,022 | 8,054 | 2,406 | 10,460 | 9,521 | 939 |
| Wool | 226 | | 205 | | | | | | 431 | | 431 | 431 | |
| Total freight | 440,946 | 975,826 | 137,305 | 3,699 | 235,437 | 180,319 | 12,034 | 866,349 | 825,722 | 2,026,193 | 2,851,915 | 1,553,116 | 1,298,799 |

TABLE 7, No. 3.—GENERAL STATEMENT showing the Quantity of each Through Article Transported on the Welland canal during the Season of Navigation in 1912.

| ARTICLES. | 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. |
| Agricultural implements..... | 20,380 | 5 | | | | | | | 20,380 | 5 | 20,385 | 20,385 | |
| All other animal..... | | | | | | | | | | | | | |
| Barley..... | | 22,375 | | | | 2,160 | | 706 | | 25,241 | 25,241 | 22,375 | 2,866 |
| Buckwheat..... | | | | | | | | | | | | | |
| Cement, bricks, &c..... | 145,839 | 450 | 540 | | | | | | 146,379 | 450 | 146,129 | 146,129 | 700 |
| Coal, hard..... | | | | | 165,461 | | 12,034 | | 175,495 | | 175,495 | | 175,495 |
| " soft..... | | | | | | 2,958 | | 531,243 | | 534,201 | 534,201 | | 534,201 |
| Coke..... | | | | | | | | | | | | | |
| Corn..... | | 2,297 | | | | 91,254 | | 27,782 | | 121,333 | 121,333 | 116 | 121,217 |
| Dressed meats..... | | 41 | | | | | | | | 41 | 41 | | 41 |
| Flax..... | | 16,374 | 132 | | | | | | 132 | 16,374 | 16,506 | 16,506 | |
| Flour..... | | 33,513 | | | | 9,878 | | 2,416 | | 45,807 | 45,807 | 34,743 | 11,064 |
| Fruits and vegetables..... | 35 | | | | 37 | | | | 72 | | 72 | 35 | 37 |
| Hay..... | | | | | | | | | | | | | |
| Hides and leather..... | 140 | | | | | | | | 140 | | 140 | 140 | |
| Household goods..... | | 7 | 93 | | | | | | 93 | 7 | 100 | 100 | |
| Iron, pig and bloom..... | 13,198 | 20 | | | | | | 1,120 | 13,198 | 1,140 | 14,338 | 13,218 | 1,120 |
| Iron and steel, all other..... | 87,593 | 164 | 25 | | | 300 | | 32,443 | 87,618 | 32,907 | 120,525 | 87,782 | 32,743 |
| Live stock..... | | | | | | | | | | | | | |
| Merchandise..... | 113,468 | 8,149 | 14,522 | | 53,278 | 14,137 | | 4,921 | 181,268 | 27,207 | 208,475 | 131,287 | 77,188 |
| Oats..... | | 165,530 | | | | 1,400 | | 17,616 | | 185,546 | 185,546 | 169,793 | 15,753 |
| Other mill products..... | | | | | 5 | 12,564 | | 1,970 | | 5 | 14,539 | | 14,539 |
| " packing house products..... | | | | | | | | | | | | | |
| " woods..... | | | | | | 2,270 | | | | 2,270 | 2,270 | | 2,270 |
| Ore, all other..... | | 486 | 3,054 | | 3,393 | | | | 6,447 | 486 | 6,933 | 2,020 | 4,913 |
| " copper..... | | | | | | | | | | | | | |
| " iron..... | | | | | 1,586 | | | 63,728 | 1,586 | 63,728 | 65,314 | | 65,314 |
| Peas..... | | | | | | 150 | | | | 150 | 150 | | 150 |
| Petroleum..... | 642 | 33,821 | 50 | | 2 | | | 42,348 | 694 | 76,169 | 76,863 | 33,118 | 43,745 |
| Poultry, game and fish..... | | | | | 66 | | | | 66 | | 66 | | 66 |
| Potatoes..... | 15 | | | | | | | | 15 | | 15 | 15 | |
| Pulpwood..... | | | 117,873 | | 2,394 | | | | 120,267 | | 120,267 | 130,257 | |

| | | | | | | | | | | | | | | |
|-------------------------------|---------|---------|---------|-------|---------|---------|--------|---------|---------|-----------|-----------|-----------|--|-----------|
| Rye..... | | | | | | | | 714 | | 714 | | 714 | | 714 |
| Sand..... | | 700 | | | | | | | | 700 | | 700 | | 700 |
| Sawed lumber..... | | | | 3,449 | | 26,614 | | 7,987 | | 38,050 | | 38,050 | | 3,449 |
| Shingles..... | | | | 250 | | | | | | 250 | | 250 | | 250 |
| Square timber..... | | 5,000 | | | | 723 | | 13,346 | | 19,069 | | 19,069 | | 5,000 |
| Sugar..... | 4,241 | 2,902 | 122 | | 11,078 | | | 1,375 | 15,441 | 4,277 | | 19,718 | | 7,921 |
| Salt..... | 30 | 1,024 | 13 | | | | | 245 | 43 | 1,869 | | 1,912 | | 1,692 |
| Wheat..... | | 665,500 | | | | 15,911 | | 112,521 | | 793,932 | | 793,932 | | 664,532 |
| Wines, liquors and beers..... | 7,241 | 1,384 | 676 | | 137 | | | 1,022 | 8,054 | 2,406 | | 10,460 | | 9,521 |
| Wool..... | 226 | | 205 | | | | | | 431 | | | 431 | | 431 |
| Total freight..... | 393,048 | 961,342 | 137,305 | 3,699 | 235,437 | 180,319 | 12,034 | 863,503 | 777,824 | 2,008,863 | 2,786,687 | 1,491,525 | | 1,295,162 |

TABLE No. 4—General Statement showing the Quantity of each Way Article Transported on the Welland canal during the Season of Navigation in 1912.

| ARTICLES. | 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. |
| Agricultural implements..... | | | | | | | | | | | | | |
| All other animal..... | | | | | | | | | | | | | |
| Barley..... | | | | | | | | | | | | | |
| Buckwheat..... | | | | | | | | | | | | | |
| Cement, bricks, &c..... | | | | | | | | | | | | | |
| Coal, hard..... | | | | | | | | | | | | | |
| " soft..... | | | | | | | | | | | | | |
| Coke..... | | | | | | | | | | | | | |
| Corn..... | | | | | | | | | | | | | |
| Dressed meats..... | | | | | | | | | | | | | |
| Flax..... | | | | | | | | | | | | | |
| Flour..... | | | | | | | | | | | | | |
| Fruits and vegetables..... | | | | | | | | | | | | | |
| Hay..... | | | | | | | | | | | | | |
| Hides and leather..... | | | | | | | | | | | | | |
| Household goods..... | | | | | | | | | | | | | |
| Iron, pig and bloom..... | | 300 | | | | | | | 300 | | 300 | 300 | |
| Iron and steel, all other..... | 180 | 2,508 | | | | | 1,140 | | 180 | 3,648 | 3,828 | 2,688 | 1,140 |
| Live stock..... | | | | | | | | | | | | | |
| Merchandise..... | | 130 | | | | | 1,706 | | | 1,836 | 1,836 | 130 | 1,706 |
| Oats..... | | | | | | | | | | | | | |
| Other mill products..... | | | | | | | | | | | | | |
| " packing house products..... | | | | | | | | | | | | | |
| " woods..... | | | | | | | | | | | | | |
| Ore, all other..... | | 5,738 | | | | | | | | 5,738 | 5,738 | 5,738 | |
| " copper..... | | | | | | | | | | | | | |
| " iron..... | | 791 | | | | | | | | 791 | 791 | | 791 |
| Peas..... | | | | | | | | | | | | | |
| Petroleum..... | | | | | | | | | | | | | |
| Poultry, game and fish..... | | | | | | | | | | | | | |
| Potatoes..... | | | | | | | | | | | | | |
| Pulpwood..... | 47,718 | | | | | | | | | 47,718 | 47,718 | 47,718 | |

| | | | | | | | | | | | | |
|-------------------------------|--------|--------|--|--|--|--|-------|--------|--------|--------|--------|-------|
| Rye..... | | | | | | | | | | | | |
| Sand..... | | 2,900 | | | | | | 2,900 | 2,900 | 2,900 | | |
| Sawed lumber..... | | | | | | | | | | | | |
| Shingles..... | | | | | | | | | | | | |
| Square timber..... | | 60 | | | | | | 60 | 60 | 60 | | |
| Sugar..... | | | | | | | | | | | | |
| Salt..... | | | | | | | | | | | | |
| Wheat..... | | 2,057 | | | | | | 2,057 | 2,057 | 2,057 | | |
| Wines, liquors and beers..... | | | | | | | | | | | | |
| Wool..... | | | | | | | | | | | | |
| Total freight..... | 47,898 | 14,484 | | | | | 2,846 | 47,898 | 17,330 | 65,228 | 61,591 | 3,637 |

TABLE 7, No. 5.—General Statement showing the Quantity of each Article Transported on the St. Lawrence canals during the Season of Navigation in 1912.

| ARTICLES. | From Canada to Canadian Ports. | | From Canada 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. |
| Agricultural implements..... | 151 | 12 | | | | | | | 151 | 12 | 163 | 163 | |
| All other animals..... | 1,102 | 6,146 | | | 3 | | | | 1,105 | 6,146 | 7,251 | 7,248 | 3 |
| Barley..... | 1,212 | 22,127 | | | | | | 218 | 1,212 | 22,345 | 23,557 | 23,339 | 218 |
| Buckwheat..... | 7 | | | | | | | | 7 | | 7 | 7 | |
| Cement, bricks, &c..... | 76,570 | 2,126 | | | | | | | 76,570 | 2,126 | 78,696 | 77,195 | 1,501 |
| Coal, hard..... | 10,076 | 417 | | | | 431 | | 428,410 | 10,076 | 427,258 | 437,334 | 8,867 | 428,467 |
| " soft..... | 143,781 | 22,092 | 2,348 | | | | | 497,760 | 146,129 | 519,852 | 665,981 | 164,010 | 501,971 |
| Coke..... | | | | | | | | | | | | | |
| Corn..... | 56 | 18,470 | | | | | | 8,181 | 56 | 26,651 | 26,707 | 1,270 | 25,437 |
| Dressed meats..... | | 60 | | | 5 | | | | 5 | 60 | 65 | 19 | 46 |
| Flax..... | 1,062 | 15,679 | 200 | | | | | | 1,262 | 15,679 | 16,941 | 16,941 | |
| Flour..... | 3,905 | 50,136 | | | | | | 280 | 3,905 | 50,416 | 54,321 | 54,041 | 280 |
| Fruits and vegetables..... | 225 | 5,511 | | | 6 | | | | 231 | 5,511 | 5,742 | 5,736 | 6 |
| Hay..... | 6,449 | 6,133 | | 635 | | | | | 6,449 | 6,768 | 13,217 | 13,217 | |
| Hides and leather..... | 120 | 163 | | | 2 | | | | 122 | 163 | 285 | 285 | |
| Household goods..... | 612 | 928 | 78 | | 6 | | | | 696 | 928 | 1,624 | 1,618 | 6 |
| Iron, pig and bloom..... | 6,014 | 357 | | | | | | 120 | 6,014 | 477 | 6,491 | 5,435 | 1,056 |
| Iron and steel, all other..... | 87,694 | 10,636 | 75 | | | | | 22,886 | 87,769 | 33,522 | 121,291 | 96,899 | 24,392 |
| Live stock..... | 61 | 541 | | | 1 | | | | 62 | 541 | 603 | 602 | 1 |
| Merchandise..... | 127,719 | 36,479 | 3,970 | | 121 | 54 | 196 | 5,126 | 132,006 | 41,659 | 173,665 | 168,608 | 5,057 |
| Oats..... | 6,988 | 161,795 | | | | | | 7,973 | 6,988 | 169,768 | 176,756 | 168,780 | 7,976 |
| Other mill products..... | 5,280 | 1,883 | | | | | | | 5,280 | 1,883 | 7,163 | 7,163 | |
| " packing house products..... | 273 | 492 | | | 1 | | | | 274 | 492 | 766 | 765 | 1 |
| " wood..... | 1,772 | 6,950 | | | 48 | 15 | | | 1,820 | 6,965 | 8,785 | 8,722 | 63 |
| Ore, all other..... | 9,174 | 398 | | | | | | | 9,174 | 398 | 9,572 | 4,293 | 5,279 |
| " copper..... | | | | | | | | | | | | | |
| " iron..... | | | | | | | | 12,467 | | 12,467 | 12,467 | | 12,467 |
| Peas..... | 1 | 22 | | | | | | | 1 | 22 | 23 | 23 | |
| Petroleum..... | 4,763 | 27,218 | | | | | | 25,960 | 4,763 | 53,178 | 57,941 | 30,062 | 27,879 |
| Poultry, game and fish..... | | 36 | 50 | | 2 | | | | 52 | 36 | 88 | 86 | 2 |
| Potatoes..... | 209 | 475 | | | 2 | | | | 211 | 475 | 686 | 684 | 2 |
| Pulpwood..... | 27,902 | | 266,223 | | | | | | 294,125 | | 294,125 | 294,125 | |

| | | | | | | | | | | | | | |
|-------------------------------|---------|-----------|---------|--------|-----|-----|--------|-----------|---------|-----------|-----------|-----------|-----------|
| Rye..... | 2 | | | | | | 714 | 2 | 714 | 716 | 2 | 714 | |
| Sand..... | 66,146 | 113,173 | | | | | 722 | 66,146 | 113,895 | 180,041 | 174,207 | 5,834 | |
| Sawed lumber..... | 51,757 | 139,509 | 7,494 | 47,671 | 4 | | | 59,255 | 187,180 | 246,435 | 245,415 | 1,020 | |
| Shingles..... | | 122 | | | | | | | 122 | 122 | 122 | | |
| Square timber..... | 177 | 26,379 | | | | | 2,737 | 177 | 29,116 | 29,293 | 27,506 | 1,787 | |
| Sugar..... | 6,364 | 3,129 | | | | | 458 | 6,364 | 3,587 | 9,951 | 9,493 | 458 | |
| Salt..... | 2,038 | 1,393 | | | | | | 2,038 | 1,393 | 3,431 | 3,431 | | |
| Wheat..... | 19,104 | 688,439 | | | | | 86,188 | 19,104 | 774,627 | 793,731 | 708,833 | 84,898 | |
| Wines, liquors and beers..... | 8,963 | 1,651 | | | | | 224 | 8,963 | 1,875 | 10,838 | 10,614 | 224 | |
| Wool..... | 317 | | | | | | | 317 | | 317 | 317 | | |
| Total freight..... | 678,046 | 1,371,077 | 280,438 | 48,303 | 201 | 500 | 196 | 1,098,424 | 958,881 | 2,518,307 | 3,477,188 | 2,340,143 | 1,137,045 |

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 1912.

| Articles. | 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. |
| Agricultural implements | | | | | | | | | | | | | |
| All other animal | 206 | 4,186 | | | | | | | 206 | 4,186 | 4,392 | 4,392 | |
| Barley | | 20,882 | | | | | 218 | | | 21,100 | 21,100 | 20,882 | 218 |
| Buckwheat | | | | | | | | | | | | | |
| Cement, bricks, &c. | 54,783 | 520 | | | | | | | 54,783 | 520 | 55,303 | 55,303 | |
| Coal, hard | 4,200 | | | | | | 416,562 | | 4,200 | 416,562 | 420,762 | 4,200 | 416,562 |
| " soft | 5,100 | 792 | | | | | 485,883 | | 5,100 | 486,675 | 491,775 | 5,100 | 486,675 |
| Coke | | | | | | | | | | | | | |
| Corn | | 1,376 | | | | | 7,341 | | | 8,717 | 8,717 | 116 | 8,601 |
| Dressed meats | | 41 | | | | | | | | 41 | 41 | | 41 |
| Flax | | 15,413 | 200 | | | | | | 200 | 15,413 | 15,613 | 15,613 | |
| Flour | 22 | 37,746 | | | | | 280 | | 22 | 38,026 | 38,048 | 37,768 | 280 |
| Fruits and vegetables | 49 | 5,257 | | | | | | | 49 | 5,257 | 5,306 | 5,306 | |
| Hay | | | | | | | | | | | | | |
| Hides and leather | 120 | | | | | | | | 120 | | 120 | 120 | |
| Household goods | 258 | 744 | 78 | | | | | | 336 | 744 | 1,080 | 1,080 | |
| Iron, pig and bloom | 3,499 | | | | | | 120 | | 3,499 | 120 | 3,619 | 3,499 | 120 |
| Iron and steel, all other | 76,156 | 6,408 | 75 | | | | 22,886 | | 76,231 | 29,294 | 106,525 | 81,133 | 24,392 |
| Live stock | 2 | 12 | | | | | | | 2 | 12 | 14 | 14 | |
| Merchandise | 110,187 | 29,225 | 3,970 | | | | 4,953 | | 114,157 | 34,178 | 148,335 | 145,419 | 2,916 |
| Oats | | 156,608 | | | | | 7,973 | | | 164,581 | 164,581 | 156,608 | 7,973 |
| Other mill products | 5 | 445 | | | | | | | 5 | 445 | 450 | 450 | |
| " packing house products | 1 | 367 | | | | | | | 1 | 367 | 368 | 368 | |
| " woods | | | | | | | | | | | | | |
| Ore, all other | 1,741 | 175 | | | | | | | 1,741 | 175 | 1,916 | 1,916 | |
| " copper | | | | | | | | | | | | | |
| " iron | | | | | | | 12,467 | | | 12,467 | 12,467 | | 12,467 |
| Peas | | 22 | | | | | | | | 22 | 22 | | 22 |
| Petroleum | 630 | 26,911 | | | | | 25,960 | | 630 | 52,871 | 53,501 | 27,541 | 25,960 |
| Poultry, game and fish | | | 50 | | | | | | 50 | | 50 | 50 | |
| Potatoes | 95 | | | | | | | | 95 | | 95 | 95 | |
| Pulpwood | 17,621 | | 266,223 | | | | | | 283,844 | | 283,844 | 283,844 | |

| | | | | | | | | | | | | |
|--------------------------|---------|-----------|---------|--|--|--------|-----------|---------|-----------|-----------|-----------|-----------|
| Rye | | | | | | 714 | | 714 | 714 | | 714 | |
| Sand | | | | | | | | | | | | |
| Sawed lumber | 1,295 | | 7,494 | | | | 8,789 | | 8,789 | 8,789 | | |
| Shingles | | | | | | | | | | | | |
| Square timber | | 15,255 | | | | 2,600 | | 17,855 | 17,855 | 16,355 | 1,500 | |
| Sugar | 5,343 | 3,057 | | | | 458 | 5,343 | 3,515 | 8,858 | 8,400 | 458 | |
| Salt | 72 | 891 | | | | | 72 | 891 | 963 | 963 | | |
| Wheat | | 682,865 | | | | 86,188 | | 769,053 | 769,053 | 684,155 | 84,898 | |
| Wines, liquors and beers | 7,891 | 1,515 | | | | 224 | 7,891 | 1,739 | 9,630 | 9,406 | 224 | |
| Wool | 317 | | | | | | 317 | | 317 | | | |
| Total freight | 289,593 | 1,010,713 | 278,090 | | | | 1,074,827 | 567,683 | 2,085,540 | 2,653,223 | 1,579,224 | 1,073,999 |

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 1912.

| ARTICLES. | 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. |
| Agricultural implements... | 151 | 12 | | | | | | | 151 | 12 | 163 | 163 | |
| All other animal... | 896 | 1,960 | | | 3 | | | | 899 | 1,960 | 2,859 | 2,856 | 3 |
| Barley | 1,212 | 1,245 | | | | | | | 1,212 | 1,245 | 2,457 | 2,457 | |
| Buckwheat | 7 | | | | | | | | 7 | | 7 | 7 | |
| Cement, bricks, etc. | 21,787 | 1,606 | | | | | | | 21,787 | 1,606 | 23,393 | 21,892 | 1,501 |
| Coal, hard | 5,876 | 417 | | | 431 | | 9,848 | | 5,876 | 10,696 | 16,572 | 4,667 | 11,905 |
| " soft | 138,681 | 21,300 | 2,348 | | | | 11,877 | | 141,029 | 33,177 | 174,206 | 158,910 | 15,296 |
| Coke | | | | | | | | | | | | | |
| Corn | 56 | 17,094 | | | | | 840 | | 56 | 17,934 | 17,990 | 1,154 | 16,836 |
| Dressed meats | | 19 | | | 5 | | | | 5 | 19 | 24 | 19 | 5 |
| Flux | 1,062 | 266 | | | | | | | 1,062 | 266 | 1,328 | 1,328 | |
| Flour | 3,883 | 12,390 | | | | | | | 3,883 | 12,390 | 16,273 | 16,273 | |
| Fruits and vegetables | 176 | 254 | | | 6 | | | | 182 | 254 | 436 | 430 | 6 |
| Hay | 6,449 | 6,133 | | 635 | | | | | 6,449 | 6,768 | 13,217 | 13,217 | |
| Hides and leather | | 163 | | | 2 | | | | 2 | 163 | 165 | 165 | |
| Household goods | 354 | 184 | | | 6 | | | | 360 | 184 | 544 | 538 | 6 |
| Iron, pig and bloom | 2,515 | 357 | | | | | | | 2,515 | 357 | 2,872 | 1,936 | 936 |
| Iron and steel, all other | 11,538 | 4,228 | | | | | | | 11,538 | 4,228 | 15,766 | 15,766 | |
| Live stock | 59 | 529 | | | 1 | | | | 60 | 529 | 589 | | 1 |
| Merchandise | 17,532 | 7,254 | | | 121 | 54 | 196 | 173 | 17,849 | 7,481 | 25,330 | 23,189 | 2,141 |
| Oats | 6,988 | 5,187 | | | | | | | 6,988 | 5,187 | 12,175 | 12,172 | 3 |
| Other mill products | 5,275 | 1,438 | | | | | | | 5,275 | 1,438 | 6,713 | 6,713 | |
| " packing house products | 272 | 125 | | | 1 | | | | 273 | 125 | 398 | 397 | 1 |
| " woods | 1,772 | 6,950 | | | 48 | 15 | | | 1,820 | 6,965 | 8,785 | 8,722 | 63 |
| Ore, all other | 7,433 | 223 | | | | | | | 7,433 | 223 | 7,656 | 2,377 | 5,279 |
| " copper | | | | | | | | | | | | | |
| " iron | | | | | | | | | | | | | |
| Peas | 1 | | | | | | | | 1 | | 1 | 1 | |
| Petroleum | 4,133 | 307 | | | | | | | 4,133 | 307 | 4,440 | 2,521 | 1,919 |
| Poultry, game and fish | | 36 | | | 2 | | | | 2 | 36 | 38 | 36 | 2 |
| Potatoes | 114 | 475 | | | 2 | | | | 116 | 475 | 591 | 589 | 2 |

| | | | | | | | | | | | | | |
|-----------------------------|---------|---------|-------|--------|-----|-----|-----|--------|---------|---------|---------|---------|--------|
| Pulpwood..... | 10,281 | | | | | | | 10,281 | | 10,281 | 10,281 | | |
| Rye..... | 2 | | | | | | | 2 | | 2 | 2 | | |
| Sand..... | 66,146 | 113,173 | | | | 722 | | 66,146 | 113,895 | 180,041 | 174,207 | 5,834 | |
| Sawed lumber..... | 50,462 | 139,509 | | 47,671 | 4 | | | 50,446 | 187,180 | 237,646 | 236,626 | 1,020 | |
| Shingles..... | | 122 | | | | | | | 122 | 111 | 122 | | |
| Square timber..... | 177 | 11,124 | | | | 137 | | 177 | 11,261 | 11,438 | 11,151 | 287 | |
| Sugar..... | 1,021 | 72 | | | | | | 1,021 | 72 | 1,093 | 1,093 | | |
| Salt..... | 1,966 | 502 | | | | | | 1,966 | 502 | 2,468 | 2,468 | | |
| Wheat..... | 19,104 | 5,574 | | | | | | 19,104 | 5,574 | 24,678 | 24,678 | | |
| Wines, liquors and beers .. | 1,072 | 136 | | | | | | 1,072 | 136 | 1,208 | 1,208 | | |
| Wool..... | | | | | | | | | | | | | |
| Total freight | 388,453 | 360,364 | 2,348 | 48,906 | 201 | 500 | 196 | 23,597 | 391,198 | 432,767 | 823,965 | 760,919 | 63,046 |

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SESSIONAL PAPER No. 20a

CANAL STATISTICS

TABLE 7, No. 8.—GENERAL STATEMENT showing the Quantity of each Article Transported on the Chamby canal during the Season of Navigation in 1912.

| ARTICLES. | 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. |
| Agricultural implements..... | 105 | 4 | | | | | | | 105 | 4 | 109 | 109 | |
| All other animal..... | | | | | | | | | | | | | |
| Barley..... | | | | | | | | | | | | | |
| Buckwheat..... | | | | | | | | | | | | | |
| Cement, Bricks, &c..... | 314 | 18 | 60 | | | | 1,726 | | 374 | 1,744 | 2,118 | 392 | 1,726 |
| Coal, hard..... | 3 | | | | | | 119,925 | | 3 | 119,925 | 119,928 | 3 | 119,925 |
| " soft..... | | | | | | | 377 | | | 377 | 377 | 10 | 367 |
| Coke..... | | | | | | | | | | | | | |
| Corn..... | 24 | 4 | | | | | | | 24 | 4 | 28 | 28 | |
| Dressed meats..... | 3 | 3 | | | | | | | 3 | 3 | 6 | 6 | |
| Flax..... | | | | | | | | | | | | | |
| Flour..... | 1,092 | | | | | | | | 1,092 | | 1,092 | 1,092 | |
| Fruits and vegetables..... | 464 | 1,927 | | | | | | | 464 | 1,927 | 2,391 | 2,391 | |
| Hay..... | 635 | 5,241 | 9,059 | | | | | | 9,694 | 5,241 | 14,935 | 14,935 | |
| Hides and leather..... | | 9 | | | | | | | | 9 | 9 | 9 | |
| Household goods..... | 85 | 48 | | | | | | | 85 | 48 | 133 | 133 | |
| Iron, pig and bloom..... | 147 | | | | | | 329 | | 147 | 329 | 476 | 147 | 329 |
| Iron and steel, all other..... | 456 | 31 | | | | | 1,068 | | 456 | 1,099 | 1,555 | 487 | 1,068 |
| Live stock..... | 3 | 214 | | | | | | | 3 | 214 | 217 | 217 | |
| Merchandise..... | 1,118 | 744 | | | | | 4,378 | | 1,118 | 5,122 | 6,240 | 1,863 | 4,377 |
| Oats..... | 21 | 541 | | | | | | | 21 | 541 | 562 | 562 | |
| Other mill products..... | 343 | 68 | | | | | | | 343 | 68 | 411 | 411 | |
| " packing house products..... | 95 | | | | | | | | 95 | | 95 | 95 | |
| " woods..... | 10 | 325 | | | | | | | 10 | 325 | 335 | 335 | |
| Ore, all other..... | | 79 | 374 | | | | 17,341 | | 374 | 17,420 | 17,794 | 508 | 17,291 |
| " copper..... | | | | | | | 23,359 | | | 23,359 | 23,359 | | 23,359 |
| " iron..... | | | | | | | | | | | | | |
| Peas..... | | | | | | | | | | | | | |
| Petroleum..... | 152 | | | | | | | | 152 | | 152 | 152 | |
| Poultry, game and fish..... | 3 | 7 | | | | | | | 3 | 7 | 10 | 10 | |
| Potatoes..... | 51 | 17 | | | | | | | 51 | 17 | 68 | 68 | |
| Pulpwood..... | | | 258,268 | | | | | | 258,268 | | 258,268 | 258,268 | |

| | | | | | | | | | | | | |
|-------------------------------|-------|-------|---------|--|--|--|---------|---------|---------|---------|---------|---------|
| Rye..... | | | | | | | | | | | | |
| Sand..... | | | | | | | | | | | | |
| Sawed lumber..... | | 10 | 164,563 | | | | 299 | 164,563 | 299 | 164,862 | 164,573 | 289 |
| Shingles..... | 34 | | | | | | | 34 | | 34 | 34 | |
| Square timber..... | | | | | | | 1,814 | | 1,814 | 1,814 | | 1,814 |
| Sugar..... | 545 | 72 | | | | | 168 | 545 | 240 | 785 | 617 | 168 |
| Salt..... | | | | | | | | | | | | |
| Wheat..... | 214 | 15 | | | | | | 204 | 15 | 219 | 219 | |
| Wines, liquors and beers..... | 32 | | | | | | | 32 | | 32 | 32 | |
| Wool..... | | 1 | | | | | | | 1 | 1 | 1 | |
| Total freight..... | 5,939 | 9,378 | 432,224 | | | | 170,774 | 438,263 | 180,152 | 618,415 | 447,702 | 170,713 |

20a-6 1/2

SESSIONAL PAPER No. 20a

CANAL STATISTICS

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 1912.

| ARTICLES. | From Canadian to Canadian Ports. | | From Canadian to United States Ports. | | From United States to Canadian Ports. | | From United States to United States Ports. | | Tons. | | Total Tons. | Origin of Cargo. | |
|----------------------------|----------------------------------|--------|---------------------------------------|-------|---------------------------------------|-------|--|-------|-------|--------|-------------|------------------|----------------|
| | Up. | Down. | Up. | Down. | Up. | Down. | Up. | Down. | Up. | Down. | | Canadian. | United States. |
| Agricultural implements. | 9 | | | | | | | | 9 | | 9 | 9 | |
| All other animals. | 19 | 4 | | | | | | | 19 | 4 | 23 | 23 | |
| Barley | | | | | | | | | | | | | |
| Buckwheat. | | | | | | | | | | | | | |
| Cement, bricks, &c. | 666 | 474 | | | | | | | 666 | 474 | 1,140 | 1,140 | |
| Coal, hard. | 263 | 10 | | | | | 300 | | 263 | 310 | 573 | 273 | 300 |
| " soft. | 304 | 34,666 | | | | | | | 304 | 34,666 | 34,970 | 34,970 | |
| Coke | | 10 | | | | | | | | 10 | 10 | | |
| Corn. | 40 | | | | | | | | 40 | | 40 | 40 | |
| Dressed meats. | 17 | 4 | | | | | | | 17 | 4 | 21 | 21 | |
| Flax | | | | | | | | | | | | | |
| Flour. | 1,547 | 27 | | | | | | | 1,547 | 27 | 1,574 | 1,574 | |
| Fruits and vegetables. | 1,431 | 18 | | | | | | | 1,431 | 18 | 1,449 | 1,449 | |
| Hay | 1,527 | 17 | | | | | | | 1,527 | 17 | 1,544 | 1,544 | |
| Hides and leather. | | | | | | | | | | | | | |
| Household goods. | 50 | 6 | | | | | | | 50 | 6 | 56 | 56 | |
| Iron, pig and bloom. | 49 | 30 | | | | | | | 49 | 30 | 79 | 79 | |
| Iron and steel, all other. | 207 | 39 | | | | | | | 207 | 39 | 246 | 246 | |
| Live stock. | 23 | 1 | | | | | | | 23 | 1 | 24 | 24 | |
| Merchandies | 2,823 | 608 | | | | | | | 2,823 | 608 | 3,431 | 3,431 | |
| Oats | 2,997 | 7 | | | | | | | 2,997 | 7 | 3,004 | 3,004 | |
| Other mill products | 987 | 96 | | | | | | | 987 | 96 | 1,083 | 1,083 | |
| " packing house products. | 455 | 14 | | | | | | | 455 | 14 | 469 | 469 | |
| " woods. | 1,092 | 127 | | | | | | | 1,092 | 127 | 1,219 | 1,219 | |
| Ore, all other. | 11 | 2,078 | | | | | | | 11 | 2,078 | 2,089 | 2,089 | |
| " copper. | | | | | | | | | | | | | |
| " iron. | | | | | | | | | | | | | |
| Peas. | 1 | | | | | | | | 1 | | 1 | 1 | |
| Petroleum. | 862 | 59 | | | | | | | 862 | 59 | 921 | 921 | |
| Poultry, game and fish. | 305 | 2,154 | | | | | | | 305 | 2,154 | 2,459 | 2,459 | |
| Potatoes. | 6,712 | 20 | | | | | | | 6,712 | 20 | 6,732 | 6,732 | |
| Pulpwood. | | | | | | | | | | | | | |

| | | | | | | | | | | | |
|-------------------------------|--------|--------|--|--|--|--|-----|--------|--------|--------|--------|
| Rye..... | | | | | | | | | | | |
| Sawed lumber..... | 9,104 | 420 | | | | | | 9,104 | 420 | 9,524 | 9,524 |
| Shingles..... | 417 | 1 | | | | | | 417 | 1 | 418 | 418 |
| Square timber..... | | | | | | | | | | | |
| Sugar..... | | | | | | | | | | | |
| Salt..... | 1,479 | 42 | | | | | | 1,479 | 42 | 1,521 | 1,521 |
| Wheat..... | | | | | | | | | | | |
| Wines, liquors and beers..... | 178 | 2 | | | | | | 178 | 2 | 180 | 180 |
| Wool..... | | | | | | | | | | | |
| Total freight..... | 33,575 | 40,934 | | | | | 300 | 33,575 | 41,234 | 74,809 | 74,509 |
| | | | | | | | | | | | 300 |

TABLE 7, No. 10.—General Statement showing the Quantity of each Article Transported on the Murray canal during the Season of Navigation in 1912.

| ARTICLES. | From Canadian to Canadian Ports. | | From Canadian to U. 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. |
| Agricultural implements..... | | | | | | | | | | | | | |
| All other animal..... | 15 | 22 | | | | | | | 15 | 22 | 37 | 37 | |
| Barley..... | | | | | | | | | | | | | |
| Buckwheat..... | | | | | | | | | | | | | |
| Cement, bricks, &c..... | 91,728 | | | | | | | | 91,728 | | 91,728 | 91,728 | |
| Coal, hard..... | 467 | | | | | | 866 | | 1,333 | | 1,333 | 150 | 1,183 |
| " soft..... | | 600 | | | | | 1,306 | | 1 | 1,906 | 1,906 | 600 | 1,306 |
| Coke..... | | | | | | | | | | | | | |
| Corn..... | | | | | | | | | | | | | |
| Dressed meats..... | | | | | | | | | | | | | |
| Flax..... | | | | | | | | | | | | | |
| Flour..... | | | | | | | | | | | | | |
| Fruits and vegetables..... | 112 | 292 | | | | | | | 112 | 292 | 404 | 404 | |
| Hay..... | 34 | | | | | | | | 34 | | 34 | 34 | |
| Hides and leather..... | | | | | | | | | | | | | |
| Household goods..... | 5 | 13 | | | | | | 5 | 5 | 18 | 23 | 5 | 18 |
| Iron, pig and bloom..... | | | | | | | | | | | | | |
| Iron and steel, all other..... | 7 | 6 | | | | | | | 7 | 6 | 13 | 11 | 2 |
| Live stock..... | | | | | | | | | | | | | |
| Merchandise..... | 5,592 | 4,051 | | | | | | 20 | 5,592 | 4,071 | 9,663 | 9,634 | 29 |
| Outs..... | | | | | | | | | | | | | |
| Other mill products..... | | 10 | | | | | | | | 10 | 10 | | 10 |
| " packing house products..... | | | | | | | | | | | | | |
| " woods..... | | | 300 | | | | | | 300 | | 300 | 300 | |
| Ors, all other..... | | | | | | | | | | | | | |
| " copper..... | | | | | | | | | | | | | |
| " iron..... | | | | | | | | | | | | | |
| Peas..... | | | | | | | | | | | | | |
| Petroleum..... | 39 | 35 | | | | | | | 39 | 35 | 74 | 61 | 13 |
| Poultry, game and fish..... | | | | | | | | | | | | | |
| Potatoes..... | | | | | | | | | | | | | |
| Pulpwood..... | | | | | | | | | | | | | |
| Rye..... | | | | | | | | | | | | | |
| Sawed lumber..... | 6 | | | | | | | | 6 | | 6 | 6 | |

| | | | | | | | | | | | | |
|--------------------------------|---------|-------|-----|--|--|-----|--------|---------|--------|---------|---------|-------|
| Sand, &c | 64,140 | | | | | | 64,140 | | 64,140 | 64,140 | | |
| Shingles | | | | | | | | | | | | |
| Square timber | | 400 | | | | | | 400 | 400 | 400 | | |
| Sugar | 10 | | | | | | 10 | | 10 | 10 | | |
| Salt | | | | | | | | | | | | |
| Wheat | | | | | | | | | | | | |
| Wines, liquors and beers | | | | | | | | | | | | |
| Wool | | | | | | | | | | | | |
| Total freight | 162,155 | 5,429 | 300 | | | 866 | 1,331 | 163,321 | 6,760 | 170,081 | 167,520 | 2,561 |

TABLE 7 No. 11.—GENERAL STATEMENT showing the Quantity of each Article Transported on the Ottawa canals during the Season of Navigation in 1912.

| Articles.. | 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. | | adian. | United States. |
| Agricultural implements.. | 136 | 12 | | | | | | | 136 | 12 | 148 | 148 | |
| All other animal | 87 | 1,860 | | | | | | | 87 | 1,860 | 1,947 | 1,947 | |
| Barley | | | | | | | | | | | | | |
| Buckwheat | 4 | | | | | | | | 4 | | 4 | 4 | |
| Cement, bricks, &c. | 3,165 | 166 | | | | | | | 2,165 | 166 | 2,331 | 2,331 | |
| Coal, hard. | | | | | | | 1,801 | | 1,801 | | 1,801 | | 1,801 |
| " soft | 29,968 | | | | | | 1,036 | | 31,004 | | 31,004 | 29,968 | 1,036 |
| Coke | | | | | | | | | | | | | |
| Corn | 32 | | | | | | | | 32 | | 32 | 32 | |
| Dressed meats | 1 | 10 | | | | | | | 1 | 10 | 11 | 11 | |
| Flax | | | | | | | | | | | | | |
| Flour | 363 | 22 | | | | | | | 363 | 22 | 385 | 385 | |
| Fruits and vegetables | 134 | 186 | | | | | | | 134 | 186 | 320 | 320 | |
| Hay | | 2,580 | | 568 | | | | | | 3,148 | 3,148 | | |
| Hides and leather | | | | | | | | | | | | | |
| Household goods | 264 | 77 | | | | | | | 264 | 77 | 341 | 341 | |
| Iron, pig and bloom | 1,054 | 11 | | | | | | | 1,054 | 11 | 1,065 | 1,065 | |
| Iron and steel, all other | 1,247 | 10 | | | | | | | 1,247 | 10 | 1,257 | 1,257 | |
| Live stock | 41 | 499 | | | | | | | 41 | 499 | 540 | 540 | |
| Merchandise | 7,346 | 3,294 | | | | | 898 | | 8,244 | 3,294 | 11,538 | 10,640 | 898 |
| Oats | 61 | 5 | | | | | | | 61 | 5 | 66 | 66 | |
| Other mill products | 232 | 529 | | | | | | | 232 | 529 | 761 | 761 | |
| " packing house products | 262 | 83 | | | | | | | 262 | 83 | 345 | 345 | |
| " woods | 4 | 18,779 | | | | | | | 4 | 18,779 | 18,783 | 18,783 | |
| Ore, all other | 5,100 | | | | | | | | 5,100 | | 5,100 | | 5,100 |
| " copper | | | | | | | | | | | | | |
| " iron | | | | | | | | | | | | | |
| Pease | 2 | | | | | | | | 2 | | 2 | 2 | |
| Petroleum | 616 | 138 | | | | | | | 616 | 138 | 754 | 754 | |
| Poultry, game and fish | | 57 | | | | | | | | 37 | 37 | 37 | |
| Potatoes | 27 | 439 | | | | | | | 27 | 439 | 466 | 466 | |
| Pulpwood | | | | | | | | | | | | | |
| Rye | | | | | | | | | | | | | |
| Sand | | 98,729 | | | | | | | | 98,729 | 98,729 | 98,729 | |

| | | | | | | | | | | |
|-------------------------------|--------|---------|--------|--|-------|--------|---------|---------|---------|-------|
| Sawed lumber..... | 367 | 154,409 | 51,318 | | | 367 | 205,727 | 206,094 | 206,094 | |
| Shingles..... | | 120 | | | | | 120 | 120 | 120 | |
| Square timber..... | 3 | 1,600 | | | | 3 | 1,600 | 1,603 | 1,603 | |
| Sugar..... | 1,111 | 28 | | | | 1,111 | 28 | 1,139 | 1,139 | |
| Salt..... | 1,465 | 6 | | | | 1,465 | 6 | 1,471 | 1,471 | |
| Wheat..... | 94 | | | | | 94 | | 94 | 94 | |
| Wines, liquors and beers..... | 906 | 8 | | | | 906 | 8 | 914 | 914 | |
| Wool..... | | | | | | | | | | |
| Total freight..... | 53,092 | 283,637 | 51,856 | | 3,735 | 56,827 | 335,523 | 332,350 | 383,515 | 8,835 |

TABLE No. 7, No. 12.—GENERAL STATEMENT showing the Quantity of each article transported on the Rideau canal during the Season of Navigation in 1912.

| Articles. | 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. |
| Agricultural implements..... | 524 | 352 | | | | | | | 524 | 352 | 876 | 876 | |
| All other animals..... | 411 | 1,706 | | | | | | | 411 | 1,706 | 2,117 | 2,117 | |
| Barley..... | 2 | 28 | | | | | | | 2 | 28 | 30 | 30 | |
| Buckwheat..... | 4 | 1 | | | | | | | 4 | 1 | 5 | 5 | |
| Cement, bricks, &c..... | 1,336 | 295 | | | | | | | 1,336 | 295 | 1,631 | 1,631 | |
| Coal, hard..... | 681 | 82 | | | | | 6,762 | | 681 | 6,844 | 7,525 | 65 | 7,460 |
| " soft..... | 1,197 | 299 | | | | | 5,645 | | 1,197 | 5,944 | 7,141 | 1,431 | 5,710 |
| Coke..... | | 2 | | | | | | | | 2 | 2 | 2 | |
| Corn..... | 9 | 69 | | | | | | | 9 | 69 | 78 | 78 | |
| Dressed meats..... | 97 | 104 | | | | | | | 97 | 104 | 201 | 201 | |
| Flax..... | | | | | | | | | | | | | |
| Flour..... | 171 | 300 | | | | | | | 171 | 300 | 471 | 471 | |
| Fruits and vegetables..... | 171 | 173 | | | | | | | 171 | 173 | 344 | 344 | |
| Hay..... | 1,072 | | | | | | | | 1,072 | | 1,072 | 1,072 | |
| Hides and leather..... | 22 | 15 | | | | | | | 22 | 15 | 37 | 37 | |
| Household goods..... | 335 | 205 | | | | | | | 335 | 205 | 540 | 540 | |
| Iron, pig and bloom..... | 766 | 137 | | | | | | | 766 | 137 | 903 | 903 | |
| Iron and steel, all other..... | 827 | 156 | | | | | | | 827 | 156 | 983 | 983 | |
| Live stock..... | 11 | 9 | | | | | | | 11 | 9 | 20 | 20 | |
| Merchandise..... | 6,941 | 2,448 | | | | | | | 6,941 | 2,448 | 9,389 | 9,389 | |
| Oats..... | 68 | 456 | | | | | | | 68 | 456 | 524 | 524 | |
| Other mill products..... | 311 | 332 | | | | | | | 311 | 332 | 643 | 643 | |
| " packing house products..... | 452 | 276 | | | | | | | 452 | 276 | 728 | 728 | |
| " woods..... | 2,621 | 845 | | | | | | | 2,621 | 845 | 3,466 | 3,466 | |
| Ore, all other..... | 1,480 | 805 | | 170 | | | | | 1,480 | 975 | 2,455 | 2,455 | |
| " copper..... | | | | | | | | | | | | | |
| " iron..... | 2 | 4 | | | | | | | 2 | 4 | 6 | 6 | |
| Peas..... | 1 | 6 | | | | | | | 1 | 6 | 7 | 7 | |
| Petroleum..... | 585 | 376 | | | | | | | 585 | 376 | 961 | 961 | |
| Poultry, game and fish..... | 27 | 7 | | | | | | | 27 | 7 | 34 | 34 | |
| Potatoes..... | 53 | 32 | | | | | | | 53 | 32 | 85 | 85 | |
| Pulpwood..... | 45 | 1,224 | | | | | | | 45 | 1,224 | 1,269 | 1,269 | |
| Rye..... | 1 | | | | | | | | 1 | | 1 | 1 | |
| Sand..... | 49,735 | 38,667 | | | | | | | 49,735 | 38,667 | 88,402 | 88,402 | |

| | | | | | | | | | | |
|-------------------------------|---------------|---------------|------------|--|--|---------------|---------------|---------------|----------------|----------------|
| Sawed lumber..... | 5,439 | 18,077 | | | | | 5,439 | 18,077 | 23,516 | 23,516 |
| Shingles..... | 180 | 12 | | | | | 180 | 12 | 192 | 192 |
| Square timber..... | 9 | 190 | | | | | 9 | 190 | 199 | 199 |
| Sugar..... | 405 | 175 | | | | | 405 | 175 | 580 | 580 |
| Salt..... | 1,575 | 232 | | | | | 1,575 | 232 | 1,807 | 1,807 |
| Wheat..... | 25 | 710 | | | | | 25 | 710 | 735 | 735 |
| Wines, liquors and beers..... | 973 | 171 | | | | | 973 | 171 | 1,144 | 1,144 |
| Wool..... | 6 | 8 | | | | | 6 | 8 | 14 | 14 |
| Total freight..... | 78,570 | 68,986 | 170 | | | 12,407 | 78,570 | 81,563 | 160,133 | 146,963 |
| | | | | | | | | | | 13,170 |

TABLE 7, No. 13.—GENERAL STATEMENT showing the Quantity of each Article Transported on the Trent Valley canals during the Season of Navigation in 1912.

| Articles. | From Canadian to Canadian Ports. | | From Canadian to American 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. |
| Agricultural implements..... | 20 | 21 | | | | | | | 20 | 21 | 41 | 41 | |
| All other animals..... | 33 | 59 | | | | | | | 33 | 59 | 92 | 92 | |
| Barley..... | 4 | | | | | | | | 4 | | 4 | 4 | |
| Buckwheat..... | 1 | 236 | | | | | | | 1 | 236 | 237 | 237 | |
| Cement, bricks, &c..... | 494 | 1,118 | | | | | | | 494 | 1,118 | 1,612 | 1,612 | |
| Coal, hard..... | 109 | 29 | | | | | | | 109 | 29 | 138 | 138 | |
| " soft..... | 142 | 30 | | | | | | | 142 | 30 | 172 | 172 | |
| Coke..... | | | | | | | | | | | | | |
| Corn..... | | | | | | | | | | | | | |
| Dressed meats..... | 1 | | | | | | | | 1 | | 1 | 1 | |
| Flax..... | | | | | | | | | | | | | |
| Flour..... | 64 | 35 | | | | | | | 64 | 35 | 99 | 99 | |
| Fruits and vegetables..... | 14 | | | | | | | | 14 | | 14 | 14 | |
| Hay..... | 161 | | | | | | | | 161 | | 161 | 161 | |
| Hides and leather..... | 2 | | | | | | | | 2 | | 2 | 2 | |
| Household goods..... | 46 | 82 | | | | | | | 46 | 82 | 128 | 128 | |
| Iron, pig and bloom..... | 4 | 62 | | | | | | | 4 | 62 | 66 | 66 | |
| Iron and steel, all other..... | 6 | | | | | | | | 6 | | 6 | 6 | |
| Live stock..... | 224 | 42 | | | | | | | 224 | 42 | 266 | 266 | |
| Merchandise..... | 946 | 557 | | | | | | | 946 | 557 | 1,503 | 1,503 | |
| Oats..... | 131 | | | | | | | | 131 | | 131 | 131 | |
| Other mill products..... | 53 | 126 | | | | | | | 53 | 126 | 179 | 179 | |
| " packing house products..... | | | | | | | | | | | | | |
| " woods..... | 20,550 | 21,143 | | | | | | | 20,550 | 21,143 | 41,693 | 41,693 | |
| Ore, all other..... | 164 | 2,499 | | | | | | | 164 | 2,499 | 2,663 | 2,663 | |
| " copper..... | | | | | | | | | | | | | |
| " iron..... | | 5 | | | | | | | | 5 | 5 | 5 | |
| Peas..... | 45 | | | | | | | | 45 | | 45 | 45 | |
| Petroleum..... | 48 | 3 | | | | | | | 48 | 3 | 51 | 51 | |
| Poultry, game and fish..... | | | | | | | | | | | | | |
| Potatoes..... | 111 | 2 | | | | | | | 111 | 2 | 113 | 113 | |
| Pulpwood..... | 1,731 | 19,584 | | | | | | | 1,731 | 19,584 | 21,315 | 21,315 | |
| Rye..... | 1 | | | | | | | | 1 | | 1 | 1 | |
| Sand..... | 349 | | | | | | | | 349 | | 349 | 349 | |

| | | | | | | | | | | |
|-------------------------------|---------------|---------------|--|--|--|--|---------------|---------------|---------------|---------------|
| Sawed lumber..... | 982 | 1,748 | | | | | 982 | 1,748 | 2,730 | 2,730 |
| Shingles..... | 54 | 91 | | | | | 54 | 91 | 145 | 145 |
| Square timber..... | 1,039 | 567 | | | | | 1,039 | 567 | 1,606 | 1,606 |
| Sugar..... | 24 | 5 | | | | | 24 | 5 | 29 | 29 |
| Salt..... | | | | | | | | | | |
| Wheat..... | 1,530 | | | | | | 1,530 | | 1,630 | 1,530 |
| Wines, liquors and beers..... | 18 | 5 | | | | | 18 | 5 | 23 | 23 |
| Wool..... | | | | | | | | | | |
| Total freight..... | 29,101 | 48,049 | | | | | 29,101 | 48,049 | 77,150 | 77,150 |

TABLE 7, No. 14.—GENERAL STATEMENT showing the Quantity of each Article Transported on the St. Andrews canal during the Season of Navigation in 1912.

| Articles. | 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. |
| Agricultural implements. | | 5 | | | | | | | | 5 | 5 | 5 | |
| All other animal. | | | | | | | | | | | | | |
| Barley. | | | | | | | | | | | | | |
| Buckwheat. | | | | | | | | | | | | | |
| Cement, bricks, &c. | | | | | | | | | | | | | |
| Coal, hard. | 410 | 156 | | | | | | | 410 | 156 | 566 | 566 | |
| " soft. | | | | | | | | | | | | | |
| Cake. | | | | | | | | | | | | | |
| Corn. | | | | | | | | | | | | | |
| Dressed meats. | | | | | | | | | | | | | |
| Flax. | | | | | | | | | | | | | |
| Flour. | | 16 | | | | | | | | 16 | 16 | 16 | |
| Fruits and vegetables. | | | | | | | | | | | | | |
| Hay. | | 5 | | | | | | | | 5 | 5 | 5 | |
| Hides and leather. | | | | | | | | | | | | | |
| Household goods. | | 12 | | | | | | | | 12 | 12 | 12 | |
| Iron, pig and bloom. | | | | | | | | | | | | | |
| Iron and steel, all other. | | 2 | | | | | | | | 2 | 2 | 2 | |
| Live stock. | | | | | | | | | | | | | |
| Merchandise. | | 41 | | | | | | | | 41 | 41 | 41 | |
| Oats. | | 5 | | | | | | | | 5 | 5 | 5 | |
| Other mill products. | | | | | | | | | | | | | |
| " packing house products. | | | | | | | | | | | | | |
| " woods. | 5,154 | | | | | | | | 5,154 | | 5,154 | 5,154 | |
| Ore, all other. | | | | | | | | | | | | | |
| " copper. | | | | | | | | | | | | | |
| " iron. | | | | | | | | | | | | | |
| Peas. | | | | | | | | | | | | | |
| Petroleum. | | | | | | | | | | | | | |
| Poultry, game and fish. | | | | | | | | | | | | | |
| Potatoes. | 11 | | | | | | | | 11 | | 11 | 11 | |
| Pulpwood. | | 6,822 | | | | | | | | 6,822 | 6,822 | 6,822 | |

| | | | | | | | | | | |
|-------------------------------|---------------|--------------|--|--|--|--|---------------|--------------|---------------|---------------|
| Rye..... | | | | | | | | | | |
| Sand..... | 80,733 | | | | | | 80,733 | 80,733 | 80,733 | |
| Sawed lumber..... | 1,736 | 441 | | | | | 1,736 | 441 | 2,177 | 2,177 |
| Shingles..... | | | | | | | | | | |
| Square timber..... | | | | | | | | | | |
| Sugar..... | | | | | | | | | | |
| Salt..... | | | | | | | | | | |
| Wheat..... | | | | | | | | | | |
| Wines, liquors and beert..... | | | | | | | | | | |
| Wool..... | | | | | | | | | | |
| Total freight..... | 88,044 | 7,505 | | | | | 88,044 | 7,505 | 95,549 | 95,549 |

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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 5,142 tons..... | 1 | 5,142 | 1 | 5,000 to ——— tons..... | | |
| 2 | 4,000 " 5,000 "..... | 2 | 8,900 | 2 | 4,000 " 5,000 "..... | | |
| 3 | 3,000 " 4,000 "..... | 2 | 6,800 | 3 | 3,000 " 4,000 "..... | | |
| 4 | 2,000 " 3,000 "..... | 10 | 23,900 | 4 | 2,000 " 3,000 "..... | | |
| 5 | 1,000 " 2,000 "..... | 70 | 90,000 | 5 | 1,000 " 2,000 "..... | | |
| 6 | Under 1,000..... | 52 | 13,550 | 6 | Under 1,000..... | 20 | 3,305 |
| | Total..... | 137 | 148,292 | | Total..... | 20 | 3,305 |

WELLAND

| | | | | | | | |
|---|------------------------|-----|--------|---|------------------------|----|--------|
| 1 | 250 to 1,667 tons..... | 86 | 89,525 | 1 | 250 to 1,239 tons..... | 23 | 15,125 |
| 2 | 200 " 249 "..... | 3 | 625 | 2 | 200 " 249 "..... | 2 | 400 |
| 3 | 150 " 199 "..... | 2 | 325 | 3 | 150 " 199 "..... | 1 | 150 |
| 4 | 100 " 149 "..... | 6 | 675 | 4 | 100 " 149 "..... | 6 | 600 |
| 5 | 50 " 99 "..... | 4 | 330 | 5 | 50 " 99 "..... | 4 | 310 |
| 6 | Under 50 "..... | 24 | 555 | 6 | Under 50 "..... | 3 | 30 |
| | Total..... | 125 | 92,035 | | Total..... | 39 | 16,615 |

ST. LAWRENCE

| | | | | | | | |
|---|------------------------|-----|---------|---|------------------------|-----|--------|
| 1 | 250 to 1,597 tons..... | 102 | 92,390 | 1 | 250 to 1,297 tons..... | 93 | 44,610 |
| 2 | 200 " 249 "..... | 5 | 1,050 | 2 | 200 " 249 "..... | 16 | 3,300 |
| 3 | 150 " 199 "..... | 7 | 1,150 | 3 | 150 " 199 "..... | 45 | 7,740 |
| 4 | 100 " 149 "..... | 13 | 1,880 | 4 | 100 " 149 "..... | 70 | 8,150 |
| 5 | 50 " 99 "..... | 37 | 2,590 | 5 | 50 " 99 "..... | 50 | 3,630 |
| 6 | Under 50 "..... | 71 | 1,415 | 6 | Under 50 "..... | 10 | 325 |
| | Total..... | 235 | 100,475 | | Total..... | 284 | 67,755 |

RIDEAU, OTTAWA

| | | | | | | | |
|---|----------------------|----|-------|---|----------------------|-----|--------|
| 1 | 250 to 371 tons..... | 5 | 1,520 | 1 | 250 to 370 tons..... | 4 | 1,200 |
| 2 | 200 " 249 "..... | 1 | 220 | 2 | 200 " 249 "..... | 8 | 1,660 |
| 3 | 150 " 199 "..... | 8 | 1,360 | 3 | 150 " 199 "..... | 37 | 6,080 |
| 4 | 100 " 149 "..... | 8 | 900 | 4 | 100 " 149 "..... | 35 | 4,230 |
| 5 | 50 " 99 "..... | 14 | 975 | 5 | 50 " 99 "..... | 18 | 1,310 |
| 6 | Under 50 "..... | 55 | 820 | 6 | Under 50 "..... | 17 | 295 |
| | Total..... | 91 | 5,795 | | Total..... | 119 | 14,775 |

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passed through the following canals during the Season of Navigation, 1912.

MARIE CANAL.

| UNITED STATES. | | | | | | | |
|----------------|--------------------------|-----|-----------|--------|------------------------|-----|----------|
| Class. | Steam Vessels. | No. | Tonnage. | Class. | Sailing Vessels. | No. | Tonnage. |
| 1 | 5,000 to 6,498 tons..... | 70 | 384,498 | 1 | 5,000 to ——— tons..... | | |
| 2 | 4,000 " 5,000 "..... | 89 | 406,400 | 2 | 4,000 " 5,000 "..... | | |
| 3 | 3,000 " 4,000 "..... | 132 | 453,600 | 3 | 3,000 " 4,000 "..... | 2 | 7,000 |
| 4 | 2,000 " 3,000 "..... | 37 | 98,400 | 4 | 2,000 " 3,000 "..... | | |
| 5 | 1,000 " 2,000 "..... | 44 | 71,100 | 5 | 1,000 " 2,000 "..... | | |
| 6 | Under 1,000 "..... | 24 | 7,890 | 6 | Under 1,000 "..... | 8 | 3,450 |
| | Total..... | 396 | 1,421,888 | | Total..... | 10 | 10,450 |

CANAL.

| | | | | | | | |
|---|------------------------|-----|--------|---|------------------------|----|-------|
| 1 | 250 to 2,053 tons..... | 70 | 73,550 | 1 | 250 to 2,052 tons..... | 9 | 7,875 |
| 2 | 200 " 249 "..... | 2 | 400 | 2 | 200 " 249 "..... | 3 | 600 |
| 3 | 150 " 199 "..... | 5 | 850 | 3 | 150 " 199 "..... | 2 | 300 |
| 4 | 100 " 149 "..... | 3 | 325 | 4 | 100 " 149 "..... | 2 | 225 |
| 5 | 50 " 99 "..... | 14 | 940 | 5 | 50 " 99 "..... | 2 | 110 |
| 6 | Under 50 "..... | 6 | 700 | 6 | Under 50 "..... | 3 | 75 |
| | Total..... | 100 | 76,765 | | Total..... | 21 | 9,185 |

CANAL.

| | | | | | | | |
|---|------------------------|----|--------|---|----------------------|-----|--------|
| 1 | 250 to 1,919 tons..... | 38 | 37,800 | 1 | 250 to 756 tons..... | 8 | 3,766 |
| 2 | 200 " 249 "..... | 1 | 240 | 2 | 200 " 249 "..... | 1 | 210 |
| 3 | 150 " 199 "..... | 2 | 310 | 3 | 150 " 199 "..... | 1 | 160 |
| 4 | 100 " 149 "..... | 2 | 210 | 4 | 100 " 149 "..... | 122 | 12,790 |
| 5 | 50 " 99 "..... | 12 | 830 | 5 | 50 " 99 "..... | 41 | 4,095 |
| 6 | Under 50 "..... | 18 | 215 | 6 | Under 50 "..... | | |
| | Total..... | 73 | 39,605 | | Total..... | 173 | 21,021 |

AND CHAMBLY CANALS.

| | | | | | | | |
|---|----------------------|---|----|---|----------------------|-----|--------|
| 1 | 250 to ——— tons..... | | | 1 | 250 to ——— tons..... | | |
| 2 | 200 " 249 "..... | | | 2 | 200 " 249 "..... | | |
| 3 | 150 " 199 "..... | | | 3 | 150 " 199 "..... | 10 | 1,680 |
| 4 | 100 " 149 "..... | | | 4 | 100 " 149 "..... | 170 | 18,710 |
| 5 | 50 " 99 "..... | | | 5 | 50 " 99 "..... | 429 | 40,380 |
| 6 | Under 50 "..... | 1 | 15 | 6 | Under 50 "..... | | |
| | Total..... | 1 | 15 | | Total..... | 609 | 60,770 |

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. | 7½ |
| 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), 553½ 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 feet. |
| Depth of water } at two locks..... | 18 " |
| on sills. } 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 of 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 feet |
| Depth of water on sills..... | 15 " |
| Breadth of canal at bottom..... | 100 " |
| Breadth of canal at 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 rapids 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 feet. |
| Depth of water on sills..... | 14 " |
| Breadth of canal at bottom..... | 90 " |
| Breadth of canal at water surface..... | 154 " |

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The old lift locks, 200 feet 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 or lockages | 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 | 3¾ 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 feet by 45, 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 9¾ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

SESSIONAL PAPER No. 20a

GALOPS CANAL.

| | |
|---|--------------|
| First commenced, 9 feet..... | 1844 |
| Opened..... | 1846 |
| Enlargement commenced..... | 1888 |
| " completed..... | 1903 |
| Length of canal..... | 7½ miles. |
| Number of locks..... | 3 |
| Dimensions of locks. } one of which is } | { 800 by 50. |
| } a guard lock. } | { 270 by 45. |
| | { 303 by 45. |
| Total rise of lockage..... | 15½ 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 4½ 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..... | 5½ 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..... | 27½ miles | 26¾ miles |
| Pairs of guard-gates (formerly 3) .. | 2 | 1 |
| Number of locks | { lift..... | 26 |
| | { guard..... | 1 |
| Dimensions..... | { 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. 6in. | |
| Total rise or lockage .. | 326¾ feet | 326¾ feet. |
| Depth of water on sills.. | 10¼ " | 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 to River Welland | 10 feet. |
| Depth of water on sills | 9 feet 10 inches. |

GRAND RIVER FEEDER.

| | | | | | |
|-----------------------------------|---|---|-----------------------|------------------|------|
| Length of canal | 21 miles. | | | | |
| Number of locks | 2 | | | | |
| Dimensions of locks | <table> <tr> <td rowspan="3">}</td> <td>1 of 150 by 26½ feet.</td> </tr> <tr> <td>1 of 300 by 45 "</td> </tr> <tr> <td>28 "</td> </tr> </table> | } | 1 of 150 by 26½ feet. | 1 of 300 by 45 " | 28 " |
| } | 1 of 150 by 26½ feet. | | | | |
| | 1 of 300 by 45 " | | | | |
| | 28 " | | | | |
| Total rise or lockage | 10 feet. | | | | |
| Depth of water on sills | 9 feet. | | | | |

PORT MAITLAND BRANCH.

| | |
|-----------------------------------|----------------------|
| Length of canal | 1½ miles. |
| Number of locks | 1 |
| Dimensions of locks | 185 feet by 45 feet. |
| Total rise or lockage | 7 feet. |
| Depth of water on sills | 7½ feet. |

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, 11½ 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 feet by 60 feet. |
| Depth of water on sills (at lowest known water level) | 18 feet 3 inches. |
| Total rise or lockage | 18 feet. |
| Breadth of canal at bottom | 141 feet 8 inches. |
| Breadth at surface of water | 150 feet. |

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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 245½ 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..... | 8½ | |
| From Lachine to Ste. Anne's lock..... | 15 | 23½ |
| Ste. Anne's lock and piers..... | ¼ | 23¾ |
| Ste. Anne's lock to Carillon canal..... | 27 | 50¾ |
| The Carillon canal..... | 3¼ | 54¼ |
| The Carillon to Grenville canal..... | 6¼ | 60¾ |
| The Grenville canal..... | 5¾ | 66¾ |
| From the Grenville canal to entrance of Rideau navigation..... | 56 | 119¾ |
| Rideau navigation ending at Kingston..... | 126¼ | 245¾ |

STE. ANNE'S LOCK.

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

| | Old Lock. | New Lock. |
|------------------------------|----------------|----------------|
| Length of canal..... | ¼ mile. | ½ mile. |
| Number of locks..... | 1 | 1 |
| Dimensions of locks..... | 190 x 45 feet. | 200 x 45 feet. |
| Total rise or 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, 23½ 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 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 $\frac{1}{4}$ miles. |
| Number of locks. | 5 |
| Dimensions of locks. | 200 x 45 feet. |
| Total rise or lockage. | 43 $\frac{1}{2}$ feet. |
| Depth of water on sills. | 9 " |
| Breadth of canal at bottom. | 40 to 50 feet. |
| 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 $\frac{1}{2}$ 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 $\frac{1}{2}$ 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 feet 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 sources of supply:—

From the summit, the route towards Ottawa follows the Rideau river, and that towards Kingston follows the River Cataraqui. 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 Buck 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 Cataraqui. 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. | $\frac{1}{2}$ mile. |
| Number of locks. | 1 |
| Dimensions of lock. | 200 feet by 45 feet. |
| Total rise of lockage. | 5 feet. |
| 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

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waters have been made practicable for navigation, and the whole scheme 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 .. | — | 9 |
| Nine Mile rapids to Percy landing.. | 19½ | — |
| Percy landing to Heeley's Falls dam.. | — | 14½ |
| Heeley's Falls dam to Peterborough.. | 51½ | — |
| Peterborough to Lakefield.. | — | 9½ |
| Lakefield to a point across Balsam lake.. | 61 | — |
| | 132½ | 33 |

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

From Sturgeon point on Sturgeon lake, 48½ 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 2½ 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, 15½ 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' x 33' x 5' 0" to | 7' 6" depth water on mitre sill. |
| 1 | " Lindsay | 134' x 33' x 5' 0" to | 7' 6" " " |
| 1 | " Bobcaygeon | 134' x 33' x 5' 8" to | 7' 0" " " |
| 1 | " Buckhorn | 134' x 33' x 5' 0" to | 9' 0" " " |
| 1 | " Lovesick | 134' x 33' x 5' 0" to | 9' 4" " " |
| 2 | " Burleigh | 134' x 33' x 6' 0" to | 8' 0" " " |
| 1 | " Young's point. 134' x 33' x 5' 0" to | 14' 0" | " " |
| 1 | " Peterborough . 134' x 33' x 5' 0" to | 10' 0" | " " |
| 1 | " Hastings | 134' x 33' x 7' 0" to | 10' 6" " " |
| 1 | " Chisholms | 134' x 33' x 5' 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 from 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 commenced.. | 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.

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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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