

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS AND CANALS

FOR THE FISCAL YEAR

FROM JULY 1, 1903, TO JUNE 30, 1904

SUBMITTED IN ACCORDANCE WITH THE PROVISIONS OF THE REVISED STATUTES
OF CANADA, CHAPTER 37, SECTION 28

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OTTAWA

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EXCELLENT MAJESTY

1905

To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey, Viscount Howick, Baron Grey of Howick, in the County of Northumberland, in the Peerage of the United Kingdom, and a Baronet; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, &c., &c., Governor General of Canada.

MAY IT PLEASE YOUR EXCELLENCY,—

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Railways and Canals, of the Dominion of Canada, for the past fiscal year from July 1, 1903, to June 30, 1904.

All of which is respectfully submitted.

H. R. EMMERSON,
Minister of Railways and Canals.

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REPORT OF THE DEPUTY MINISTER.

To the Honourable H. R. EMMERSON,
Minister of Railways and Canals.

SIR,—I have the honour to submit the annual report of the Department of Railways and Canals for the fiscal year ended June 30, 1904.

The annual reports of the engineers, together with general and special reports from superintendents, both of railways and canals, and from other officers in the department, are given in appendices.

In Part II. will be found statements showing the amounts expended during the past fiscal year in construction, repair and maintenance of the several works under the department; also statements showing total expenditure on each canal since its construction, and on each of the government railways; also a statement showing the payments made, year by year, to subsidized railways, with the aggregates of such payments.

GENERAL SUMMARY.

The expenditures of the department for the fiscal year 1903-04 on its works of construction, operation and maintenance, both railway and canal, and in furtherance, by subsidy under authority of parliament, of outside railway enterprises, are as follows:—

The government railway expenditure totals \$12,351,250.05, of which \$2,619,059.86 was chargeable to capital account, \$2,132,231.62 to income, and \$7,599,958.57 to revenue. There was paid out from the consolidated fund as subsidies to railways other than the government roads a total of \$2,046,878.45, which is included in the above under 'Income.'

The expenditure on canals aggregates \$2,980,558.88, of which \$1,880,787.30 was chargeable to capital, \$302,409.02 to income, and out of revenue, \$436,034.76, for staff, and \$361,327.90 for repairs.

Adding to the above the further sum of \$36,262.32 for miscellaneous expenditures, the total departmental expenditure for railways and canals for the past fiscal year amounted to \$15,368,071.25.

The total revenue derived from the government works for the past fiscal year was as follows:—

From railways \$6,627,255.51, and from canals, \$79,536.51, of which the sum of \$72,701.28 was derived from hydraulic rents.

By Orders in Council of April 27, and May 19, 1903, tolls for passage through any of the government canals were abolished, the exemption, which was by way of experiment, to continue in force for the two seasons of navigation of 1903 and 1904, only.

The total government expenditure on railway construction prior to and since confederation (July 1, 1867), up to July 1, 1904, amounts, on capital account, to \$142,648,039.09, which includes the sum of \$25,000,000 granted (from capital) to the Canadian Pacific Railway Company for its main line. In addition there has been expended from the consolidated fund a total of \$139,556,724.15, including \$31,341,933.16, paid as subsidies to railways other than the Canadian Pacific Railway, and \$107,110,755.93, for working expenses of the government railways, making a total expenditure of \$282,204,763.24. Of this amount the sum of \$13,881,460.65 was expended on construction works prior to confederation, on portions of what is now the Intercolonial Railway system.

The total revenue received from the government railways from July 1, 1867, to July 1, 1904, amounts to \$97,569,608.11.

The government expenditure on canals from July 1, 1867, to July 1, 1904, amounts, on capital account, to \$87,223,164.67, and from the consolidated fund to \$21,090,389.93, making a total of \$108,313,554.60.

The total revenue derived from canals during the same period is \$13,320,222.95.

The total expenditure on railways and canals up to July 1, 1904, is, as above, \$390,518,317.84, to which must be added for miscellaneous expenditures, embracing both, \$629,294.59; making a grand total of \$391,147,612.43.

The total revenue derived from railways and canals from July 1, 1867, to July 1, 1904, is \$110,889,831.06.

Details of the above will be found in the statements of the accountant of the department, Part II., pages 3 to 49, inclusive.

RAILWAYS.

The present report deals with those railways of the Dominion directly controlled by the Federal Government, and others towards the construction of which subsidies have been granted or authorized.

In an appendix will be found a special statistical report, embodying returns for the fiscal year ended June 30, 1904, made by Canadian railway companies, as required by statute. This report gives detailed information as to railway operations in Canada, including the government roads, of which the following is a summary:—

Steam Railways.

The number of steam railways in actual operation, including the two government roads, the Intercolonial and the Prince Edward Island Railways, at the close of the fiscal year, June 30, 1904, was 191; some of these, however, are amalgamated or leased, making the total number of controlling companies 85, not including the government railways. The number of companies absorbed by amalgamation was 54, and the number of leased lines was 38.

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On June 30, 1904, the number of miles of completed railway was 19,611, an increase of 534 miles, besides 3,327 miles of sidings. The number of miles laid with steel rails was 19,545, of which 763 miles was double track. The number of miles in operation was 19,431.*

The paid-up capital amounted to \$1,186,546,918, an increase of \$39,996,149.** The gross earnings of the year amounted to \$100,219,436, an increase of \$4,154,909, and the working expenses aggregated \$74,563,162, an increase of \$7,081,638, compared with those of the previous year; leaving the net earnings \$25,656,274, a decrease of \$2,926,729. The number of passengers carried was 23,640,765, an increase of 92,023, and the freight traffic amounted to 48,097,519 tons, an increase of 724,102 tons. The total number of miles run by trains was 61,312,002, an increase of 929,082.

The rolling stock comprised: For passenger service, 2,149 cars; for freight service, 84,422, including 54,877 box and cattle cars; and for operation and maintenance service 4,157, making a total of 90,728 cars. Of these, 75,273 were equipped with air-brakes, and 80,585 were fitted with automatic couplers, an increase of 4,049 over the previous year. The locomotives numbered 2,768.

The accident returns show a total of 395 persons killed, 25 being passengers, 192 employees and 178 others, and, in addition, 1,405 injured, of whom 234 were passengers, 912 employees and 259 others. By train collisions and derailments 8 passengers, 60 employees and 9 others were killed, and 130 passengers, 165 employees and 14 others were injured. Through jumping on and off trains or engines in motion, 7 passengers, 7 employees and 7 others were killed, and 57 passengers, 84 employees and 30 others were injured. Through walking, lying or being on the track, 5 passengers, 41 employees and 103 others were killed, and 59 employees and 95 others were injured. Through falling from cars or engines, 5 passengers, 34 employees and 8 others were killed, and 17 passengers, 130 employees and 14 others were injured. Through being struck by engines or cars at highway crossings, 1 employee and 36 others were killed, and 3 passengers, 6 employees and 56 others were injured. In the work of coupling cars, 11 employees were killed, and 2 passengers, 162 employees and 3 others were injured, a total of 178, as against 211, 241, 290 and 363 in the four preceding years, respectively; a very satisfactory testimony to the efficiency and value of the automatic car coupler, now, happily, growing into general use.

By the Railway Act, 1903, section 211 (c.) railway companies are required to provide and use on their engines and cars 'couplers which couple automatically by impact, and which can be uncoupled without the necessity of men going in between the ends of the cars.' They are allowed, however, until January 1, 1906, for fitting with such couplers cars built prior to the passage of the Act.

*Of this mileage the Canadian Pacific Railway comprised 8,062 miles (4,742.40 owned and 3,319.60 leased); the Grand Trunk Railway 3,158.60 miles; the Intercolonial 1,342.26 miles, including the Windsor Branch; the Canada Atlantic 458.60 miles (400.30 miles owned, and 58.30 leased) and the Canadian Northern 1,349.60 miles (998.65 owned, and 350.95 leased).

**The main items of this increase are the following: Canadian Northern, \$1,959,20; Canadian Pacific, \$13,486,685; Grand Trunk, \$7,906,002; Intercolonial, \$1,880,856.

Electric Railways (including Street Railways and Tramways).

At the close of the fiscal year ended June 30, 1904, there were 767 miles completed, of which 745 miles were laid with steel rails, 188 miles being double tracked. The paid-up capital amounted to \$50,399,188, of which the municipal aid amounted to \$173,000 (including \$100,000, subscription to shares, and \$40,000, loan). The number of miles in operation was 745, the actual increase being 58 miles, as a portion of the mileage returned in the previous year was double track. The gross earnings aggregated \$8,453,609, an increase of \$1,219,932, and the working expenses \$5,326,517, an increase of \$853,659, leaving the net earnings \$3,127,092, an increase of \$366,273. The number of passengers carried was 181,689,998, † an increase of 26,027,186, and the freight carried amounted to 400,161 tons, an increase of 28,875 tons. The car mileage was 42,066,124, an increase of 4,037,595 miles. The accident returns show a total of 53 persons killed during the year, 10 being passengers, 3 employees and 40 others. In addition, 844 persons were injured. Of these 508 were passengers, 64 employees and 272 others; 1 employee and 2 others were killed, and 35 passengers, 10 employees and 8 other persons injured in collisions and derailments; 2 passengers were killed, and 307 passengers, 4 employees and 2 other persons injured through jumping on or off the cars when in motion; 1 passenger and 21 others were killed, and 7 passengers, 1 employee and 102 other persons were injured through walking or being on the track; 4 passengers and 1 other person were killed, and 118 passengers and 25 employees injured through falling from cars; 3 passengers, 2 employees and 15 other persons were killed and 20 passengers, 2 employees and 145 other persons were injured by being struck by engines or cars at highway crossings. There were 8 employees injured by the work of coupling cars, and 3 employees injured while at work near track making up trains. Power was supplied in 12 cases by water, and in 30 cases by steam. Ontario has 375 miles, Quebec 253, New Brunswick 13, Nova Scotia 44, Manitoba 28, and British Columbia 51 miles. Returns were received from 49 companies.

All Railways, Steam and Electric.

At the close of the fiscal year ended June 30, 1904, the conjoined statistics of steam and electric roads (including street railways) show the following results: The number of companies was 240. There were 20,378 miles of railway completed, 20,176 miles being in operation. The paid-up capital amounted to \$1,236,946,106. The gross earnings were \$108,673,045, and the total working expenses \$79,889,679, making the net earnings \$28,783,366. 205,330,763 passengers, and 48,497,680 tons of freight were carried; 35 passengers were killed.

Again this year trouble has been experienced owing to the dilatory manner in which returns are made by companies, the work of compiling these railway statistics being thus greatly impeded, and the issue of the departmental report much delayed.

†The city street railways and their extensions carried passengers as follows: Montreal (3 companies), 62,276,903; Toronto (5 companies), 58,697,920; Ottawa, 7,649,850; Quebec, 5,179,091; Hamilton (4 companies), 6,673,878; Winnipeg, 7,763,562; London, 4,104,719; Halifax, 3,369,280; St. John, 1,396,339; and Vancouver, Victoria and New Westminster (operated, and returns made, by one company), 8,869,486.

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No returns whatever have been received from the following three companies, namely,—

Lenora and Mount Sicker Railway Company, (B.C.)
Princeton Branch of the Washington County Railway Company (U.S.)
St. Thomas Electric Street Railway.

In the case of the following companies, returns were not received until after the 27th of December, 1904,—too late to be included, namely:—

Hampton and St. Martin's Railway Company of New Brunswick.
New Brunswick Coal and Railway Company.
Fredericton and St. Mary's Railway Bridge Company.
Quebec Southern Railway Company.

The figures of last year's return have been used this year in all the above cases, except for the Princeton Branch and the St. Thomas Electric Street Railway, for which no figures were obtainable.

In the case of the Metropolitan Electric Railway, Toronto, no return was given as to number of passengers carried nor as to miles run; the figures of last year for these items have been used.

GOVERNMENT RAILWAYS IN OPERATION.

The government railways are: The Intercolonial, the Windsor Branch (maintained only), and the Prince Edward Island Railway.

Details respecting these railways and their operations will be found in the appendices, Part I., containing reports from the chief engineer of the department, the general manager of government railways, and the officials of these roads.

The gross earnings of all the government roads for the past fiscal year, 1903-04, amounted to \$6,627,255.51, and compared with those of the preceding year, show an increase of \$42,656.74. The gross working expenses amounted to \$7,599,958.57, an increase of \$1,125,824.37.

The net loss on the operations of the year was \$972,703.06.

The Intercolonial produced a loss of \$900,750.61; the Windsor Branch (one-third of total earnings), a profit of \$29,352.96, and the Prince Edward Island a loss of \$101,305.41.

The above figures include rental, \$140,000, paid for the extension of the Intercolonial into Montreal.

INTERCOLONIAL RAILWAY.

On March 1, 1898, the operations of the Intercolonial were extended to Montreal by means of leases obtained from the Grand Trunk and Drummond County Railway Companies, making an addition of 169'81 miles to the operation of the government

line; its length being now 1,320.92 miles, as against 1,314.67 miles in the previous year, the addition being due to the completion of the Rivière Ouelle Branch.

The leasing agreement with the Grand Trunk Railway Company, dated February 1, 1898, was confirmed by the Act 62-63 Vict., chap. 5 (1899). Its term extends for a period of ninety-nine years from March 1, 1898; the annual rental being fixed at \$140,000.

Under authority of the Act 62-63 Vic., chap. 6 (1899), the Drummond County Railway from Chaudière to Ste. Rosalie, together with the branch from St. Léonard to Nicolet was acquired by the Dominion; conveyance being made by a deed dated November 7, 1899.

The accountant of the railway has dealt with the rental paid under the Grand Trunk Railway lease (the only one now remaining), as an addition to the ordinary working expenses, and, in his comparative statement of averages for each year, both with the rental included, and also with the rental omitted. The statements of the general manager, however, are based on figures from which the rental is omitted. This explanation will cover any seeming discrepancy of statement in the matter. The accountant of the department, in his statements (Part II.), includes the rental, and it is also included in my present report.

CAPITAL ACCOUNT.

During the fiscal year there was an addition of \$1,880,856.60 to the capital expenditure, making the total expenditure chargeable to capital on the whole road as amalgamated under the Acts 54-55 Vic., chap. 50 (1891) and 62-63 Vic., chaps. 5 and 6 (1899), up to July 1, 1904. \$72,735,935.80.

The additions made during the past fiscal year included (omitting cents) the following items: For increased accommodation at Sydney, \$25,682; for strengthening bridges, \$164,928; for increased accommodation at Lévis, \$62,107; for air brakes to freight cars, \$24,990; to exchange draw bars on freight cars, \$46,000; for rolling stock, \$643,020; new superstructure for the Restigouche bridge, \$95,106; for extension to Moncton repair shop, \$26,377; for engine house, car shop, &c., at Rivière du Loup, \$48,805; for engine house, &c., at Chaudière Junction, \$48,475; for increased accommodation at St. John, \$67,355, at Halifax, \$105,762, at Moncton, \$95,198, at Ste. Flavie, \$27,472; for a spur line from railway to wharf at Rivière Ouelle, \$32,369; for double-tracking parts of line, \$85,138, and for steel rails and fastenings, \$50,356. Details will be found in the reports of the general manager and other officers in Part I. of the Appendices.

REVENUE ACCOUNT.

The gross earnings of the year amounted to \$6,339,231.43, an increase of \$14,907.71, and the working expenses to \$7,239,982.04 (including \$140,000 paid as rental for the extension into Montreal), being an increase of \$1,043,328.85 in comparison with the previous year, when the same rental was paid. The expenditure exceeded the earnings by \$900,750.61. There was an increased expenditure of \$440,761.50 for locomotive power; of \$369,070.28 for car expenses; of \$105,322.89 for

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maintenance of way and works; of \$88,726.18 for station expenses, and of \$40,563.02 for general charges.

Comparing the earnings with those of the previous year, the passenger traffic produced \$2,021,568.40, or 31.89 per cent of the gross earnings, an increase of \$93,651.43; the freight traffic amounted to \$4,041,122.48, or 63.75 per cent of the gross earnings, a decrease of \$87,132.52, and the carriage of mail and express freight produced \$276,540.55, or 4.36 per cent of the gross earnings, an increase of \$8,388.80. The earnings per mile of railway were \$4,799.10, a decrease of \$11.46.

The working expenses per mile of railway were \$5,481.02, an increase of \$767.56, and per train mile 111.32 cents, and increase of 13.67 cents. These figures include the rental of the leased extension to Montreal. The mileage of the railway was 1,320.92 miles against 1,314.67 miles the preceding year.

GENERAL OBSERVATIONS.

The traffic of the road during the past year in comparison with that of the preceding year is indicated by the following statement of the principal items comprised in it:—

The number of passengers carried was 2,663,156, an increase of 258,926. Of this increase 192,830 were local and 66,096 through passengers. Of freight, 2,664,149 tons, a decrease of 126,588 tons, the local freight having fallen off by 116,732 tons and the through freight by 9,856 tons.

Of flour and meal, 1,607,050 barrels were carried, an increase of 85,510, and of grain 2,788,772 bushels, a decrease of 603,480. Lumber showed an increase of 6,148,214 superficial feet, the quantity carried being 465,379,863 feet. Of live stock, 113,006 head were carried, being a decrease of 14,054 head. 694,761 tons of coal, a decrease of 55,315 tons, were carried, and there was a decrease of 1,394 tons of cordwood, the quantity being 53,606 cords. Of manufactured goods 522,410 tons, a decrease of 68,116 tons, were carried. There was an increase of 700,938 tons in the quantity, 1,194,163 tons, of other articles transported, which included 44,920 tons of refined sugar, an increase of 13,809 tons, though raw sugar showed a decrease of 8,604 tons; only 8,727 tons being moved; 11,068 tons of fresh fish, an increase of 779 tons; salt fish, of which 8,996 tons were carried, showing a decrease of 2,499 tons.

Ocean borne goods, other than deals, to and from Europe via Halifax, aggregated 174,520 tons, an increase of 35,889 tons. Of this 146,070 tons were local traffic.

The winter was very severe and stormy, and the consequent expenditure was considerably increased, being \$130,652.35, an increase of \$41,171.65.

One hundred and sixty-two miles of the road were relaid with 80-pound steel rails and 44 miles with 67-pound rails.

One hundred and twelve additional freight cars were fitted with the Westinghouse air brakes, making the total number so fitted 4,426.

The rolling stock at the close of the fiscal year comprised, amongst other items, 302 locomotives, 31 first and 31 second-class sleepers, 5 parlour and 7 dining cars, 117 first and 93 second class passenger cars, 5,486 box cars, 84 refrigerator cars, 2,686 platform, 999 hopper, 542 coal and 123 stock cars, 49 snow ploughs and 22 flangers.

The value of stores on hand at the close of the fiscal year, including fuel and steel rails and fastenings, was \$1,423,356.55.

The railway works and rolling stock have been maintained at a satisfactory standard of efficiency.

Details of works executed and various financial and other items of information will be found in the appendices hereto.

WINDSOR BRANCH.

The road is 32 miles in length. It extends from Windsor Junction, on the Intercolonial Railway, to Windsor.

The railway is operated by the Dominion Atlantic Railway Company, formerly the Windsor and Annapolis Railway Company. The Company pay all charges in connection with the working of the traffic, two-thirds of the gross earnings being allowed them, the government taking the remaining one-third, and assuming all costs of maintenance of the road and works. This arrangement is carried out under an agreement dated December 13, 1892, which extends, for a further term of 21 years, arrangements similar to those made in 1871.

All charges for superintendence and supervision of maintenance of works are borne by the government; the duty of supervision is performed by the chief officers of the Intercolonial Railway.

The gross earnings of the government (one-third of gross receipts) credited to this branch, amounted to \$53,634.05, an increase of \$11,073.24. The expenses of maintenance amounted to \$24,281.09, an increase of \$6,437.90, leaving a profit to the government of \$29,352.96.

The road has been maintained in good order. Details will be found in the appendices.

PRINCE EDWARD ISLAND RAILWAY.

The mileage of this railway in operation was the same as in the previous year, namely, 209 miles.

CAPITAL ACCOUNT.

The total cost of the road and equipment chargeable to capital account at the close of the past fiscal year was \$6,128,116.80; there being an addition during the year of \$698,877.47; the principal items being an expenditure of \$226,248.22 on the branch to Murray Harbour, and \$418,982.76 for a combined railway and carriage bridge over

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the River Hillsborough, Charlottetown; \$10,895.74 was expended on the straightening of the line at Curtis creek, and \$21,580.30 on air brakes and signals.

REVENUE ACCOUNT.

The gross earnings amounted to \$234,390.03, and the working expenses to \$335,695.44, the expenditure in excess being \$101,305.41.

Compared with the previous year, the gross earnings show an increase of \$16,675.79, and the working expenses an increase of \$76,057.62. The railway carried 224,567 passengers, an increase of 19,302, producing \$102,378.49, an increase of \$7,141.37. Of freight there were carried 86,286 tons, an increase of 5,704 tons, producing \$114,061.59, an increase of \$7,541.87. The earnings from mails and sundries amounted to \$17,049.95, an increase of \$1,992.55.

The train mileage (the number of miles run by trains) was 310,785, an increase of 19,522 miles.

The cost per train mile was 108'01 cents, an increase of 18'87 cents; and the cost per mile of railway \$1,606.09, an increase of \$443.10.

The value of stores on hand at the close of the fiscal year, including fuel and rails, was \$99,809.77.

The road, with its buildings and rolling stock, has been efficiently maintained.

Details of operation will be found in the appendices (Part I), including the reports of the superintendent and other officers.

SURVEY FOR A RAILWAY TO GIVE ACCESS TO THE YUKON DISTRICT.

In the annual report for the fiscal year 1900-01, will be found a full report from the engineer in charge on this subject and also (on p. xv) a summary of the work done and the conclusions arrived at. Previous reports were printed in the annual reports for the years 1898-99 and 1899-1900.

NATIONAL TRANSCONTINENTAL RAILWAY.

Under an agreement, dated July 29, 1903, ratified by the Dominion Act of that year, chap. 71, and under a modifying agreement, dated February 18, 1904, ratified by the Act of that year, chap. 24, the Grand Trunk Pacific Railway Company, a company incorporated by the Act of 1903, chap. 122, have agreed with His Majesty in respect of the construction of a line of railway, wholly upon Canadian territory, between the city of Moncton, in the province of New Brunswick, and the navigable waters of the Pacific ocean, at or near Port Simpson, or some other port in British Columbia, as may be agreed upon. The railway is to be composed of two divisions, namely, the eastern division, between Moncton and Quebec, thence westerly through the northern part of the provinces of Quebec and Ontario, and through the province of Manitoba to the city of Winnipeg, and the western division between Winnipeg, or some point on the said eastern division and the Pacific ocean. The eastern division

is to be constructed by the government under four commissioners to be appointed by the Governor in Council, and thereafter leased to and maintained and operated by the company, who undertake to construct at their own cost and to maintain and operate the western division. The lease of the eastern division is to be for a period of 50 years, at a rental of three per cent per annum upon the cost of its construction; the first seven years of the term to be free of rent; both divisions are to be equipped by the company, the first equipment to be of a value not less than \$20,000,000.

By way of assistance to the company in the construction of the western division, it is provided that the government shall guarantee payment of the principal and interest of an issue of bonds to be made by the company for an amount sufficient to produce a sum equal to 75 per cent of the cost of its construction, such amount not to exceed \$13,000 per mile in respect of the prairie section from Winnipeg to the eastern limit of the Rocky mountains (such limit to be established by the Chief Engineer of the company and the Chief Engineer of the government as the result of actual surveys to be made).

The several expenditures to be made under these Acts and agreements are to be so made from appropriations by parliament for the purpose, and on the recommendation of the Minister of Railways and Canals, to whom accounts of all receipts, expenditures and liabilities are to be furnished monthly. The board are to furnish annually a report to the Governor in Council, through the Minister of Railways and Canals, showing the receipts and expenditures of the year, and other information as to the railway, which report is to be submitted to parliament.

The Board of Commissioners has been duly appointed by Order in Council, together with the necessary officers, and is established with its headquarters in the city of Ottawa. A number of survey parties have been sent out, both by the company and by the government.

RAILWAY SUBSIDIES.

The following pages show, in alphabetical sequence, the position of those companies whose dealings with the government in respect of subsidies are not yet closed. Reports of previous years give information as to companies whose subsidies have been fully earned and paid prior to July 1, 1903.

A tabulated statement of payments will be found in Part II., and a list of subsidy agreements entered into during the fiscal year in Part IV.

The several subsidy Acts passed in each year from 1882 will be found in Part III. No subsidies were authorized in the session of 1895, 1896, 1898 and 1902.

Information has been brought down to the end of the fiscal year 1903-1904, only, but, in supplement, the following list shows also the additional contracts entered into, and the payments made, between that date and December, 1904.

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SUBSIDY CONTRACTS DURING 1903-1904 TO JUNE 30, 1904.

Bay of Quinté Railway Company.—Extension of railway from a point near Actinolite to a point in township of Marmora, Hastings county, 20 miles; contract dated January 23, 1904.

Beersville Coal Railway Company.—From Adamsville to a point near Brown's Landing or Beersville, 7 miles; contract dated June 24, 1904.

Canadian Northern Railway Company.—From Grandview to Edmonton, 620 miles; and Prince Albert Branch, 100 miles east from Prince Albert; contract dated July 29, 1903.

Canadian Northern Railway Company.—From a point on line of Winnipeg Great Northern Railway north of Swan River to Prince Albert, N.W.T., 100 miles; contract dated December 7, 1903.

Canadian Northern Railway.—In further extension north of Swan River towards Prince Albert, 100 miles; contract dated December 7, 1903.

Canadian Pacific Railway Company.—From a point on main line between Moosomin and Elkhorn to neighbourhood of Pheasant Hills, 136 miles; contract dated January 14, 1904.

Chateauguay and Northern Railway Company.—From a point on main line near l'Épiphanie to village of Rawdon, 16 miles; contract dated December 12, 1903.

Canadian Bridge Company *et al.*—St. Francis River bridge; contract dated December 21, 1903.

Canadian Bridge Company *et al.*—For completion of foundation and approaches of St. Francis River bridge; contract dated December 21, 1903.

Central Counties Railway Company.—From Hawkesbury, Ont., to South Indian, 35 miles; contract dated December 26, 1903.

Edmonton, Yukon and Pacific Railway Company.—From Stratheona to Edmonton, 50 miles; contract dated June 24, 1904.

Grand Trunk Pacific Railway Company.—From Winnipeg to Port Simpson (W. Division), &c.; contract dated July 29, 1903.

Grand Trunk Pacific Railway Company.—From Winnipeg to Port Simpson (W. Division), &c.; contract dated February 18, 1904.

Halifax and South-Western Railway Company.—From Halifax to Mahone Bay, 68 miles; contract dated November 9, 1903.

Halifax and South-Western Railway Company.—From Bridgewater towards Barrington Passage; also a line to Barrington Passage, in addition, 77 and 35 miles; contract dated November 9, 1903.

Halifax and South-Western Railway Company.—From New Germany to Caledonia, 22 miles; contract dated November 9, 1903.

Halifax and South-Western Railway Company.—From Caledonia to Liverpool, 29 miles; contract dated November 9, 1903.

International Railway Company of New Brunswick.—For extension of line to a point on St. John River between Grand Falls and Edmundston, 33 miles; contract dated January 15, 1904.

Inverness Railway and Coal Company.—From Cheticamp to point between Broad Cove and Point Tupper, 37 miles; contract dated November 9, 1903.

Inverness Railway and Coal Company.—From Point Tupper to Broad Cove, 8 miles; contract dated November 9, 1903.

Lindsay, Bobcaygeon and Pontypool Railway Company.—Between Buckton and Bobcaygeon, 40 miles; contract dated March 14, 1904.

Middleton and Victoria Beach Railway Company.—From Victoria Beach to Middleton, 41 miles; contract dated December 28, 1903.

Nova Scotia Eastern Railway Company.—(1) New Glasgow to Cross Roads, 116 miles; (2) Dartmouth to Melrose through Musquodoboit Valley, 120 miles; total, 236 miles; contract dated April 15, 1904.

Ottawa, Northern and Western Railway Company.—From Aylmer to Hull, Que., 9 miles; contract dated July 10, 1903.

Ottawa, Northern and Western Railway Company.—From end of 62nd mile towards Desert, 20 miles; contract dated August 25, 1903.

Ottawa, Northern and Western Railway Company.—Unearned balance of subsidy upon the 62 miles from Hull towards Desert; contract dated August 25, 1903.

Quebec Bridge and Railway Company.—Quebec Bridge approaches and terminals; contract dated October 19, 1903.

Restigouche and Western Railway Company.—From Campbellton, on Intercolonial Railway, towards Grand Falls, 20 miles; contract dated February 17, 1904.

South Shore Railway Company (Quebec).—St. Francis River Bridge; contract dated December 21, 1903.

South Shore Railway Company (Quebec).—For completion of foundation and approaches of St. Francis River Bridge; contract dated December 21, 1903.

St. Mary's River Railway Company.—From Spring Coulee to Cardston, 16 miles, and from a point on this line near irrigation canal, 16 miles, a total of 32 miles; contract dated March 14, 1904.

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SUBSIDIES PAID DURING THE FISCAL YEAR ENDED JUNE 30, 1904.

Atlantic and Lake Superior Railway, Quebec	\$ 37,000 00
Atlantic and North-western Railway.	186,600 00
Bay of Quinté Railway, Ontario.	49,920 00
Canadian Northern Railway Company, Ontario.	374,156 00
Canadian Pacific Railway (Kootenay and Arrowhead branch)	17,842 85
Canadian Pacific Railway (Pheasant Hills branch)..	378,624 00
Canadian Pacific Railway (Waskada branch)..	13,520 00
Cape Breton Railway Extension Company, N.S.	117,120 00
Chateauguay and Northern Railway, Quebec.	191,595 00
Coast Line of Nova Scotia, now Halifax and Yarmouth Railway.	9,600 00
Halifax and South-western Railway, N.S.	185,422 00
Inverness and Richmond Railway, N.S. (now Inverness Railway and Coal Company).	57,170 44
Midland Railway Company, Nova Scotia.	1,750 00
New Brunswick Coal and Railway, N.B.	48,000 00
Northern Colonization Railway, Quebec.	58,384 00
Ottawa, Northern and Western Railway, Quebec (for- merly Ottawa and Gatineau Railway).	118,368 00
Restigouche and Western Railway, N.B. (now Inter- national).	30,208 00
Schomberg and Aurora Railway, Ontario.	46,144 00
South Shore Railway, Quebec	80,494 16
St. Mary's River Railway Company, N. W. T.	40,960 00
Tilsonburg, Lake Erie and Pacific Railway, Ontario. . .	4,000 00
	\$2,046,878 45

ADDITIONAL SUBSIDY CONTRACTS FROM JULY 1, 1904, TO DECEMBER 31, 1904.

Bracebridge and Trading Lake Railway Company.—From Bracebridge, in Muskoka, to a point near Baysville, Ont., 15 miles; contract dated October 7, 1904.

Bruce Mines and Algoma Railway Company.—From Gordon Lake Station to Rock Lake, 6 miles; contract dated October 20, 1904.

Cape Breton Railway Company, Limited.—From St. Peter's to Louisburg, 50 miles; contract dated October 5, 1904.

Chateauguay and Northern Railway Company.—Balance of subsidy for bridge from Bout de l'Île to Charlemagne; contract dated November 12, 1904.

Chateauguay and Northern Railway Company.—Additional grant for Bout de l'Île bridge; contract dated November 12, 1904.

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James' Bay Railway Company.—From Toronto to Sudbury, Ont., 265 miles; contract dated September 8, 1904.

Kootenay and Arrowhead Railway Company.—From Lardo towards Upper Arrow Lake, in lieu of subsidy granted by chap. 7, 1901, section 2, item 28, 30 miles; contract dated October 20, 1904.

Minudie Coal Company, Limited.—From a point on Joggins Railway to village of Minudie, 6 miles; contract dated October 28, 1904.

Quebec and Lake St. John Railway Company.—From La Tuque, on St. Maurice River, to a point on Lake St. John Railway near River Jeannotte, 35 miles; contract dated October 12, 1904.

ADDITIONAL SUBSIDY PAYMENTS FROM JULY 1, 1904, TO DECEMBER 31, 1904.

Algoma Central and Hudson Bay Railway.	\$331,378 76
Atlantic and Lake Superior Railway.	43,131 85
Atlantic and North-west Railway.	93,300 00
Canadian Pacific Railway (Kootenay and Arrowhead Branch).	4,176 15
Lindsay, Bobcaygeon and Pontypool Railway.	123,840 00
	\$595,826 76

GOVERNMENT ACTION AS TO SUBSIDIZED RAILWAYS.

(The numbers within brackets after the title of the company refer to the lists of railways for which subsidies have been authorized by parliament, year by year, from the commencement of the system of railway subsidy in 1882, in the appendices hereto.)

With regard to the several lines of railway subsidized by the Dominion, the following represents the action taken and the progress made, in so far as the Dominion government is concerned; only those lines and companies being mentioned as to which definite steps, other than merely preliminary, have been taken towards securing the subsidy.

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The following shows the aggregate of the payments made on subsidy account:—

For the fiscal year 1883-84, ended on June 30, 1884	\$	208,000	00
“ 1884-85	“	1885	403,245 00
“ 1885-86	“	1886	2,171,249 00
“ 1886-87	“	1887	1,406,533 00
“ 1887-88	“	1888	1,027,041 92
“ 1888-89	“	1889	846,721 83
“ 1889-90	“	1890	1,678,195 72*
“ 1890-91	“	1891	1,265,705 87*
“ 1891-92	“	1892	1,248,215 93*
“ 1892-93	“	1893	811,394 07*
“ 1893-94	“	1894	1,229,885 10*
“ 1894-95	“	1895	1,310,549 10*
“ 1895-96	“	1896	834,745 49*
“ 1896-97	“	1897	416,955 30*
“ 1897-98	“	1898	1,414,934 78*
“ 1898-99	“	1899	3,201,220 05*
“ 1899-1900	“	1900	725,720 35*
“ 1900-01	“	1901	2,512,328 86*
“ 1901-02	“	1902	2,093,939 00*
“ 1902-03	“	1903	1,463,222 34*
“ 1903-04	“	1904	2,046,878 45*
			\$28,316,681 16†

To the above there have to be added the following exceptional subsidies:—

The Canada Central Railway, paid between 1878-83.	\$	1,525,250	00
The Canadian Pacific Railway extension from St. Martin's Junction to Quebec, paid in 1885.		1,500,000	00

Total subsidies paid from 'Consolidated Fund' up to June 30, 1902.	\$31,341,931	16†
The main line subsidy to the Canadian Pacific Rail- way was paid from 'Capital,' amounting to.	25,000,000	00

Total paid as subsidies. \$56,341,931 16†

The above does not include the amount \$2,394,000, due to the province of Quebec for the railway between Ottawa and Quebec, which amount has been transferred to the public debt, and on which interest at 5 per cent is paid, amounting to \$119,700 a year. (See note on page 48 of the accountant's statement, Part II.)

* In these amounts the subsidy of \$186,600 a year payable to the Atlantic and North-west Railway Company, for 20 years from July 1, 1889, is included. Payment is made by the Finance Department.

† There was an error in the corresponding figures in last year's report, which is now rectified.

NOTE.—The names, locations and mileage of the several railways of the Dominion, together with those of the branch lines composing their system, will be found in the 'Railway Statistics,' Appendix No. VI. of the present report.

Albert Southern Railway Company.

(See Annual Report of 1891-92.)

Algoma Central and Hudson Bay Railway Company.

(See Nos. 437 and 479.)

This company was incorporated as 'The Algoma Central Railway Company' by the Act 62-63 Vic., chap. 50 (1899), with powers to construct a line of railway from the town of Sault Ste. Marie to a point on the Canadian Pacific Railway at or near Dalton Station, and thence south-westerly to Michipicoten Harbour, Lake Superior.

These powers were amended by the Act 63-64 Vic., chap. 49 (1900), and the company were empowered to build a railway from Sault Ste. Marie to a point between the rivers Magpie and Michipicoten, and thence to the main line of the Canadian Pacific Railway, and southerly to Michipicoten Harbour.

By the Act 1 Ed. VII., chap. 46 (1901), the name of the company was changed as above, and they were empowered to build an extension of their railway from a point on the Canadian Pacific Railway northerly to some point on James Bay, not further north than Equam river.

By the Railway Subsidy Act of 1899, 62-63 Vic., chap. 7, item 23, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400 a mile, was authorized for 40 miles of a railway from Sault Ste. Marie towards Michipicoten river and harbour, and towards the Canadian Pacific Railway.

The company having applied for this subsidy, a contract was entered into with them, accordingly, on September 23, 1901, under authority of orders in council dated May 30 and August 10, 1901.

By the Railway Subsidy Act of 1900, 63-64 Vic., chap. 8, item 4, the grant of a similar subsidy to the company was authorized for an extension of 25 miles from the end of the 40 miles section above mentioned, and also for 25 miles from Michipicoten harbour towards the main line of the Canadian Pacific Railway.

Under authority of an order in council, dated January 6, 1902, a contract was entered into with the company on February 5, 1902, for the work so subsidized.

By the Railway Subsidy Act of 1901, chap. 7, item 20, the grant of a similar subsidy was authorized for a further distance, not exceeding 135 miles, to a point on the Canadian Pacific Railway at or near White River, and a contract was entered into with the company accordingly on October 15, 1902.

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During 1902-03 there was paid to the company the sum of \$202,912, making the total payments \$583,536, up to June 30, 1903.

No further payments were made up to June 30, 1904.

Atlantic and Lake Superior Railway Company.

(See No. 524.)

This company was incorporated by the Act 56 Vic., chap. 39 (1893), with powers to construct or acquire a line of railway from a point at or near Gaspé bay in the province of Quebec, to a point at or near the St. Mary river in the district of Algoma, in the province of Ontario, and was authorized to enter into agreement with certain companies named for the purchase or lease of their railways, in whole or in part, and their franchises, between the points named.

Agreements were made by the company, and were confirmed by Parliament by the Act 57-58 Vic., chap. 63 (1894), as follows:—

(1) For the purchase of the Baie des Chaleurs Railway Company's railway and appurtenances and their franchises. (2) For the use of a bridge to be constructed across the River St. Lawrence, opposite the city of Montreal, to be built by the Montreal Bridge Company. (3) For the purchase of the Great Eastern Railway between Yamaska and St. Gregoire, in the province of Quebec. (4) For the purchase from the Ottawa Valley Railway Company of their railway between Lachute and St. Andrew's in the province of Quebec, and their franchises. The Act provided that the railways named should be completed within three years, and the bridge within five years.

Difficulties, however, arose; the property of the Atlantic and Lake Superior Railway Company was ultimately vested in trustees of the bondholders, who, by the Act 1 Ed. VII., chap. 48, 1901, were authorized, notwithstanding anything contained in any Act of Parliament, to repair and renew the road-bed and bridges of the railway between Metapedia and Caplin, and to construct the railway from Caplin to a point near Paspébiac; such powers of construction to be exercised before December 31, 1902; also to operate the railway between Metapedia and Paspébiac, the Baie des Chaleurs division.

By the Subsidy Act of 1901, 1 Ed. VII., chap. 7, item 9, the grant of a subsidy was authorized for the 30 miles between Caplin and Paspébiac, namely, of \$3,200 a mile, with a further subsidy of 50 per cent of cost in excess of \$15,000 a mile; in all, not exceeding \$6,400 a mile; the subsidy contract to be made 'with the trustees or receivers under mortgage from the Atlantic and Lake Superior Railway Company.' The Act provided for payment out of the subsidy, 1st, for certain bridge superstructures, the amount being limited to \$35,000; 2nd, for the completion of the road-bed; 3rd, towards payment of claims for labour, materials, and supplies in that connection.

Under date July 25, 1901, a subsidy contract was entered into accordingly. The road was completed, and, on inspection, was so reported in June, 1903. The question of the amount of subsidy earned remained to be decided, involving decision as to the actual, necessary and reasonable cost of this 30 miles of railway.

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During the past fiscal year payments were made to the extent of \$37,000, making a total of \$14,153.98 to June 30, 1904. Of this total, \$32,153.98 was for bridge superstructures and \$72,000 to the trustees for road-bed completion.

It has to be observed that, as stated in the annual report of the department for the year 1894-95, subsidy has been paid to the Baie des Chaleurs Railway Company for the portion of this railway from Metapedia eastwardly towards Paspebiac, 70 miles, to the extent of \$620,000.

Atlantic and North-west Railway Company.

(See Annual Report of 1889-1890.)

The full history of this subsidy was shown in the annual report for 1889-90. The company receives an annual subsidy of \$186,600 for 20 years. The first payment having been made in 1889-90. The total paid up to June 30, 1904, is \$2,799,000. Payment is made by the Department of Finance direct.

Baie des Chaleurs Railway Company.

(See Annual Report of 1895-96.)

(See also Atlantic and Lake Superior Railway Company.)

The Bay of Quinté Railway Company.

(See Nos. 434 and 581.)

This company was incorporated by the Dominion Act of 1881, chap. 46, under the name 'The Bay of Quinte Railway and Navigation Company,' with powers to construct a line of railway from Mill Point, county of Hastings, on the Bay of Quinté, to a point of junction with the Grand Trunk Railway.

By the Act of 1896 it was empowered to amalgamate with the Kingston, Napanee and Western Railway Company (formerly the Napanee, Tamworth and Quebec Railway Company), under the name of the Bay of Quinte Railway Company. Its powers were extended to cover the construction of branch lines, not exceeding 20 miles in length, each to connect with mines and mineral lands, and by the Act of 1900, chap. 50, extensive powers were conferred for development of electrical power, and for mining and timber industries. Their powers of construction were extended to June 14, 1905.

By the Subsidy Act of 1899, chap. 7, item 20, as amended by clause 9 of the Subsidy Act of 1900, chap. 8, the grant of aid was authorized to the extent of \$3,200 per mile for 10 miles, for extensions, branches and additions to connect their lines of railway or to connect the said lines or connecting lines with iron or other mines or mineral or wood lands in certain counties named. This was in lieu of part of the balance of subsidy granted to the Kingston, Napanee and Western Railway in 1892.

Under date of December 30, 1902, a subsidy contract was entered into with them accordingly.

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By the Subsidy Act of 1899, cap. 7, item 45, the grant of aid to the extent of \$3,200 per mile with an addition of 50 per cent on average expenditure in excess of \$15,000 per mile, the whole not exceeding \$6,400 per mile, was authorized for an extension, not exceeding 2 miles, of the company's line, westerly, from a point at or near Richmond Boundary Road, near Deseronto, and also for an extension from the end of the said two miles, northerly, for a distance not exceeding 3 miles.

Under date of December 30, 1903, a separate contract was entered into with the company for each of these two sections.

During the fiscal year 1902-03 payment has been made of \$19,200 for the six miles between Deseronto and Napanee, under the subsidy granted by item 20 of the Act of 1899.

By the Subsidy Act of 1903, chap. 57, item 37, the grant of aid to the extent of \$3,200 per mile with an addition of 50 per cent on the average expenditure in excess of \$15,000 per mile, the whole not exceeding \$6,400 per mile, was authorized for further extension of the company's line of railway, from the northern terminus thereof, commencing from a point at or near Actinolite, thence in a north-westerly direction via the villages of Queensboro' and Bannockburn, to a point in the township of Marmora or Lake in Hastings county, not exceeding 20 miles in all.

Under date of January 23, 1904, a subsidy contract was entered into with the company for the construction of this extension.

During the past fiscal year there has been paid \$49,920, making the total payments to this company on subsidy account \$69,120, up to June 30, 1904; but there had been previously paid to the Kingston, Napanee and Western Railway Company a total of \$208,732.50.

Beauharnois Junction Railway Company.

(See Annual Report of 1895-96.)

Beersville Coal and Railway Company.

(See No. 604.)

This company was incorporated by the Act of New Brunswick, 3 Edward VII., chap. 94 (1903), with power to construct a railway from Adamsville on the Intercolonial Railway to a point at or near Brown's Landing or Beersville, and also to carry on the business of coal mining in all its branches, and other privileges in connection therewith.

By the Subsidy Act of 1903, chap. 57, item 60, a subsidy was authorized for 7 miles of the company's railway from Adamsville to Brown's Landing or Beersville, \$3,200 a mile, with a further subsidy of 50 per cent on cost in excess of \$15,000 a mile, not exceeding in all \$6,400 a mile.

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The company were admitted to contract on June 24, 1904, the road to be completed by January 1, 1905.

No payments have been made up to June 30, 1904.

Belleville and North Hastings Railway Company.

(See Annual Report of 1888-89.)

Boston and Nova Scotia Coal Company.

(See Annual Report of 1895-96.)

Bracebridge and Trading Lake Railway Company.

This company was incorporated by the Act 63 Vic., chap. 109 (Ontario), with powers to construct a line of railway to be operated by steam or electricity, or partly by steam and partly by electricity, from a point in the town of Bracebridge to some point in the township of McLean, a distance of about fourteen miles, and to construct, extend and operate a continuation or branch of such railway from Bracebridge to some point on Muskoka Lake at or near Beaumaris, in the township of Monck, a distance of about ten miles, all in the district of Muskoka.

By the Railway Subsidy Act of 1900, 63-64 Vic., chap. 8, item 7, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400, was authorized for a railway from Bracebridge, in Muskoka, to a point at or near Baysville, Ont., not exceeding 15 miles.

The company having applied for this subsidy, a contract was entered into with them, accordingly, on December 30, 1902, under authority of Order in Council, dated April 6, 1903.

No payments have been made up to June 30, 1904.

Brockville, Westport and Sault Ste. Marie Railway Company.

(See Annual Report of 1896-97.)

Brantford, Waterloo and Lake Erie Railway Company.

(See Annual Report of 1895-96.)

Bruce Mines and Algoma Railway Company.

(See Annual Report of 1902-03.)

Buctouche and Moncton Railway Company.

(See Annual Report of 1893-94.)

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Calgary and Edmonton Railway Company.

(See Annual Report for 1890.)

(Leased to Canadian Pacific Railway.)

Canada Atlantic Railway Company.

(See Annual Report of 1888-89; also see in present report under head of Ottawa, Arnprior and Parry Sound Railway Company.)

Canada Eastern Railway Co. (formerly Northern and Western Railway Company of New Brunswick).

(See Annual Reports of 1894-95 and 1899-1900.)

Canadian Bridge Company.

(See South Shore Railway Company, Quebec.)

Canadian Northern Railway Company.

(See Nos. 446, 493.)

By the Dominion Act 62-63 Vic., chap. 57 (1889), authority was granted for the amalgamation of the Winnipeg Great Northern Railway Company (formerly the Winnipeg and Hudson's Bay Railway and Steamship Company, the name of which was by the Act of 1887, chap. 81, changed to the Winnipeg and Hudson Bay Railway Company), and the Lake Manitoba Railway and Canal Company, under the name of the Canadian Northern Railway Company, and the agreement for such amalgamation was confirmed; authority also was given for the construction of a railway from Prince Albert to Edmonton, also a branch from a point on that line to the Peace river, together with certain other branch lines.

The Dominion Act 1 Ed. VII., chap 52 (1901), confirmed certain agreements for amalgamation of the Manitoba and South-eastern Railway Company and the Ontario and Rainy River Railway Company with the above company; it also granted authority to construct certain lines of railway described.

By the Dominion Act 1 Ed. VII., chap 53 (1901), authority was granted to the above company, to lease, with the option of purchase the Northern Pacific and Manitoba Railway, the Winnipeg Transfer Railway Company, Limited, the Portage and North-western Railway Company, and the Waskada and North-eastern Railway Company.

By the Dominion Subsidy Act 62-63 Vic. (1889), chap 7, item 32, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile, limited in all to \$6,400 a mile, was authorized for 100 miles of railway from a point on the Winnipeg Great Northern Railway north of Swan river to Prince Albert, N.W.T.

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By the Dominion Subsidy Act 63-64 Vic. (1900), chap 8, item 18, the grant of a similar subsidy for 100 miles of railway in further extension of the company's line from north of Swan river towards Prince Albert, was authorized.

The company having applied, they were admitted to contract under both subsidies, the two agreements being dated December 7, 1903.

The payments made to this company under the aforesaid agreements aggregate the following amounts :—

For the Ontario and Rainy River Railway (see the Annual Report for 1902-03), \$1,534,976, all paid prior to June 30, 1903.

For the Prince Albert Branch, \$374,156.

The total of the above payments amounts to \$1,909,132, up to June 30, 1904.

By the Special Act 3 Ed. VII., chap 7, (1903), assistance was granted for the extension of the company's railway for 620 miles from Grandview, the terminus of their Gilbert Plains branch to Edmonton, and for a distance of 100 miles east of Prince Albert to Prince Albert by guaranteeing the principal and interest at 3 per cent per annum of first mortgage bonds and other securities to the extent of \$13,000 a mile, the principal to be payable in 50 years from the passage of the Act.

Under date July 29, 1903, a trust mortgage between the Canadian Northern Railway Company, the British Empire Trust Company, Limited, the National Trust Company, Limited, and His Majesty was executed in pursuance of the provisions of the said Act, the security to be held by the trustees to be a charge on the two lines of railway thereunder to be constructed, with their equipment, buildings and appurtenances, on the balance of the Prince Albert Branch east of Erwood, and on the company's already constructed and operated lines from Port Arthur westwards as enumerated in a schedule attached, with their buildings, equipment and appurtenances.

Under the same date, July 29, 1903, an agreement was made with the company for the construction of the said two lines of railway, accordingly the line from Grandview to Edmonton to be completed by October 1, 1905, and the 100 miles east from Prince Albert by the same date.

Under orders in council of November 5, 1903, and March 10, 1904, authority has been given for the payment out of moneys deposited with the government as proceeds of the company's stock, for that purpose, under the said agreement, of the sum of \$1,571,700, for the work executed on the 620 miles between Grandview and Edmonton, and of the sum of \$312,000 for work on the 100 miles east from Prince Albert, namely, for 19½ per cent of the estimated cost, \$11,341,300 of the work to be done on the 620 miles, and for 24 per cent of the estimated cost, \$1,709,115 of the work to be done on the 100 miles.

This represents the position up to June 30, 1904.

For certain portions of the company's lines, under the aforesaid amalgamations, land grants have been authorized (see Winnipeg Great Northern Railway Company

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and Manitoba and South-eastern Railway Company in annual report for 1895-96.) These matters are dealt with by the Department of the Interior.

The company further, by virtue of this amalgamation, have an agreement with the government for the transport of men, supplies, materials and mails for 20 years over the portion of their line from Gladstone to a point half way to the River Saskatchewan.

Canadian Pacific Railway Company.

(Pheasant Hills Branch.)

(See No. 616.)

By the Subsidy Act of 1903, Ed. VII., chap 57, item 72, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on cost in excess of \$15,000 a mile, but not exceeding in all \$6,400 a mile, was authorized for a railway from a point on the main line of the Canadian Pacific Railway between Moosomin and Elkhorn, north-westerly to a point in the neighbourhood of the Pheasant Hills, not exceeding 136 miles.

The company having applied, a contract was entered into with them on January 14, 1904, under authority or orders in council of November 17, 1903, and January 12, 1904.

During the past fiscal year, subsidy was paid for this work to the extent of \$378,624, the total paid up to June 30, 1904.

Canadian Pacific Railway Company.

(Revelstoke to Arrow Lake.)

(See Annual Report for 1896-97.)

Canadian Pacific Railway Company.

(Pipstone Branch—Antler Station to Moose Mountain.)

(See Annual Report for 1901-02.)

Canadian Pacific Railway Company.

(Crow's Nest Pass Railway.)

(See Annual Report for 1902-03.)

Canadian Pacific Railway Company.

(Waskada Branch.)

(See No. 494.)

By the Railway Subsidy Act of 1900, 62-64 Vic., chap. 8, item 19, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on cost in excess of \$15,000 a

mile, but not exceeding in all \$6,400 a mile, was authorized for a railway from the westerly end of the Waskada branch of the Canadian Pacific Railway, Manitoba, for 20 miles further.

That company having applied for the said subsidy, a contract was entered into with them for the work on December 28, 1901, under authority of orders in council, dated July 6, September 11, October 3, and November 30, 1901. No portion of the subsidy was paid up to June 30, 1902.

During the past fiscal year, subsidy was paid for this work to the extent of \$13,520, making the total payments up to June 30, 1904, \$64,000.

Canadian Pacific Railway Company.

(Dyment Branch.)

(See Annual Report for 1902-03.)

Canadian Pacific Railway Company.

(West Selkirk—Lake Winnipeg Branch.)

(See Annual Report for 1902-03.)

Cap de la Madeleine Railway Company.

(See Annual Report of 1896-97.)

Cape Breton Railway Extension Company, Limited.

(See Annual Report of 1895-96.)

(See No. 420.)

This company was incorporated by 62 Vic., chap. 126 (1899), of the Acts of Nova Scotia, with powers to construct a railway between Canso and Louisbourg and to construct a bridge or tunnel over or under the Straits of Canso, or to operate a ferry.

By the Nova Scotia Act of 1902, chap. 190, it was further empowered to build branches from any point on its main line or branches to any other point in the county of Cape Breton.

By the Subsidy Act of 1899, 62-63 Vic., chap. 7, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on the average cost in excess of \$15,000 a mile, in all not exceeding \$6,400 a mile, was authorized in aid of a railway from Port Hawkesbury, on the Strait of Canso, N.S., to St. Peter's, 30 miles.

The above company, having applied, were admitted to contract for work on September 15, 1900. During the past fiscal year payments have been made to the extent of \$117,120, making the total payments up to June 30, 1904, \$182,400.

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Central Counties Railway Company.

(See No. 574.)

This company was originally incorporated by the Dominion Act 50-51 Vic., chap. 82, under the name of the Prescott County Railway, with powers to construct and operate a railway from a point in or near the village of Hawkesbury, in the county of Prescott, to a point on the line of the Ontario and Quebec Railway in the county of Soulanges, in the province of Quebec, and to a point on the line of the Canada Atlantic Railway, in the county of Glengarry, and to the River St. Lawrence, in or near the town of Cornwall, with a branch to Caledonia Springs.

By the Dominion Act 52 Vic., chap. 80, the name of the company was changed to the above, and power granted to construct a bridge across the Ottawa river. By a further Dominion Act, 2 Edward VII., chap. 53, power was granted for the extension of the railway from Hawkesbury to South Indian.

This railway has been leased to, and is now operated by, the Canada Atlantic Railway Company.

By the Dominion Subsidy Act of 1903, 3 Edward VII., chap. 57, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile, not exceeding in all \$6,400 a mile, was authorized for 35 miles, and has been granted to this company, in lieu of the subsidy authorized by item 22 of sec. 2 of chap. 7 of 1899.

Application having been made, the company was admitted to contract for this work on December 26, 1903, under authority of the Order in Council of December 12, 1903.

No payments have been made up to June 30, 1904.

Central Ontario Railway Company.

(See Annual Report for 1900-01.)

Central Railway Company of New Brunswick.

(See Annual Report for 1902-03.)

Chateauguay and Northern Railway Company.

(See Nos. 507, 508, 509, 599.)

This company was incorporated by the Quebec Act of 1895 (1), chap. 64, its powers of construction being modified by the Act chap. 75 of 1896.

By the Dominion Subsidy Act of 1900, 63-64 Vic., chap. 8, the grant to this company of a subsidy of \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile, not exceeding in all \$6,400 a mile, was authorized for 42 miles of a railway from a point in Hochelaga ward, Montreal, to a point on the Great Northern Railway in or near the town of Joliette, with a spur into the town.

The company were admitted to contract for this work on January 19, 1901.

On the same date they were admitted to contract for two other works, specially subsidized by the same Act, viz., for a railway, vehicular, and foot-passenger bridge from Bout de L'Isle to Charlemagne, at the junction of the Rivers Ottawa and St. Lawrence, \$150,000, and for a bridge across the Lac Ouareau river, \$15,000. No portion of these three subsidies has been paid up to June 30, 1903.

By the Dominion Subsidy Act of 1903, chap. 57, item 55, the grant to this company of a subsidy of \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile, limited in all to \$6,400 a mile, was authorized for 16 miles of a railway from a point on its main line at or near L'Epiphanie, via the parish of St. Jacques de l'Achigan to the village of Rawdon.

The company were admitted to contract for this work on December 12, 1903.

By the Dominion Subsidy Act of 1903, chap. 57, sec. 3, sub-sec. 4, a subsidy was authorized for the Bout de L'Isle bridge of \$50,000, in addition to that granted by item 33 of section 2, of chap. 8, of 1900.

During the past fiscal year, payment of subsidy was made to the extent of \$191,595, being the total of the payments made to the company up to June 30, 1904.

Chatham Branch Railway Company.

(See Annual Report of 1893-94.)

Chignecto Marine Transport Company.

(See Annual Report for 1894-95.)

Coast Railway Company of Nova Scotia.

(Name changed to Halifax and Yarmouth Railway Company by Nova Scotia Statute of 1899, chap 128.)

(See Nos. 403, 520.)

This company was incorporated by the Provincial Act of Nova Scotia, 56 Vic., chap. 154 (1893), to build a line of railway from Yarmouth to Lockeport; a subsequent Act, 59 Vic., chap. 103 (1896), extending its powers.

By the Dominion Subsidy Act, 60-61 Vic., chap. 4 (1897), the grant of a subsidy to this company for 61 miles of their railway from Yarmouth to Port Clyde was authorized, the amount being \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400 a mile.

The company were admitted to contract on August 26, 1897, the road to be completed by September 1, 1899.

During the year 1897-98 they were paid the sum of \$90,400.

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By the Subsidy Act of 1901, chap 7, item 5, the grant of aid was authorized for a line of railway from Pubnico, N.S., to Port Clyde, or Clyde river, \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile, limited in all to \$6,400 a mile, for 31 miles.

This was in lieu of the unexpended balance of the subsidy granted in 1897.

The company having applied were admitted to contract on March 1, 1903.

During the past fiscal year payment of subsidy was made to the extent of \$9,600, making with subsidy previously paid, a total of \$150,400 up to June 30, 1904.

Compagnie du Chemin de fer de Colonisation du Nord.

(See No. 451.)

This company was incorporated by the Dominion Act 62-63 Vic., chap. 62 (1899), with powers to construct and operate a railway from a point in or near Labelle, in the county of Labelle, Quebec, and passing within a mile of the parish church of L'Annonciation, in the township of Marchand, in the said county, and within a mile of the parish church in the vilage of Nominingue. in the township of Loranger, and within a mile of the village of Rapide de L'Original, in the townships of Robertson and Campbell, and thence in a westerly direction to a point at or near Lake Temiscamingue in the county of Pontiac.

By the Railway Subsidy Act 62-63 Vic., chap. 7 (1899), item 37, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on the average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400 a mile, was authorized for a railway for a distance not exceeding 22 miles from Labelle in a north-westerly direction, to Nominingue, via Notre Dame de l'Annonciation.

The company having applied for this subsidy, a contract was entered into with them, accordingly, on July 8, 1902.

During the past fiscal year payment has been made to the extent of \$53,384, being the total up to June 30, 1904.

Cobourg, Northumberland and Pacific Railway Company.

(See Annual Report for 1900-01.)

Columbia and Kootenay Railway and Navigation Company.

(Leased to the Canadian Pacific Railway Company.)

(See Annual Report for 1891-92.)

Cornwallis Valley Railway Company.

(See Annual Report for 1891-92.)

Cumberland Railway and Coal Company.

(See Annual Report for 1894-95.)

Dominion Atlantic Railway Company.

(See Western Counties Railway Company.)

Dominion Eastern Railway Company.

(See Annual Report for 1900-01.)

Dominion Lime Company.

(See Annual Report for 1888-89.)

Dominion Coal Company.

(See Annual Report for 1895-96.)

Drummond County Railway Company.

(See Annual Report of 1900-01.)

East Richelieu Valley Railway Company.

(See Annual Report of 1888-89.)

Edmonton, Yukon and Pacific Railway Company.

(See Nos. 455, 572.)

This company was incorporated by the Dominion Act of 1896, 59 Vic., chap 71, under the name of the Edmonton District Railway, with powers to construct and operate a railway from some point within the town of Edmonton to a point in South Edmonton on the Calgary and Edmonton Railway and to connect therewith; also from some point within the town of Edmonton, via the village of St. Albert, to a point on the Athabaska river, at or near Fort Assiniboine, with a branch to Stony Plains; also from some point within the town of Edmonton to a point at or near Fort Saskatchewan, together with a branch to a point on Sturgeon river. Other powers were granted of a general commercial character.

By the Dominion Act of 1898, 61 Vic., chap 63, the company was empowered to extend their line of railway from the Athabaska to the navigable waters of Pelly river.

By the Dominion Act of 1889, 62-63 Vic., chap 64, the name of the company was changed to the above, with powers to extend the railway via the Yellow Head Pass or the Peace River Pass, to a point in British Columbia, or to connect with the railway which the British Pacific Railway Company is authorized to construct, and also to construct and operate a branch line to some point on the Yukon river.

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By the Dominion Subsidy Act of 1903, 3 Edw. VII., chap. 57, item 28, the grant to this company of a subsidy of \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile, limited in all to \$6,400 a mile, was authorized for 50 miles of a railway from the town of Strathcona to Edmonton, and thence westerly towards the Yellow Head Pass.

The company having applied for this subsidy, a contract was entered into with them, accordingly on June 24, 1904, the road to be completed by December, 1906.

No payments have been made up to June 30, 1904.

Elgin, Petittodiac and Havelock Railway Company.

(See Annual Reports for 1885-86 and 1890-91.)

Erie and Huron Railway Company.

(See Annual Report for 1886-87.)

Esquimalt and Nanaimo Railway Company.

(See Annual Report for 1886-87.)

Fredericton and St. Mary's Bridge Company.

(See Annual Report of 1888-89.)

Grand Trunk, Georgian Bay and Lake Erie Railway Company.

(See Annual Report for 1893-94.)

Grand Trunk Railway Company.

(See Annual Report of 1900-01.)

Great Eastern Railway Company.

(See Annual Report for 1896-97.)

Great Northern Railway of Canada (formerly the Great Northern Railway Company).

(See Annual Report for 1902-03.)

Gulf Shore Railway Company of New Brunswick.

(See Annual Report for 1899-1900.)

Guelph Junction Railway Company.

(See Annual Report of 1888-89.)

Halifax and South-western Railway Company.

(See Nos. 567, 619.)

This company was declared to be incorporated under date of the 21st day of August, A.D. 1901, by the Act of the province of Nova Scotia, 2 Edward VII., chap. 1 (1902), for the construction and operation of a railway from a point on the Inter-colonial Railway at or near Halifax to Barrington Passage, and also from a junction with the Central Railway, at or near New Germany, to Caledonia Corners.

By the Dominion Subsidy Act of 1903, chap. 57, items 23 and 75, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on cost in excess of \$15,000 a mile, not exceeding in all \$6,400 a mile, was authorized for lines of railway (*a*) from a point at or near Halifax to a point on the Central Railway at or near Mahone Bay, 68 miles; (*b*) from a point on the Central Railway at or near Bridgewater towards Barrington Passage, 77 miles, and an addition to and continuation of the same, 35 miles; (*c*) from a point at or near New Germany on the Central Railway to a point at or near Caledonia, 22 miles; (*d*) and from a point at or near Caledonia to Liverpool, 29 miles.

The company was admitted to contract on November 9, 1903; the time for completion being fixed as August 1, 1905.

During the past fiscal year payments have been made to the extent of \$185,422, this being the total paid up to June 30, 1904.

Halifax and Yarmouth Railway Company.

(Formerly the Coast Railway Company of Nova Scotia, which see.)

(Name changed by Nova Scotia Statute of 1899, Chap. 128.)

(See Annual Report for 1902-03.)

Harvey Branch Railway Company.

(See Annual Report of 1889-90.)

Hereford Railway Company (formerly Hereford Branch Railway Company).

(See Annual Report of 1891-92.)

International Railway Company.

(See Annual Reports of 1887-88 and 1889-90.)

International Railway Company of New Brunswick.

(See Restigouche and Western Railway Company.)

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Inverness Railway and Coal Company.

(Name changed from Inverness and Richmond Railway Company by the Act of the province of Nova Scotia, 2 Edward VII., chap. 162 of 1902.)

(See Nos. 208, 251, 357, 400, 523 and 568.)

This company was incorporated by the Act of the province of Nova Scotia, 50 Vic., chap. 60 (1887), with powers for the construction of a line of railway between Hawkesbury and a point in the district of Margaree. By the Act of 1888, chap. 79, the location of the line was authorized as from Port Hawkesbury, through Port Hastings, Judique, Port Hood, Mabou and Margaree, to a point at Eastern Harbour, Cheticamp.

By the Subsidy Act, 57-58 Vic., chap. 4 (1894), assistance to the extent of \$80,000 was authorized for 25 miles of railway from Port Hawkesbury towards Cheticamp, and the above company was admitted to contract for the work on November 23, 1894.

By the Subsidy Act of 1897, 60-61 Vic., chap. 4, in lieu of the subsidy granted in 1894, a subsidy of \$3,200 a mile with an addition of 50 per cent on expenditure in excess of \$15,000 a mile, such subsidy in all not to exceed \$6,400 a mile, was authorized for a railway from Port Hawkesbury to Port Hood and Broad Cove, 53 miles, and the company was admitted to contract thereunder on April 29, 1898.

By the Subsidy Act of 1903, chap. 57, item 24, the grant of a subsidy for 30 miles of railway from Cheticamp to a point on the line already built between Broad Cove and Point Tupper, being a revote and in substitution of the subsidy granted by chap. 4 of 1897, was authorized.

The company was admitted to contract on November 9, 1903; the time for completion being fixed as August 1, 1905.

The sum of \$57,170.44 was paid during the past fiscal year, making the total payments \$368,545.97 up to June 30, 1904.

Irondale, Bancroft and Ottawa Railway Company.

(See Annual Report for 1900-01.)

Joggins Railway Company.

(See Annual Report for 1891-92.)

Kingston, Napanee and Western Railway Company.

(See Napanee, Tamworth and Quebec Railway.)

Kingston and Pembroke Railway Company.

(See Annual Report for 1884-85.)

Kootenay and Arrowhead Railway Company.

(See No. 543.)

This company was incorporated by the Act 1 Ed. VII., chap. 70 (1901), with powers to construct a railway from a point at or near Lardo, near the head of Kootenay lake, to a point at or near Duncan; thence north-westerly to Arrowhead on Arrow lake, B.C., together with such branch lines, none to exceed 30 miles, as may be authorized by the Governor in Council. The company were empowered to lease or sell their works to certain companies named, including the Canadian Pacific Railway Company.

On August 15, 1901, this railway was leased to the Canadian Pacific Railway Company for a term of 999 years. The leasing was approved by an Order in Council of June 29, 1903.

By the Subsidy Act of 1901, chap 7, item 28, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on cost in excess of \$15,000 a mile, limited to \$6,400 in all, was authorized for a railway from Duncan lake towards Lardo or Arrow lake, B.C., or from Lardo to Arrow lake, not exceeding 30 miles.

The company having applied for this subsidy, a contract was entered into with them for the work on August 26, 1901, under authority of Orders in Council of June 3 and July 6, 1901; the time for completion being fixed as August 1, 1903. The road was built from Lardo to Trout lake, 33 miles, and was inspected in June, 1902, with a view to its being opened for public traffic.

During 1902-03 there was paid to the company the sum of \$42,771, this being the total paid up to June 30, 1903.

No further payments were made up to June 30, 1904.

Lake Erie and Detroit River Railway Company.

Formerly 'the Lake Erie, Essex and Detroit Railway Company.' Name changed by Dominion Act, 54-55 Vic., chap. 88 (1891).

(See Annual Report for 1901-02.)

L'Assomption Railway Company.

(See Annual Report of 1886-87.)

Leamington and St. Clair Railway Company.

(See Annual Report of 1888-9.)

Lake Temiscamingue Colonization Railway Company.

(See Annual Report of 1896-7.)

Laurentian Railway Company.

(See St. Lawrence, Lower Laurentian and Saguenay Railway Company.)

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Lindsay, Bobcaygeon and Pontypool Railway Company.

(See Nos. 197, 271, 372, 425, 545.)

This company was incorporated by the Dominion Act 53, Vic., chap 55 (1890), with powers to construct a railway from a point at or near Pontypool on the line of the Canadian Pacific Railway, thence via Lindsay to the village of Bobcaygeon. The company were empowered to lease or sell their works to certain companies named, including the Canadian Pacific Railway Company.

The charter originally granted was revived and amended by the Act 55-56 Vic., chap. 78.

By the Subsidy Act of 1903, chap. 57, item 2, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on cost in excess of \$15,000 a mile, limited in all to \$6,400 a mile, was authorized for a railway from Burketon to Bobcaygeon, not exceeding 40 miles, in lieu of the subsidy granted by item 11 of section 2 of chap. 7 of 1899.

The company having applied for this subsidy, a contract was entered into with them, accordingly, on March 14, 1904.

No payments have been made up to June 30, 1904.

Lotbinière and Megantic Railway Company.

(See Annual Report of 1896-7.)

Magnetawan River Railway Company.

This company was incorporated by the Act 1 Edward VII. (Ontario), chap. 83 (1901), with powers to construct a railway between a point in or near the village of Burk's Falls, in the district of Parry Sound, and a point on the Magnetawan river, in the said district of Parry Sound, where the said river is navigable for vessels.

By the Railway Subsidy Act, 1 Edward VII., chap. 7 (1901), item 22, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on an average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400 a mile, was authorized for a line of railway from a point on the Grand Trunk Railway at or near Burk's Falls, Ontario, to the Magnetawan river, not exceeding two miles.

The company having applied for this subsidy, a contract was entered into with them accordingly, on March 19, 1903.

During 1902-03 there was paid to the company the sum of \$3,552.

No further payments were made up to June 30, 1904.

Manitoulin and North Shore Railway Company.

(See No. 481.)

This company was incorporated by the Dominion Act of 1900, chap. 64, 63-64 Vic., with powers to construct a line of railway from Little Current, Manitoulin
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Island, to a point 100 miles northerly, crossing the Canadian Pacific Railway at or near Onaping or Cartier stations; also from a point in or near the township of Drury or Hyman, on its said line, easterly to Sudbury, also from a point at or near Little Current, south-easterly to the south shore of Manitoulin Island, or Fitzwilliam Island, and from a point near Tobermory to Meaford, passing through Wiarton and Owen Sound; also with powers for dock construction, ferry operation, and electric power production.

By the Subsidy Act of 1900, chap. 8, item 6, aid was authorized towards the construction of 66 miles of the company's railway from Little Current to Sudbury; the company to construct a bridge between Little Current and the mainland, with free provision for vehicular and passenger traffic.

By the Act of 1901, section 5, work under the foregoing subsidy was allowed to be carried on in two sections, the first beginning at Victoria Mines and extending to Sudbury and thence to Lake Wahnapiatae, not exceeding 33 miles, the second beginning at Little Current and extending to and connecting with the Canadian Pacific Railway at or near Stanley, not exceeding 31 miles.

Under date of May 15, 1902, a contract was entered into with the company under the above subsidy for a railway from Victoria Mines to Sudbury and thence to Lake Wahnapiatae.

During the year 1902-03 there was paid to the company the sum of \$32,000.

No further payments were made up to June 30, 1904.

Massawippi Valley Railway Company.

(See Annual Report for 1900-01.)

Middleton and Victoria Beach Railway Company.

(See Nos. 503, 536 and 566.)

This company was incorporated by the statute of Nova Scotia, 60 Vic., chap. 82 (1897), as 'the Granville and Victoria Beach Railway and Development Company,' with powers to build a line of railway from some point on the Dominion and Atlantic Railway at or near Bridgetown, through Granville, to some point at or near Victoria Beach on the Annapolis Basin, with approved branches, &c. This Act was revived by the Act of 1899, chap. 129. It was further revived by the Act of 1901, chap. 160, and extended for six years; the name being changed to the 'Middleton and Victoria Beach Company.'

By the Railway Subsidy Act of Canada, 63-64 Vic., chap. 8, item 28, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on cost in excess of \$15,000 a mile, not exceeding in all \$6,400 a mile, was authorized for 30 miles of a railway from Bridgetown to Victoria Beach, Nova Scotia.

The above company having applied, they were admitted to contract for the work on May 5, 1902, under authority of an Order in Council of April 1, the railway to be completed by December 1, 1903.

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By the Subsidy Act of 1901, chap. 7, item 21, a similar subsidy was authorized to be granted for an extension from Bridgetown to Middleton, not exceeding 11 miles, and the company having applied for it, a contract was made with them, accordingly, on May 5, 1902, under authority of an order in council of April 1, the work to be completed by December 1, 1903.

By the Subsidy Act of 1903, chap. 57, item 2, a similar subsidy was authorized for 41 miles of railway from Victoria Beach to Middleton, in lieu of subsidies granted by chap. 8 of 1900, and chap. 7 of 1901.

Application having been made, the company was admitted to contract for this work on December 28, 1903, the time for completion being fixed as by August 1, 1905.

No portion of these subsidies has been paid up to June 30, 1904.

Midland Railway Company, Limited.

(See Nos. 336, 421, 427.)

This company was incorporated by the Act of the province of Nova Scotia, 59 Vic., chap. 85 (1896), with powers to build a railway from Windsor to a point at or near Maitland, then, via Clifton, to a point between Truro and Stewiacke, on the Intercolonial; thence to Eastville; with extensions and branches to coal and iron fields, and shipping ports.

By the Dominion Subsidy Act, 57-58 Vic., chap. 4 (1894), authority was given for the grant of a subsidy of \$3,200 per mile for 90 miles of railway from Newport or Windsor to Truro, or to a point between Truro and Stewiacke, and from a point on the said railway to a point at or near Eastville, and from Eastville, through the valley of Musquodoboit river, towards a point on the Dartmouth branch of the Intercolonial, in lieu of a subsidy authorized in 1892; also for a railway bridge over the River Shubenacadie, a subsidy of 15 per cent on the value of the structure; the total of the subsidies not to exceed \$300,000.

The Midland Railway Company having applied, were admitted to contract for these works on July 30, 1896.

By the Subsidy Act, 62-63 Vic., chap. 7 (1899), in lieu of the foregoing, there was authorized a grant of \$3,200 per mile, with a further grant of 50 per cent on cost in excess of \$15,000 per mile, up to a limit of \$6,400 per mile, for a railway from Windsor, N.S., to Truro via Clifton; and the Midland Railway Company having applied for it they were admitted to contract on December 7, 1899.

The sum of \$1,750 was paid during the past fiscal year, making the total payments \$362,200.30 up to June 30, 1904.

Montfort Colonization Railway Company.

(See Annual Report for 1900-01.)

Montfort and Gatineau Colonization Railway Company.

(Now part of Great Northern Railway Company of Canada.)

(See Annual Report for 1902-03.)

Montreal and Champlain Junction Railway Company.

(See Annual Report for 1892-93.)

Montreal and Lake Maskinongé Railway Company.

(See Annual Report for 1890-91.)

Montreal and Sorel Railway Company.

(See Annual Report for 1892-93.)

Montreal and Western Railway Company.

(See Annual Report for 1893-94.)

Montreal and Ottawa Railway Company.*(Formerly the Vaudreuil and Prescott Railway Company. Name changed by 58
Vic., ch. 58.)*

(See Annual Report for 1898-99.)

Montreal and Province Line Railway Company.

(See Annual Report for 1901-02.)

Napanee, Tamworth and Quebec Railway Company.*(Name changed to the Kingston, Napanee and Western Railway Company by the
Act 58 Vic., ch. 62.)*

(See Annual Report for 1895-96.)

Nakusp and Slocan Railway Company.

(See Annual Report for 1894-95.)

New Brunswick and Prince Edward Island Railway Company.

(See Annual Report for 1888-89.)

New Brunswick Coal and Railway Company.

(See No. 522.)

This company was incorporated by the Act 1 Edward VII., chap. 77 (New Brunswick), with powers to construct a line of railway from Chipman to Gibson, with the

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right to build branches thereto and connecting with any railway or railways in New Brunswick.

By the Subsidy Act of 1901, 1 Edward VII., chap. 7, item 7, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400, was authorized for a line of railway from Chipman station, New Brunswick, to Gibson, in lieu of the subsidies granted by 1897, chap. 4, and 1899, chap. 7, sec. 2, item 31, not exceeding 45 miles.

The company having applied for this subsidy, a contract was entered into with them, accordingly, on June 30, 1902.

The sum of \$48,000 was paid during the past fiscal year, the total paid up to June 30, 1904.

New Glasgow Iron, Coal and Railway Company.

(See Annual Report of 1895-96.)

Northern and Pacific Junction Railway Company.

(See Annual Report of 1890-91.)

Northern and Western Railway Company.

(See Annual Report of 1889-90.)

(Also under the head 'Canada Eastern Railway' in Annual Report of 1894-95.)

Nova Scotia Central Railway Company.

(See Annual Report for 1898-99.)

Nova Scotia Eastern Railway Company, Limited

(See Nos. 516, 519, 563, 607.)

This company was incorporated by the Act 1 Edward VII., chap. 130 (Nova Scotia), with powers to construct a line of railway from a point on the Intercolonial Railway at or near New Glasgow, in the county of Pictou, and passing through the counties of Pictou and Guysborough, to the deep waters of Country Harbour, in the county of Guysborough, and from the Cross Roads, Country Harbour, in the said county of Guysborough, to a point at or near the town of Guysborough, and thence to a point on the Strait of Canso, in the said county of Guysborough, and such other lines as may become feeders for the main trunk line above described.

By the Subsidy Act of 1901, 1 Edward VII., chap. 7, item 1, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400, was authorized for a line of railway from a point on the Intercolonial Railway, at or near New Glasgow

to Country Harbour, and from a point at or near Country Harbour Cross Roads to Guysborough, in lieu of the subsidies granted by 1897, chap. 4, and 1899, chap. 7, sec. 2, item 34, not exceeding 80 miles.

The company having applied for this subsidy, a contract was entered into with them, accordingly, on February 19, 1903.

By the Subsidy Act of 1903, chap. 57, items 19 and 63, the grant of subsidies was authorized, on terms similar to the above, for lines of railway from New Glasgow to Cross Roads, Country Harbour, via Guysborough, to the Strait of Canso, with a branch from Cross Roads down the Country Harbour river to navigable water, 116 miles; and from Dartmouth through the Musquodoboit valley to a point at or near Melrose, to connect there with the railway mentioned in item 19.

The company having applied, were admitted to contract under both subsidies, the two agreements being dated April 19, 1904; the railways to be completed by December 31, 1906.

No payments have been made up to June 30, 1904.

Nova Scotia Southern Railway Company.

(See Annual Report for 1902-03.)

Ontario and Pacific Railway Company.

(*Name changed to Ottawa and New York Railway Company, by 60-61 Vic., ch. 57, 1897.*)

(See Annual Report for 1901-02.)

Ontario and Quebec Railway Company.

(See West Ontario Pacific Railway Company, and Annual Report for 1891-92.)

Ontario, Belmont and Northern Railway Company.

(See Annual Report for 1896-97.)

Ontario and Rainy River Railway Company.

(*Amalgamated with and under the name of the Canadian Northern Railway Company under the Act 62-63 Vic., ch. 80.*)

(See Ontario and Rainy River Railway Company in Annual Report for 1902-03, and under Canadian Northern Railway Company in present report.)

Orford Mountain Railway Company.

(See Annual Reports for 1893-94 and 1894-95.)

Ottawa and New York Railway Company.

(See Ontario and Pacific Railway Company.)

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Ottawa, Arnprior and Parry Sound Railway Company.

(Now the Canada Atlantic Railway Company, by amalgamation, under the Act 62-63 Vic., ch. 81, 1899.)

(See Annual Report for 1898-99.)

Ottawa and Gatineau Valley Railway Company.

(Name changed to the Ottawa and Gatineau Railway Company, by the Act 57-58 Vic., ch. 87, which consolidated and amended Acts relating to the company.)

(Name further changed to the Ottawa Northern and Western Railway Company, by the Act 1 Edw. VII., ch. 80, 1901.)

(See Nos. 8, 26, 58, 151, 305, 349, 379, 409, 414, 426, 492, 453, 526 and 557.)

By the Act 48-49 Vic., chap. 29 (1885), the grant of a subsidy to this company was authorized (in lieu of subsidies granted in previous years), namely, for a line of railway from Hull station towards the village of Le Désert, 62 miles, the amount being \$320,000. The subsidy having lapsed, it was revoked by the Act 52 Vic., chap. 3 (1889).

Under authority of an order in council of July 10, 1889, a contract with the company for the work in question, 62 miles, was signed on August 19, 1889.

By the Subsidy Act, 56 Vic., chap. 2 (1893), the unpaid balance, \$89,248, was revoked.

By the Subsidy Act, 57-58 Vic., chap. 6 (1894), authority was given for subsidizing, to the extent of \$64,000, a further distance of 20 miles from the end of the 62 miles already subsidized, and a contract for the work was entered into with the company on October 7, 1895.

By the Subsidy Act, 60-61 Vic., chap. 4 (1897), in lieu of this subsidy, the said 20 miles were subsidized to the extent of \$3,200 per mile, with a further subsidy of 50 per cent of the expenditure in excess of \$15,000 a mile; the total subsidy not to exceed \$6,400 a mile.

The company were admitted to contract under this subsidy on July 29, 1899.

By the Subsidy Act, 60-61 Vic., chap. 4 (1897), the unpaid balance, \$35,572, of the vote of 1893 was revoked, and a contract was made with the company thereunder on July 29, 1899.

The total payments up to June 30, 1894, amounted to \$284,128.

Under dates September 21, 1899, and November 26, 1900, contracts were entered into for the construction, under subsidy, of a bridge across the River Ottawa at Ottawa, being made with this company conjointly with the Pontiac Pacific Junction Railway Company. This bridge was completed, and payment of the full amount of

the subsidy was made during the fiscal year 1900-01. (See Pontiac Pacific Junction Railway in Annual Report for 1900-01.)

By the Subsidy Act of 1899, chap. 7, item 39, the grant of aid to the extent of \$3,200 a mile, with 50 per cent additional on excess cost over \$15,000 a mile, was authorized for the company's railway through Hull, not exceeding 4 miles.

A contract for the work was made on February 15, 1902, and the road being built, the subsidy for the actual distance, 1.28 miles, connecting the old Gatineau Valley Railway with the approach to the bridge across the River Ottawa, was paid during that fiscal year, namely, \$8,192, making the total payments to this company on subsidy account, \$292,320, up to June 30, 1902.

Under the authority of the Act 1 Ed. VII., chap 80, this railway has been purchased by the Canadian Pacific Railway, and now forms part of its system.

By the Subsidy Act of 1899, chap 7, item 12, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent of cost in excess of \$15,000 a mile, limited in all to \$6,400 a mile, was authorized for 9 miles of a railway from Aylmer to Hull, in lieu of the subsidy granted by chap. 4 of 1897.

The above company having applied, they were admitted to contract for the work on July 10, 1903.

By the Subsidy Act of 1901, chap 7, item 11, the grant of a similar subsidy was authorized for a line of railway from the end of the 62nd mile subsidized, towards Desert, in lieu of subsidy granted by the Act of 1897, chap. 4, item 5 ; also by section 3 of the Act of 1897 the Governor in Council was authorized to grant to the company its unearned balance of subsidy upon the 62 miles of its line of railway from Hull towards Desert, granted by the Act, of 1897, chap. 4, sec. 3, paragraph 3, a sum not exceeding \$35,872.

The above company having applied, were admitted to contract under both subsidies, the two agreements being dated August 25, 1903.

During the past fiscal year, payments of subsidies have been made to the extent of \$118,368, making the total amount paid up to June 30, 1904, \$410,338.

Ottawa Northern and Western Railway Company.

(See Ottawa and Gatineau Valley Railway Company, and Pontiac Pacific Junction Railway Company.)

Oshawa Railway and Navigation Company.

(Name changed to the Oshawa Railway Company, by 54-55 Vic., ch. 91.)

(See Annual Report for 1895-96.)

Parry Sound Colonization Railway Company.

(See Annual Report for 1895-96.)

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Pembroke Southern Railway Company.

(See Annual Report for 1899-1900.)

Phillipsburg Junction Railway and Quarry Company.

(See Annual Report for 1894-95.)

(Now the Phillipsburg Railway and Quarry Company. Name changed by 58 Vic., ch. 65, 1895.)

(See Annual Report for 1899-1900.)

Port Arthur, Duluth and Western Railway Company.*(Formerly the Thunder Bay Colonization Railway Company.)*

(See Annual Report for 1892-93.)

Pontiac and Renfrew Railway Company.

(See Annual Report for 1899-1900.)

Pontiac Pacific Junction Railway Company.

(See Annual Report for 1900-01.)

Qu'Appelle, Long Lake and Saskatchewan Railway Company.

Leased to Canadian Pacific Railway Company.)

(See Annual Report for 1890.)

Quebec Bridge Company.*(Now the Quebec Bridge and Railway Company,—name changed by the Act 3 Ed. VII., ch. 117, 1903.)*

(See No. 467 and Acts, chaps 54 and 177 of 1903.)

This company was incorporated by the Dominion Act. 50-51 Vic., chap. 95 (1887), with powers to construct a railway bridge over the River St. Lawrence near Quebec, and to arrange the same for the use of foot passengers and vehicles, and to construct and operate lines of railway to connect with existing or future lines of railway on each side of the river.

By the Act 60-61 Vic., chap. 69 (1897), the powers of the company were revived, and the time for construction was extended to June 29, 1902.

By the Act 63-64 Vic., chap. 115 (1900), the time for completion was extended to June 14, 1905, and the company were further empowered to arrange for the placing

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of electric wires on the bridge and connecting railways, and for the passage of electric street railway or tram cars.

By the Railway Subsidy Act, 62-63 Vic., chap. 7 (1899), the grant of a subsidy to this company of \$1,000,000 was authorized for a railway bridge over the River St. Lawrence at Chaudière basin, and by the Act of 1900, chap. 8, clause 10, it was made applicable, one-third to the substructure and approaches, and two-thirds to the superstructure.

On November 12, 1900, the company were admitted to contract for this subsidy work.

The site and plans of the bridge were approved by the Railway Committee of the Privy Council, and by an order in council dated May 16, 1898.

The structure is to be a cantilever bridge, composed of two approach spans of 220 feet each, two anchor spans of 500 feet each, and a centre span of 1,800 feet from centre to centre of the piers. The under side of the bridge will give a height of 150 feet above high water. When completed, it will comprise a double track railroad two lines for electric tramways, and two ordinary roads for vehicles and foot passengers.

Subsidy payments to the extent of \$374,353.33 were made up to June 30, 1903. No further payments have been made.

By the Dominion Special Act, 3 Ed. VII., chap. 177, assented to on July 10, 1903, the name of the above company was changed to 'The Quebec Bridge and Railway Company,' with powers to construct lines of railway from the northern terminus of the company's bridge to the city of Quebec, also from the southern terminus of the said bridge to a point at or near the intersection of the Grand Trunk Railway with the Intercolonial Railway at Chaudière Curve, or to some point on those lines near named section to connect with the line of the Canadian Pacific Railway. Other powers of a general commercial character were granted. The powers of the company for the general commercial character were granted. The powers of the company for the construction of all its authorized works was extended to July 10, 1910.

Negotiations were had having in view entry into agreement for the guarantee by the government of the bonds of the company, and for conveying to the government, at its option, the bridge, railways and property of the company.

Under the authority of an order in council, dated October 19, 1903, and under the same date, the company entered into an agreement with the government, accordingly, subject to ratification by parliament; and by the Public Act of the same year, 1903, chap. 54, such agreement, annexed as a schedule to the Act, was so ratified and confirmed, subject to the provision that the consent of parliament shall be given before the government exercise the right of taking over the company's property. It was further provided that the Governor in Council should have the right to appoint three directors of the company.

By this agreement the company releases the government from any claim for the unpaid balance of the subsidy of \$1,000,000 granted to them, and the government

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agrees to guarantee the principal and interest of the company's bonds to the extent of \$6,678,200, such bonds to be payable in 50 years from the date thereof, bearing interest at 3 per cent per annum, payable half-yearly, and to be a first charge, secured by a mortgage, upon all the company's franchises, tolls, and property of whatsoever kind, the mortgage to secure such securities to be made to a trustee or trustees approved by the Governor in Council and to be subject to like approval, the government to have the right to take possession of the undertaking and property at any time on one month's notice, paying the shareholders the amount of their stock at par value, not exceeding \$265,585.70, with simple interest at 5 per cent, and an addition of 10 per cent on the par value of fully paid up shares, and assuming the approved obligations of the company for construction, operation and maintenance, according to the terms of the aforesaid bonds and the mortgage securing the same. The date for the completion of the works was fixed by December 1, 1903.

In pursuance of this authority there was executed, on February 1, 1904, between the Quebec Bridge and Railway Company, the Royal Trust Company (Montreal), and His Majesty, a mortgage trust deed, conveying to the said trust company as trustees all the property and franchises of the bridge company and providing for the issue of bonds to the extent of \$6,678,200.

In pursuance of the requirements of the said agreement, the plans, profiles and specifications of the company's proposed railway works have been approved, as follows:—

By order in council of January 27, 1904, for the line from the northern terminus of the bridge to Champlain market, in the city of Quebec, 6.44 miles, and by an Order in Council of February 2, 1904, from the south terminus of the bridge to a point of junction with the Intercolonial Railway, 12,600 feet.

Under the terms of the company's aforesaid agreements in respect of the bond guarantee, the amount of the issue of bonds is to be fixed by the Chief Engineer's certificate as to the value of the work done and materials delivered, from time to time, on the company's works.

Up to June 30, 1904, no issue of bonds has been authorized.

Quebec Central Railway Company.

(See Annual Report of 1895-96.)

Quebec and Lake St. John Railway Company.

(See Annual Report of 1895-96.)

Quebec, Montmorency and Charlevoix Railway Company.

(See Annual Report for 1894-95.)

Quebec and New Brunswick Railway Company.

(See No. 517.)

This company was incorporated by the Act (1900) 63-64 Vic., chap. 75, with powers to construct a railway from Connor station on the St. Francis Branch of the Temiscouata Railway (New Brunswick) to a point on the Intercolonial Railway at or near St. Charles Junction, or a point on the Quebec Central Railway at or near St. Anselme, or a point on the Grand Trunk Railway at or near Chaudière Junction (Quebec) a distance of about one hundred and thirty miles.

By the Railway Subsidy Act of 1901, 1 Edward VII., chap. 7, item 2, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on an average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400 a mile, was authorized for a railway from a point at or near St. Charles or at or near Chaudière Junction or a point on the Quebec Central Railway, near St. Anselme, towards the present terminus of the St. Francis Branch of the Temiscouata Railway, not exceeding 45 miles, and for a line of railway from the mouth of the St. Francis river, New Brunswick, westerly towards Chaudière Junction, not exceeding 15 miles, in lieu of the subsidy granted by 1900, chap. 8, sec. 2, item 23; also for a line of railway in extension of the St. Francis Branch of the Temiscouata Railway to the mouth of the St. Francis river, New Brunswick, in lieu of the subsidy granted by 1899, chap. 7, sec. 2, item 43, not exceeding 3 miles; in all not exceeding 63 miles.

The company having applied for this subsidy, a contract was entered into with them, accordingly, on August 25, 1902.

No payments have been made up to June 30, 1904.

Red Deer Valley Railway and Coal Company.

(See Annual Report for 1902-03.)

Restigouche and Western Railway Company.

(Now International Railway Company of New Brunswick.)

(See Nos. 259, 352 and 384.)

This company was incorporated by the Act of the province of New Brunswick, 60 Vic., chap. 82 (1897), with powers to construct a railway from Campbellton, to a point on the River Saint John between Grand Falls and Edmundston.

By the Subsidy Act 60-61 Vic., chap 4 (1897), there was authorized a subsidy for a railway from Campbellton, on the Intercolonial Railway, towards Grand Falls, N.B., 20 miles, \$3,200 a mile, with an addition of 50 per cent on the cost in excess of \$15,000 a mile; the whole not to exceed \$6,400 a mile. This was in lieu of a previous subsidy to a specified company.

The Restigouche and Western Railway Company having applied, were admitted to contract for the work on December 24, 1897.

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During the past fiscal year subsidy to the extent of \$30,208 was paid, making the total payments \$77,138 up to June 30, 1904.

Schomberg and Aurora Railway Company.

(See No. 386.)

This company was incorporated by the Dominion Act, 59 Vic., chap. 34 (1896), with powers to build a line of railway from a point on the Grand Trunk Railway between King and Newmarket to the village of Schomberg.

By the Subsidy Act, 60-61 Vic., chap. 4 (1897), the grant of a subsidy of \$3,200 a mile for 15 miles between the points named above, with addition of 50 per cent of the cost in excess of \$15,000 a mile, but not exceeding in all \$6,400 a mile was authorized.

A subsidy agreement was entered into with the company accordingly on July 29, 1899.

By the Subsidy Act 1 Edward VII., chap. 7, item 10 (1901), this subsidy was, in effect, revoked, and a new contract was made with this company on February 3, 1902; the road to be completed by October 31, 1903.

By the Subsidy Act, 63-64 Vic., chap. 8, item 13 (1901), the grant of a subsidy of \$3,200 a mile with a further subsidy of 50 per cent on average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400 a mile, was authorized for the extension of the company's line from its easterly terminus to a point at or near Bond's lake, Ontario, not exceeding 4 miles.

The company having applied for this subsidy, a contract was entered into with them accordingly on July 30, 1902.

During the past fiscal year payment of subsidy was made to the extent of \$46,144, the total paid up to June 30, 1904.

Shuswap and Okanagan Railway Company.

(See Annual Report of 1894-95.)

South Norfolk Railway Company.

(See Annual Report of 1888-89.)

South Shore Railway Company.

(See Annual Report of 1896-97.)

South Shore Railway Company, Quebec.

(See Nos. 441, 468, 469 and 513.)

This company was incorporated by the Quebec Act of 1894, chap. 72, and the undertaking was declared to be a work for the general advantage of Canada by the Do-

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minion Act, 60 Vic., chap. 10 (1896), which authorized the construction of a line of railway from a point in the town of Levis to a point on the Canada Atlantic Railway at or near Valleyfield.

By the Subsidy Act, 62-63 Vic., chap. 7 (1899), the grant of a subsidy to this company for 82 miles of a railway from Sorel Junction to Lotbinière was authorized, \$3,200 a mile, with an addition of 50 per cent of cost in excess of \$15,000 a mile, but not exceeding in the whole \$6,400 a mile. The company were admitted to contract for this work on May 9, 1900.

By the same Act the grant of a subsidy was authorized towards the construction of a bridge over the River Richelieu at Sorel, not exceeding \$35,000. The company were admitted to contract for this work on December 23, 1899.

By the same Act the grant of a subsidy to this company was authorized towards the renewal of the railway bridge over the River Yamaska at Yamaska, the amount being \$50,000. They were admitted to contract for the work on May 9, 1900.

By the Subsidy Act, 63-64 Vic., chap. 8 (1900), the grant of subsidy to the extent of \$50,000 was authorized for a railway bridge over the River St. Francis, such bridge to be free to foot passengers and vehicles. A contract was entered into with the company for the work on June 29, 1901.

By the Subsidy Act of 1903, chap 57, sec. 3, subsec 2, the grant of a subsidy of \$50,000 was authorized towards the construction of a steel superstructure of a railway bridge on the St. Francis river, county of Yamaska, in lieu of the grant under item 38 of sec. 2 of chap 8 of 1900, but subject to the same conditions as expressed therein, the subsidy to be payable to the Canadian Bridge Company.

A contract was entered into for this work accordingly on December 21, 1903.

By the same section of the said Act, subsec. 3, the grant of a subsidy was authorized to the Canadian Bridge Company of Walkerville, to strengthen and complete the foundation and approaches to the bridge over the St. Francis river, subsidized in favour of the above company by section 3, of chap 7, of 1899, \$35,000, which amount shall remain the first charge on the road, and shall be recouped to the treasury out of subsidies earned or to be earned.

A contract was entered into for this work accordingly on December 21, 1903.

During the past fiscal year payment of subsidy was made to the extent of \$80,494.16. The total of payments up to June 30, 1904, was \$199,784.35. This includes the sum of \$16,164.63 for completing the Montreal and Sorel Railway (see report of 1899-1900.)

St. Catharines and Niagara Central Railway Company.

(See Annual Report for 1895-96.)

St. Clair Frontier Tunnel Company.

(See Annual Reports of 1890-91 and 1891-92.)

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St. Gabriel de Brandon and Ste. Emélie de l'Energie Railway Company.

(See Annual Report for 1902-03.)

St. John Valley and Rivière du Loup Railway Company.

(See Annual Report for 1893-94.)

St. Stephen and Milltown Railway Company.

(See Annual Reports for 1895-96 and 1900-01.)

Stewiacke Valley and Lansdowne Railway Company.

(See Annual Report for 1895-96.)

St. Lawrence and Adirondack Railway Company.

(See Annual Reports for 1893-94 and 1900-01.)

St. Lawrence, Lower Laurentian and Saguenay Railway Company.

(Name changed to **Laurentian Railway Company**, by *Provincial Act 51-52 Vic., ch. 108.*)

(See Annual Report for 1891-92.)

St. Louis and Richibucto Railway Company.

(See Annual Report for 1884-85.)

St. Mary's River Railway Company.

(See Nos. 495, 614.)

This company was incorporated by the Dominion Act, 63-64 Vic., chap. 79 (1900), with powers to construct a railway from some point between Lethbridge and Stirling, on the railway of the Alberta Railway Company to some point on the international boundary line, between ranges 24 and 30, west of the 4th meridian, N.W.T., and, with the approval of the Governor in Council, to build branch lines, limited to 15 miles each in length.

By the Dominion Act 4 Ed. VII., chap 43 (1904), this company has been authorized to amalgamate with the Alberta Railway and Coal Company and the Canadian North-west Irrigation Company, under the name of the Alberta Railway and Irrigation Company.

By the Subsidy Act of 1903, chap 57, item 70, the grant of a subsidy of \$3,200 a mile, with an addition of 50 per cent on cost in excess of \$15,000 a mile, limited in all to \$6,400 a mile, was authorized for a line of railway from Spring Coulee, cross-

ing St. Mary's river at Cardston, 16 miles, and from a point on this line to or near the intake of the irrigation canal, about 16 miles, in all not exceeding 32 miles.

The company having applied, they were admitted to contract, on March 14, 1904, the lines to be completed by August 1, 1905.

During the past fiscal year, subsidy to the extent of \$40,960 was paid, making the total of \$115,960 up to June 30, 1904.

Témiscouata Railway Company—Rivière du Loup to Edmundston.

(See Annual Report for 1892-93.)

Thousand Islands Railway Company.

(See Annual Reports for 1895-96 and 1901-02.)

Tilsonburg, Lake Erie and Pacific Railway Company.

(See Annual Report for 1895-96.)

(No. 387.)

A further subsidy to this company was authorized by the Act 60-61 Vic., chap. 4 (1897), namely, for 3.50 miles from the then terminus, through Tilsonburg to the Michigan Central Railway, \$3,200 a mile, with an addition of 50 per cent of the cost in excess of \$15,000 a mile, the whole not to exceed \$6,400 a mile.

Under date December 4, 1897, the company were admitted to contract. During the fiscal year 1898-99 the sum of \$10,912 was paid, and in the fiscal year 1900-01 the sum of \$7,159.48 was paid from this subsidy, making, with their previous subsidy of \$51,200, paid in 1895-96, a total of \$69,271.48.

By the Subsidy Act, 62-63 Vic., chap. 7, item 26 (1899), a subsidy of \$3,200 per mile, with a further subsidy of 50 per cent on cost in excess of \$1,500 a mile, not exceeding in all \$6,400 a mile, was authorized for an extension from Tilsonburg to Ingersoll or Woodstock, not exceeding 28 miles.

Under authority of an order in council of September 11, 1901, a contract was made with the company accordingly on October 15, 1901; the road to be completed by October 1, 1902.

During the past fiscal year payment of subsidy was made to the extent of \$4,000, making the total payments \$117,431.48 up to June 30, 1904.

Trans-Canada Railway Company.

(See No. 540.)

This company was incorporated under the name of 'The Trans-Canadian Railway Company' by the Act 58-59 Vic., chap. 28 (1895), with powers to construct a railway

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from a point at or near the city of Quebec; thence westerly and as nearly as practicable in a straight line to a point north of Lake Winnipeg; thence westerly by way of the Yellow Head or other convenient and practicable pass in the Rocky mountains; and thence by the Skeena river to Port Simpson or Port Essington, with the option of adopting any other more feasible route west of the Rocky mountains to reach a point on the Pacific coast between fifty-two and fifty-five degrees north latitude.

Powers were also given for operation of vessels in connection with their railway; for wharf, dock, elevator and warehouse construction, and for production and use of electric power; also for telegraph and telephone lines to any point on James' Bay, Hudson Bay and Hudson Straits.

Additional powers were given by the Act of 1894, chap. 65, for the construction of a branch from the main line at the St. Maurice river, Quebec, thence southerly to the village of Montcalm in the parish of St. Liguori, and thence in a direct line to the city of Montreal; the construction of such a branch not to be commenced until after two hundred miles of the main line beginning at the city of Quebec has been constructed and put into operation. This Act also changed the name of the company.

By the Act 2 Edw. VII., chap 108 (1902), the time for the construction of the railway authorized by the above Acts, was extended to May 15, 1912: their powers of construction were also extended as follows:—To enable the company to 'continue the construction of its main line, which was commenced at Roberval on the Quebec and Lake St. John Railway, from that point in a westerly or north-westerly direction,' and to build 'a branch line from the nearest point on its main line to deep water near the mouth of the Nottaway river,' (which empties into James' bay), and also 'a branch line from Chicoutimi to the mouth of the Saguenay river at or near St. Catharine's bay'; also, with the sanction of the Governor in Council, to enter into an agreement with the Great Northern Railway of Canada, the Quebec and Lake St. John Railway Company, or the Canadian Northern Railway Company, for conveying or leasing its railway, or for an amalgamation with such company.

By the Railway Subsidy Act of 1901, 1 Edw. VII., chap 71, item 25, the grant of a subsidy of \$3,200 a mile, with a further subsidy of 50 per cent on average expenditure in excess of \$15,000 a mile, the whole subsidy not to exceed \$6,400 a mile, was authorized 'for a line of railway from Roberval, Quebec, westward towards James' bay, not exceeding 60 miles.'

The company having applied for this subsidy, a contract was entered into with them accordingly on January 19, 1903.

No payments have been made up to June 30, 1904.

Tobique Valley Railway Company.

(See Annual Report for 1893-94.)

Toronto, Grey and Bruce Railway Company.

(See Annual Report for 1887-88.)

United Counties Railway Company.

(See Annual Report for 1900-01.)

Vaudreuil and Prescott Railway Company.(See *Montreal and Ottawa Railway Company*.)**Waterloo Junction Railway Company.**

(See Annual Report for 1891-92.)

Western Counties Railway Company.*(Name changed to The Yarmouth and Annapolis Railway Company, by 56 Vic., ch. 63.)**(Name further changed to The Dominion Atlantic Railway Company, by 57-58 Vic., ch. 69.)*

(See Annual Report for 1894-95.)

West Ontario Pacific Railway Company.*(Leased to Ontario and Quebec Railway Company—C.P.R.)*

(See Annual Report of 1890-91.)

Woodstock and Centreville Railway Company.

(See Annual Report for 1895-96.)

Yarmouth and Annapolis Railway Company.(See *Western Counties Railway Company*.)**York and Carleton Railway Company.**

(See Annual Report for 1901-02.)

LAND SUBSIDIES.

A number of companies have been aided by subsidies in land, duly authorized by parliament and granted by the Department of the Interior, to whose report reference must be had for information as to their position.

In the annual report of this department for 1895-93 information was given as to a number of these land subsidized companies.

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CANALS.

The total expenditure charged to capital account on the original construction and the enlargement of the several canals of the Dominion, up to June 30, 1904, was \$87,223,164.67. A further sum of \$21,090,389.93 has been expended from the consolidated fund, including the repairs, renewals, maintenance and operation of these works, making a total of \$108,313,554.60. The total revenue derived, including tolls, and rentals of lands and water-powers, amounted to \$13,320,222.95. (See the accountant's statements, Part II., pp. 27, 28, 47 and 48.)

The total expenditure on canals for the fiscal year ended on June 30, 1904, was as follows:—

On construction and enlargement, a total of \$1,880,787.20, and a further sum of \$1,099,771.68 for repairs, renewals, operation, and revenue collection, making a total for the year of \$2,980,558.88.

The total net revenue collected for the fiscal year was \$79,536.51, a decrease compared with the net revenue of the fiscal year 1902-03 of \$150,676.64. No tolls were charged on any of the canals.* On July 1, 1903, the balance of rents unpaid was \$83,536.93. The rents accrued during the year amounted to \$88,077.84, and the rents received to \$72,701.28, an increase of \$2,300.23, leaving a balance of rents uncollected on June 30, 1904, amounting to \$97,955.81.

The total expenditure on canal staff and maintenance, repairs and renewals amounting, for the year, to \$1,099,771.68, an increase of \$25,394.67, and the total net receipts amounting, as above, to \$79,536.51, the amount of such expenditure in excess of receipts was \$1,020,235.17.

The above figures relate to the fiscal year 1903-04, but very voluminous statistics relating to the canal traffic, and various commercial statistics, for the *season of navigation* of the year 1903 will be found in Part V., 'Canal Statistics.'

The total traffic through the several canals of the Dominion for the season of 1903 amounted to 9,203,817 tons, an increase of 1,690,620 tons compared with the previous year. This includes 5,511,868 tons passing through the Sault Ste. Marie canal against 4,729,268 tons in 1902.

The following features of the principal canal traffic during the season of 1903 will be of interest:—

On the Welland canal, 1,002,919 tons of freight were moved, an increase of 347,532 tons, of which 543,993 tons were agricultural products, an increase of 188,121 tons, and 158,721 tons produce of the forest; of coal 147,884 tons were carried; 732,829 tons passed eastward, and 270,000 tons westward; 979,817 tons were through freight, of which 715,595 tons passed eastward.

* All tolls were, by orders in council of April 27, and May 19, 1903, abolished for the seasons of 1903 and 1904. In the fiscal year 1902-03 the net canal tolls amounted to \$159,959.56, being for the portion of the year between July 1, 1902, and the end of that season. In the fiscal year 1901-02, when the system of tolls was in force, the tolls amounted to \$236,942.72.

Of the through freight Canadian vessels carried 400,491 tons, an increase of 73,384 tons, and United States vessels 579,326 tons, an increase of 260,336 tons.

The total freight passed eastward and westward through this canal to United States ports was 370,225 tons, an increase of 101,196 tons compared with the year 1902.

The quantity of grain passed down the Welland and St. Lawrence canals to Montreal was 351,936 tons, an increase of 143,721 tons compared with the previous year; of this, 40,641 tons were transhipped at Ogdensburg as against 34,060 tons transhipped in 1902. The further quantity of 48,131 tons of grain passed down the St. Lawrence Canals, only, to Montreal, making the total 400,067 tons.

On the St. Lawrence canals 1,681,206 tons of freight were moved, an increase of 588,073; of which 756,379 were eastbound through-freight, and 211,438 tons westbound through-freight; 801,544 tons were agricultural products, 523,564 tons merchandise, 415,642 tons coal and 191,813 tons forest products.

Seventy-four cargoes of grain, aggregating 99,582 tons, were taken down direct to Montreal through the Welland and St. Lawrence canals in 1903, as against thirty-seven, aggregating 35,253 tons, in 1902, twenty-two cargoes, aggregating 17,303 tons, in 1901, and fifteen cargoes, aggregating 7,924 tons in 1900.

On the Ottawa river canals the total quantity of freight moved was 436,473 tons, a decrease of 8,209, of which 410,620 tons were produce of the forest.

On the Chambly canal 346,571 tons were moved, a decrease of 32,871 of which 188,335 tons were produce of the forest, and 79,894 tons of coal.

On the Rideau canal 61,120 tons were carried, an increase of 10,241; 29,093 tons being the product of the forest and 8,245 tons of coal.

On the St. Peters canal 90,864 tons were carried, an increase of 17,326, of which 49,681 tons were merchandise, and 37,760 tons coal.

On the Murray canal 30,389 tons passed, a decrease of 4,789, and 7,405 tons of this were the product of the forest.

On the Trent Valley canal, 42,407 tons were moved, of which 40,477 tons were the product of the forest.

On the Sault Ste. Marie canal, the total movement of freight was 5,511,868 tons, being an increase of 782,600 tons carried in 4,351 vessels, the number of lockages being 3,242. Of wheat 32,232,315 bushels, and of other grain 6,154,448 bushels were carried; 2,808,927 barrels of flour, 2,683,500 tons of iron ore, 998,780 tons of coal, and 30,609,187 feet, board measure of lumber; all these items show a very considerable increase. The total traffic at this point, accommodated by the canals, the American and Canadian, amounted to 34,674,437 tons, a decrease of 1,287,626 tons, carried in 18,595 vessels, a decrease of 4,036. The total quantity of wheat carried was 61,384,552 bushels, a decrease of 15,361,797, and of other grain 32,095,646 bushels, an increase of

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6,783,133. Of lumber the total was 1,003,192,000 feet, board measure, a decrease of 74,740,942.*

* NOTE.—The following items of information respecting the traffic during the season of 1903 through the two canals, the United States and the Canadian, at the Sault Ste. Marie, will be found of much interest in view of the enormous proportions and rapid growth of lake commerce. They are taken from 'Statistics of Lake Commerce', compiled under the direction of Majors W. H. Bixby, and W. H. Fisk, Corps of Engineers, U.S.A., from the official records.

The season of navigation lasted for eight months and 14 days, the Canadian canal being open from April 2nd to December 13, 256 days, and the United States canal from April 11 to December 15, or 249 days.

The total freight passed through the two canals during the season aggregated 34,674,437 net tons (2,000 lbs) a decrease of 1,286,709 tons, or 4 per 100, against an increase the preceding season of 7,558,081 tons. That season was, however, an extraordinary one, and the traffic was the largest by 6,271,372 tons ever known. Fifty-five thousands and one hundred and seventy-five passengers, a decrease of 1,202, were carried. The Canadian canal carried 16 per cent of the total freight, or 5,502,185 tons, and 58 per cent of the passengers, or 32,019. There was an increase of 773,824 tons of freight through the Canadian canal, and a decrease of 4,580 passengers.

As showing the enormous development of traffic at this point, it has to be noted that the first canal (American) was opened in 1855; in 1861 the freight carried amounted to \$7,847 net tons, valued at \$6,000,000; in 1891, 8,888,759 tons, valued at \$128,178,208, and in 1902, the greatest quantity, 35,965,146 tons, valued at \$358,306,300.

In 1903 the total value of the freight was \$349,405,014; the total amount paid for transportation was \$26,727,735.17. The average distance freight was carried was 835.6 miles; the average cost of transport per ton was \$0.77, and the average cost per mile per ton was 0.92 of a mill.

The number of registered vessels was 895, of which 799 were American, comprising 566 steamers valued at \$60,007,000 and 233 sailing vessels valued at \$8,245,800, the total registered tonnage being 1,152,254 tons, and 96 Canadian, comprising 86 steamers valued at \$5,977,500 and 10 sailing vessels valued at \$407,000; their total registered tonnage being 70,944 tons. Besides these, a number of small unregistered craft, both American and Canadian, used the canals, carrying a proportion of the freight to the extent of, in all, 37,587 tons.

The number of vessels in commission was smaller than in the previous year, being 895 as against 935. Of these, however, 50 were new vessels, large steam freighters ranging from 200 to 468 feet in length.

The tendency is to increase the size and carrying capacity of vessels. While there were only 89 carrying 2,000 to 3,000 tons as against 112 the preceding year, there were 162 as against 159, carrying from 3,000 to 4,000 tons, 36 as against 38, carrying from 4,000 to 5,000 tons, 41 as against 39, carrying from 5,000 to 6,000 tons, 63 as against 54, carrying from 6,000 to 7,000 tons, 54 as against 45, carrying 7,000 to 8,000, and 19 as against 11, carrying 8,000 tons and over. There were 97 as against 87 of from 400 to 500 feet in length. The largest single cargo was 8,914 tons, carried by the steamer 'Wm. Edenborn', and the next largest by the barge 'Manila', 8,671 net tons; both owned by the Pittsburg Steamship Co.

There were 14,243 passages of vessels through the American and 4,353 through the Canadian canal, a total of 18,596 as against 22,659 the preceding year. The lockages through the American canal numbered 8,395, and through the Canadian 3,247, a total of 11,642 against 12,846 the previous season.

The principal items of freight compared with the previous year were as follows: coal 6,937,632 tons, an increase of 2,125,155 tons, of which 5,788,628 tons were bituminous; flour 7,093,380 barrels, a decrease of 1,816,860; wheat 61,384,552 bushels, a decrease of 15,346,413; grain other than wheat 32,095,646 bushels, an increase of 4,354,826; salt 454,882 barrels, an increase of 11,576; copper 112,877 tons, a decrease of 7,735 tons; iron ore 21,654,898 tons, a decrease of 2,622,657 tons; unclassified freight, 659,839 tons, a decrease of 80,261 tons. No silver ore was carried.

The eastbound traffic aggregated 26,932,238 tons, of which 3,210,674 tons went to Lake Michigan, 1,155,377 to Lake Huron, 22,212,177 to Lake Erie, and 354,010 to Lake Ontario ports; 955,452 tons were carried in Canadian vessels, from Canadian to Canadian ports, 263,748 tons in Canadian vessels from Canadian to American ports, and 190,286 tons in Canadian vessels from American to Canadian ports.

The westbound traffic aggregated 34,674,437 tons, of which 90,031 tons went from Lake Michigan, 226,047 tons from Lake Huron, 7,329,727 tons from Lake Erie and 96,394 tons from Lake Ontario ports; 206,535 tons were carried in Canadian vessels from Canadian to Canadian ports, 259,232 tons in Canadian vessels from Canadian to American ports, and 35,829 in Canadian vessels from American to Canadian ports.

The freight charges per unit on the principal items were as follows: on coal \$0.53 per ton; flour \$0.12 per barrel; wheat and other grain \$0.16 per bushel; manufactured iron \$2 per ton, pig iron \$1.50; salt \$0.15 per barrel; copper \$1.43 per ton; iron ore \$0.75 per ton; lumber \$2.50 per M ft. B.; general merchandise \$2 per ton.

In connection with the question of canal versus railway transport of grain from the west, it may be noted that whereas grain and pease passed down to Montreal through the Welland and St. Lawrence canals to the extent of 351,936 tons, an increase of 143,721 tons, compared with the previous year, the quantity carried to Montreal via the Canadian Pacific and Grand Trunk Railways amounted to 253,959 tons, a decrease of 9,902 tons. Over the route from Depot Harbour, on Georgian bay, Lake Huron via the Canada Atlantic Railway to Coteau Landing, at the head of the Soulanges canal, thence by barge to Montreal, in the season of 1902 the total freight so carried to Montreal was 273,145 tons; of this quantity 11,732 tons were corn, 216,305 wheat. In 1903 the total freight carried was 315,779 tons, 109,937 tons were corn and 175,954 wheat.

The quantity of grain carried to tide water on the New York state canals was 327,840 tons, an increase of 9,163 tons, while the quantity carried by the railways of the state to tide water amounted to 3,793,973 tons, a decrease of 764,563.

Of the total east and west bound freight carried by the canals of the State of New York (the Erie, the Champlain, the Black river, the Cayuga and Seneca, and the Oswego), and the competing railways (the New York Central and the Erie Railway) respectively, (amounting in 1903 to 72,283,508 tons—greater by 207,734 tons than in 1902), the proportion carried by the canals has fallen steadily from 68·9 per cent in 1859 and 47·0 per cent in 1869, to 6·8 per cent in 1898, 7·2 per cent in 1899, 5·2 in 1900, 5·1 in 1901, 5·5 in 1902, and 5·6 in 1903. These canals carried in 1903, 3,615,385 tons, an increase of 340,775 tons.

The enlarged Erie canal, between Buffalo and Albany, is 350½ miles long; comprises 72 locks, 110 x 18 feet, with a depth of 7 feet of water, accommodating, as a maximum, vessels of 240 tons burden. The original canal was completed in 1836, and the enlargement in 1862. The total cost of construction was \$51,609,200.

By means of the enlarged Canadian canal system and the intermediate waterways, a minimum depth of fourteen feet of water from Lake Superior to the head of ocean navigation at Montreal is afforded; the smallest locks being 270 feet in length and 45 feet in width, intended, for purposes of ordinary traffic, to accommodate vessels 255 feet long and 44 feet beam.* As an index to the carrying power of the canal works, a vessel 247 feet of length and width 42·6 feet, drawing 14 feet of water and carrying 2,212 tons of corn may be a typical of their general accommodation, though not of their full capacity.

The through route between Montreal and Port Arthur, on the west shore of Lake Superior, open as a 14-foot navigation, comprises 73 miles of canal, with 48 locks, and 1,150 miles of river and lake waters, or a total of 1,223 miles. From Montreal to Duluth, at the south-west of Lake Superior, the total distance is 1,357 miles, and to Chicago, 1,286 miles. A summary of this route will be found in the Chief Engineer's

*In exceptional cases, and in cases of emergency, this length can, with certain manoeuvring, be somewhat increased; being governed, of course, by the form of the vessel. As a matter of fact, there are vessels now using the canals whose length, over all, is 265 feet, and width of beam 37 feet.

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report, Part I., and further details of the several works in the pages immediately following. At Port Arthur and at Fort William (about six miles distant), the Canadian Pacific Railway gives communication to and from the west.

The approaches to the canals and the channels through the intermediate river reaches are well defined, and are lighted with gas buoys under the control of the Department of Marine and Fisheries, admitting of safe navigation, if in the hands of competent pilots, both day and night. In the cases of the Sault Ste. Marie, the Cornwall, and the Soulanges, they are well lighted throughout by electricity, and the Lachine canal is partially so lighted. The Sault Ste. Marie, the Cornwall and the Soulanges canals are electrically operated. Installments for electrical lighting and operation of the Welland canal are in progress; also, for like purposes on the Lachine. The Farran's Point canal is lighted with acetylene gas.

The improvement works being carried on at Port Colborne, the Lake Erie entrance of the Welland canal, comprise the deepening of the approach to the canal to 22 feet, and the construction of two docks, with piers, 200 feet wide, upon which grain elevators will be erected for the transference of grain to vessels adapted to the canal navigation, when required. In addition to the works undertaken by this department, a breakwater, about a mile in length, has been, and another is being, constructed across the entrance to the harbour by the Department of Public Works, which will also dredge out the area so contained: thus greatly increasing the accommodation, and insuring safety at this important point. The removal of the centre pier bridges on the canal, which obstructed navigation, is in progress, and new bridges spanning the entire channel are being erected. The deepening of portions of the canal prism is being carried on satisfactorily.

The work of deepening the approaches of the Sault Ste. Marie canal to 21 feet 5 inches is progressing. The approaches at the lower entrances are completed to that depth. The south lower entrance pier is being extended for a distance of 800 feet, and the work will probably be completed next season. A contract has been made for the work for a similar extension of 800 feet to the south upper entrance pier. With the completion of these two works, and possibly some levelling, sodding and tree and shrub planting of the canal grounds, in order to obtain an appearance of neatness such as that which characterizes the American canal opposite, the construction work of this canal will be finished.

The works on the Trent canal are satisfactorily advancing. The section, $9\frac{1}{2}$ miles, comprising the new hydraulic lift lock at Ashburnham (Peterborough), was formally opened for traffic in June, 1904. The occasion was one of much interest, especially from an engineering point of view. The lock which, at a single operation, raises or lowers a vessel of the ordinary type, 800 tons capacity, in use on this canal, a distance of 65 feet in three minutes actual movement, proved to be completely successful. Not only is it the only lock of the character on this continent, but it is double the size of any of the three existing in Europe. A detailed description will be found as a note in the Chief Engineer's section of this report. A second hydraulic lift lock to overcome a rise and fall of 54 feet is projected for the Balsam-Simcoe Lake division of the canal.

When the present contracts are completed, a six foot navigation will be afforded from Lake Simcoe to Heely's Falls, a distance of about 160 miles, leaving the portion between Heely's Falls and Lake Ontario and the portion from the head of Lake Simcoe to Georgian bay, Lake Huron, still to be dealt with. The total distance between the Bay of Quinté, Lake Ontario and Georgian bay is about 192 miles.

The completion of the difficult work of constructing a channel 3,000 feet long, 300 feet wide, and with 17 feet of water, through the Galops rapids, which has, for some years past, been carried on, is now so near completion that it is expected that the current year will see it finished. In this connection there is being constructed a massive dam between Adam's island (Canadian) and Galops island, which is in the territory of the United States, in order to the removal of a cross current which affected the said new channel. In dealing with this matter, the department has received much courteous assistance from the United States authorities, who have facilitated the work in every way in their power.

During the years 1899 and 1900, under special appropriations voted by parliament, surveys were conducted on the Upper River Ottawa, with a view to ascertaining the feasibility and probable cost of constructing a canal system to give a navigation from Georgian bay down the river to Montreal, a scheme proposed many years ago and lately revived by private parties with considerable energy. The results of these surveys will be found in a special report from the engineer in charge, Mr. H. A. F. MacLeod, attached to an appendix to the annual report for the year 1900-1901.

His conclusions are that the canal can be constructed at an estimated cost, for a 14 foot navigation of \$23,898,000, and for a 20 foot navigation of \$72,627,000. The distance from Georgian bay to Montreal is set down at 430 miles. A further and more detailed survey is in progress under the Department of Public Works.

In the report of the chief engineer, and in the reports of the superintending engineers, will be found full details as to the operation of the various canals, and as to the progress and position of the works of enlargement and construction now being carried on.

I have the honour to be, sir,

Your obedient servant,

COLLINGWOOD SCHRIEBER,

Deputy Minister of Railways and Canals.

PART I

SKETCH MAPS OF DOMINION RAILWAYS AND CANALS

AND

REPORT OF THE CHIEF ENGINEER

COMPRISING REPORTS OF

GENERAL MANAGER OF GOVERNMENT RAILWAYS AND SUPERINTENDENTS OF CANALS

ALSO

DECISIONS OF THE RAILWAY COMMITTEE OF
THE PRIVY COUNCIL

1903-1904

DEPARTMENT OF RAILWAYS AND CANALS.

LIST OF ANNUAL REPORTS UNDER THIS COVER.

1. Collingwood Schreiber, Chief Engineer Railways and Canals, General.
2. D. Pottinger, General Manager Government Railways, I.C.R.
3. T. C. Burpee, Engineer of Maintenance, I.C.R.
4. W. B. McKenzie, Chief Engineer, I.C.R.
5. G. R. Joughins, Superintendent of Motive Power, I.C.R.
6. D. Pottinger, General Manager Government Railways, Windsor Branch.
7. T. C. Burpee, Engineer of Maintenance, Windsor Branch.
8. D. Pottinger, General Manager Government Railways, P.E.I. Railway.
9. G. A. Sharp, Superintendent P. E. I. Railway.
10. W. S. Poole, Mechanical Superintendent, P. E. I. Railway.
11. W. B. McKenzie, Chief Engineer, P. E. I. Railway.
12. E. Marceau, Superintending Engineer, Quebec Canals.
13. L. N. Rheaume, St. Lawrence Canals.
14. W. A. Stewart, Superintendent of Operation, St. Lawrence Canals.
15. A. J. Grant, Engineer in charge of Construction, Welland Canal.
16. J. L. Weller, Superintending Engineer, Welland Canal.
17. F. B. Fripp, Engineer in Charge, Sault Ste. Marie.
18. J. C. Boyd, Superintendent, Sault Ste. Marie.
19. R. B. Rogers, Superintending Engineer, Trent Canal.
20. A. T. Phillips, Superintending Engineer, Rideau Canal.
21. J. H. Devereaux, Lock Master, St. Peters Canal.
22. Collingwood Schreiber, Secretary, Railway Committee of Privy Council.

CHIEF ENGINEER'S REPORT.

DEPARTMENT OF RAILWAYS AND CANALS,

OFFICE OF THE CHIEF ENGINEER,

OTTAWA, November 1, 1904.

SIR,—I have the honour to submit my annual report for the fiscal year ended June 30, 1904, covering, however, the works of construction up to October 1, 1904. Accompanying it are the following:—

First.—The annual report of the General Manager of Government Railways, to which are attached the report of the Chief Engineer, the Engineer of Maintenance, the Superintendent of Motor Power of the Intercolonial Division and the report of the Superintendent of Prince Edward Island Division, with statements of accounts prepared by the Accountants of these roads. (Part I.)

Second.—The annual reports of the Superintending Engineers of the several Canals, and of the Superintendents of the Sault Ste. Marie Canal, the St. Peter's Canal and of the St. Lawrence Canals. The engineer in charge of the improvements of the upper entrance of the Welland Canal and the engineer in charge of the improvements to the entrance to the Sault Ste. Marie Canal. (Part I.)

Third.—Proceedings before the Railway Committee of the Privy Council. (Part I.)

Fourth.—Financial Statements of the Accountant of the Department. (Part II.)

Fifth.—A statement of the condition of the subsidies granted in aid of the construction of railways; also a list of Railway Subsidy Acts. (Part III.)

Sixth.—Statement of contracts entered into during the year, prepared by Mr. Hansard (Part IV.)

Seventh.—Statement of water powers and other public property leased by the department during the year, prepared by Mr. Hansard. (Part IV.)

Eighth.—Statement of property purchased or damaged during the year, prepared by Mr. Hansard. (Part IV.)

Ninth.—Agreements respecting subsidies in aid of construction of railways entered into during the year, prepared by Mr. Hansard. (Part IV.)

Tenth.—The Canal Statistics for the season of navigation of 1903, compiled by Mr. Devlin. (Part V.)

Eleventh.—The Railway Statistics for the year ended June 30, 1904, compiled by Mr. Ridout from returns prepared by the Railway Companies. (Part VI.)

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The following shows the length of the government railways in operation on June 30, 1904:—

INTERCOLONIAL RAILWAY.

MAIN LINE AND BRANCHES.

	Miles.
Montreal to Halifax, via Lévis.	837
Moncton to St. John.	89
Truro to Sydney.	213
Oxford Junction to Pictou.	69
St. Charles Junction to Chaudière Curve, via St. Henri.	17
Rivière Ouelle Branch.	6·25
Dalhousie Junction to Dalhousie.	7
Derby Junction to Indiantown.	14
Painsec Junction to Point du Chêne.	12
Pugwash Junction to Pugwash.	5
Stellarton Junction to Brown's Point.	12
North Sydney Junction to North Sydney.	5
New Glasgow to Pictou Landing.	8
Dartmouth Branch.	13
Nicolet Branch.	14'76
	<hr/>
	1,322·01

FREIGHT BRANCHES.

	Miles.
Rivière du Loup Wharf Branch.	4
Rimouski "	2
Newcastle "	2
Dorchester "	1
Courtney Bay "	1
Sackville "	'50
Stewiacke "	1
Halifax Cotton Factory Branch.	1
	<hr/>
	12'50
	<hr/>
Total.	1,334·51

WINDSOR BRANCH.

Windsor Junction to Windsor.	32
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PRINCE EDWARD ISLAND RAILWAY.

Souris to Tignish.	167
Mount Stewart to Georgetown.	24
Charlottetown to Royalty Junction.	5
Emerald Junction to Cape Traverse.	13
Alberton to Cascumpe Wharf.	1
	<hr/>
	210

Total length of government railways. 1,576 51

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The result of the year's operations of the government railways may be stated as follows :—

Name of Railway.	Mileage in Operation	Amount.	Profit.	Loss.
		\$ cts.	\$ cts.	\$ cts.
Intercolonial Division	1,301	Working expenses 7,239,982 04 Earnings 6,339,231 43		900,750 61
Windsor Branch	32	One-third earnings 53,634 05 Maintenance 24,281 09	29,352 96	
Prince Edward Island Division	210	Working expenses 335,695 44 Earnings 234,390 03		101,305 41
Total miles	1,543		29,352 96	1,002,056 02
		Deduct profit from loss		29,352 96
		Net loss		972,703 06

The maintenance of the roads and rolling stock has received careful attention, and both roads continue to be in efficient condition; the rolling stock is being brought up to the modern standard.

The working expenses of the Intercolonial Railway given above include the \$140,000 rental paid to the Grand Trunk Railway.

The gross earnings of the government railways for the last two years compare as follows :—

	1902-1903.	1903-1904.
Intercolonial Division	\$6,324,823 72	\$6,339,231 43
Windsor Branch	42,560 81	53,634 05
Prince Edward Island Division	217,714 24	234,390 03
	\$6,584,598 77	\$6,627,255 51

Showing an increase in the gross earnings of \$42,656.74.

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The gross working expenses of the government railways for the last two years compare as follows:—

	1902-1903.	1903-1904.
Intercolonial Division.... .	\$6,196,653 19	\$7,239,982 04
Windsor Branch..... .	17,843 19	24,281 09
Prince Edward Island Division.	259,637 82	335,695 44
Total..... .	6,474,134 20	\$7,599,958 57
Gross working expenses of government railways....		\$7,599,958 57
Gross earnings of government railways.....		6,627,255 51
Excess of working expenses, which include rental, \$140,000, over earnings		\$ 972,703 06

Showing an increase in working expenses for the year, compared with the previous year, of \$1,125,824.37, which is made up of the following:—

	1902-1903.		1903-1904.		Difference.	
	Increase.	Decrease.	Increase.	Decrease.	Increase.	Decrease.
	\$	cts.	\$	cts.	\$	cts.
Locomotive power.....	2,249,212	81	2,732,396	72	483,183	91
Car expenses.....	1,388,805	73	1,762,273	89	373,468	16
Maintenance of way and works.....	1,485,545	61	1,619,780	67	134,235	06
Station expenses.....	831,650	91	922,528	95	92,878	04
General charges.....	490,355	29	533,529	51	43,174	22
Rental of leased lines.....	140,000	00	140,000	00	Nil.	Nil.
	6,585,570	35	7,712,509	74	1,126,939	39
Deduct car mileage.....	111,436	15	112,551	17		
Net increase.....	6,474,134	20	7,599,958	57	1,125,824	37

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INTERCOLONIAL DIVISION.

The ocean passenger and freight traffic via the port of Halifax shows a considerable increase for the winter season of 1903-4, as compared with the previous winter season.

COMPARATIVE Statement of Ocean-borne Passenger Business done at the Port of Halifax during the Winter Seasons of 1902-3 and 1903-4.

Name of Steamer.	1902-1903.			Name of Steamer.	1903-1904.		
	No. of Passengers.				No. of Passengers.		
	1st Class.	2nd Class.	Total.		1st Class.	2nd Class.	Total.
Pretorian.....	176	1,271	1,447	Pretorian.....	61	1,351	1,412
Parisian.....	216	1,506	1,722	Parisian.....	101	1,399	1,500
Bavarian.....	198	2,033	2,231	Bavarian.....	175	2,314	2,689
Corinthian.....	139	1,543	1,682	Corinthian.....	29	578	607
Armenian.....		3,277	3,277	Cambroman.....	Nil.	52	52
Siberian.....	5	1,086	1,091	Siberian.....	11	556	567
Mongolian.....	26	726	752	Mongolian.....	Nil.	502	502
Corean.....		489	489	Corean.....	5	165	170
Assyrian.....		2,944	2,944	Assyrian.....	Nil.	837	837
Numidian.....	71	1,758	1,829	Numidian.....	26	803	829
Arcadian.....		971	971	Arcadian.....	Nil.	1,945	1,945
Canada.....	76	1,634	1,710	Canada.....	81	1,314	1,395
Carthaginian.....	2	1,110	1,112	Carthaginian.....	22	393	415
Tunisian.....	383	2,972	3,355	Tunisian.....	248	2,868	3,116
Sardinian.....		501	501	Sardinian.....	Nil.	260	260
Laurentian.....	20	616	636	Laurentian.....	24	823	847
Pomeranian.....	1	510	511	Pomeranian.....	1	372	373
Lake Champlain.....	61	1,306	1,367	Lake Champlain.....	169	825	994
Adria.....		1,090	1,090	Ionian.....	115	1,661	1,776
Bulgaria.....		2,204	2,204	Dominion.....	27	731	758
Sicilian.....	4	16	20	Sicilian.....	20	802	822
				Pallanza.....	Nil.	138	138
				Barcelona.....	Nil.	1,508	1,508
				Kensington.....	Nil.	913	913
				Buenos Ayrean.....	Nil.	39	39
				Sarmatian.....	Nil.	277	277
				Southwark.....	Nil.	512	512
				Malou.....	Nil.	191	191
* Total.....	1,378	29,563	30,941	Total.....	1,115	24,329	25,444

* NOTE.—Of the above 29,315 travelled by the Canadian Pacific Railway, and 1,626 travelled by the Intercolonial Railway.

Of the 25,444 passengers carried by the Intercolonial Railway in 1903-04 as above, 17,237 travelled via St. John by the Canadian Pacific Railway, and 2,125 travelled by the Intercolonial Railway to Montreal.

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COMPARATIVE Statement of Ocean-borne Freight Traffic during the Winter Seasons of 1902-3 and 1903-4.

Name of Line of Steamers.	WINTER OF 1902-1903.			Name of Line of Steamers.	WINTER OF 1903-1904.		
	Measurement tons.	Weight tons.	Total tons.		Measurement tons.	Weight tons.	Total tons.
Furness-Allan	Nil.	Nil.	Nil.	.....	.....	.....	.....
Allan Line.	3,962	2,530	6,492	Allan Line.	11,203	4,095	15,298
Furness Line.	4,339	8,445	12,784	Furness Line.	4,599	8,754	13,353
Elder-Dempster. . . .	Nil.	Nil.	Nil.	Canada-Jamacia Steamship Line }		40	40
Pickford and Black	152	1,786	1,938	Pickford and Black	Nil.	Nil.	Nil.
Beaver Line.	Nil.	Nil.	Nil.	Red Cross Line. . .	Nil.	879	879
Total	8,453	12,761	21,214	Total.	15,802	13,768	29,570

The above statement shows an increase of 8,356 tons of ocean-borne freight traffic for the winter season of 1903-4 as compared with the winter season of 1902-3.

The following is a statement of the quantity and classes of the rolling stock purchased on capital account up to June 30, 1904 :—

	Engines.	Dining cars.	PASSENGER CAR STOCK.					Conductor's van.	Oil tank cars.	Box, cattle and refrigerator cars.	Platform cars.	Coal cars of 3 several kinds.	Snow ploughs.	Wing ploughs.	Flangers.	Rotary snow ploughs.	Auxiliary cars.	Air Brake Instruction car.
			1st class sleeping and parlor.	1st class.	2nd class sleepers.	2nd class.	Baggage and mail postal.											
.....	.....	.....	.....	.....	.....	.....	.....	.....	5,486	.....	999	.....	.....	.....	.....	.....	.....	.....
.....	302	7	31	117	31	93	50	99	.....	123	2,686	54	49	10	22	2	19	1
.....	.....	.....	5	.....	.....	.....	32	.....	15	84	.....	542	.....	.....	.....	.....	.....	.....
Total.	302	7	36	117	31	93	82	99	15	5,693	2,686	1,595	49	10	22	2	19	1

NOTE—51 coal cars have been converted into platform cars.

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The following is a statement of the quantity and classes of rolling stock which have been rebuilt during the year ended June 30, 1904, at the cost of revenue to maintain the work :—

	Passenger Car Stock.														
	Engines.	1st class sleeping and parlour.	1st class.	2nd class sleepers.	2nd class.	Baggage and express.	Conductor's van.	Box cars.	Platform cars.	Refrigerator cars.	Coal cars of three several kinds.	Snow ploughs.	Wing ploughs.	Flangers.	Rotary snow ploughs.
Total.....	8					3	8	255	137	8	54				

The following table shows the working expenses, gross earnings, the tonnage of freight and number of passengers carried each year since July 1, 1876, when the road was first opened as a through line to the west.

Year.	Average Miles in Operation.	Working Expenses.		Gross Earnings.		Profit.		Loss.		Tons of Freight carried.	No. of Passengers carried.
		¢	cts.	¢	cts.	¢	cts.	¢	cts.		
1876-77.....	714	1,661,673	55	1,154,445	33			507,228	22	421,327	913,420
1877-78.....	714	1,816,273	56	1,378,946	78			432,326	78	522,710	518,957
1878-79.....	714	2,010,183	22	1,294,009	69			716,083	53	510,861	640,101
1879-80.....	829	1,603,429	71	1,506,298	48			97,131	23	561,924	581,483
1880-81.....	840	1,759,851	27	1,760,393	92		542 65			725,777	631,245
1881-82.....	840	2,069,657	48	2,079,262	66		9,605 18			838,956	779,994
1882-83.....	840	2,360,373	27	2,370,910	10		10,547 83			970,961	878,600
1883-84.....	887	2,377,433	62	2,384,414	92		6,981 30			1,009,237	944,636
1884-85.....	941	2,519,751	56	2,441,203	66			78,547 90		989,986	957,228
1885-86.....	946	2,583,999	67	2,450,993	88			133,965 79		1,023,788	932,880
1886-87.....	977	2,922,369	62	2,660,116	93			262,252 69		1,143,020	942,784
1887-88.....	971	3,366,781	74	2,983,336	05			383,445 69		1,288,823	1,040,163
1888-89.....	971	3,244,647	73	2,967,801	00			276,847 73		1,218,877	1,136,272
1889-90.....	971	3,560,575	74	3,012,739	87			847,835 87		1,368,819	1,219,233
1890-91.....	1,094	3,662,341	94	2,977,395	38			684,946 56		1,304,534	1,298,304
1891-92.....	1,142	3,439,377	00	2,945,441	97			493,935 03		1,264,575	1,297,732
1892-93.....	1,142	3,045,317	50	3,065,499	09	20,181 59				1,388,080	1,292,878
1893-94.....	1,142	2,981,671	98	2,987,510	27	5,838 29				1,342,710	1,301,062
1894-95.....	1,142	2,936,902	74	2,940,717	95	3,815,21				1,276,816	1,352,667
1895-96.....	1,142	3,012,827	62	2,957,640	10			55,187 52		1,379,618	1,471,866
1896-97.....	1,145	2,925,968	67	2,866,028	02			59,940 65		1,296,028	1,501,690
1897-98.....	1,201	3,327,648	51	3,117,669	85			209,978 66		1,424,576	1,523,444
*1898-99.....	1,301	3,675,686	21	3,738,331	44	62,645 43				1,750,761	1,603,095
*1899-1900.....	1,301	4,431,404	69	4,552,071	71	120,667 02				2,151,208	1,791,754
*1900-01.....	1,301	5,460,422	64	4,972,235	87			488,186 77		2,111,310	2,025,295
*1901-02.....	1,301	5,574,363	30	5,671,385	91	96,822 61				2,385,816	2,486,226
*1902-03.....	1,315	6,196,653	19	6,324,323	72	127,670 53				2,790,737	2,404,230
*1903-04.....	1,321	7,239,982	04	6,339,231	43			900,750 61		2,664,149	2,663,156

* The working expenses include the rental paid for leased line.

4-5 EDWARD VII., A. 1905

INTERCOLONIAL RAILWAY.

STATEMENT of Earnings from the several sources named from June 30, 1876, to June 30, 1904.

Year.	Miles in operation.	Passenger	Freight	Mails and sundries.	Total.
		traffic.	traffic.		
		§ cts.	§ cts.	§ cts.	§ cts.
1876-77.....	714	460,368 15	607,564 99	86,512 21	1,154,443 33
1877-78.....	714	475,256 82	801,709 82	101,985 07	1,378,946 78
1878-79.....	714	451,893 29	753,490 85	88,715 55	1,294,099 69
1879-80.....	829	490,338 66	915,486 50	100,473 32	1,506,298 48
1880-81.....	840	545,114 48	1,113,872 21	101,407 23	1,760,393 92
1881-82.....	840	651,296 94	1,303,495 00	124,470 72	2,079,262 66
1882-83.....	840	741,992 72	1,487,601 98	141,326 40	2,370,910 10
1883-84.....	887	775,783 77	1,461,390 37	147,240 78	2,384,414 92
1884-85.....	941	747,585 13	1,542,052 18	151,566 35	2,441,203 66
1885-86.....	946	765,900 03	1,523,487 72	160,706 13	2,450,093 88
1886-87.....	977	828,328 28	1,677,971 59	153,817 06	2,660,116 93
1887-88.....	971	884,448 07	1,932,877 85	166,010 13	2,983,336 05
1888-89.....	971	906,246 47	1,969,094 44	152,460 09	2,967,801 00
1889-90.....	971	895,094 53	1,964,646 86	152,998 48	3,012,739 87
1890-91.....	1,094	962,316 88	1,854,629 88	160,448 62	2,977,395 38
1891-92.....	1,142	961,427 94	1,803,529 03	180,485 00	2,945,441 97
1892-93.....	1,142	1,002,912 74	1,868,823 84	194,468 80	3,065,499 09
1893-94.....	1,142	958,915 13	1,834,126 34	193,762 51	2,987,502 27
1894-95.....	1,142	963,914 44	1,782,608 54	194,194 97	2,940,717 95
1895-96.....	1,142	971,426 26	1,788,813 18	197,400 66	2,957,640 10
1896-97.....	1,145	979,005 57	1,687,050 42	199,972 03	2,866,028 02
1897-98.....	1,201	1,053,864 64	1,857,740 06	206,065 15	3,117,669 85
1898-99.....	1,315	1,167,453 16	2,348,096 58	222,781 70	3,738,331 44
1899-00.....	1,315	1,404,469 87	2,912,790 52	234,811 32	4,552,071 71
1900-01.....	1,315	1,607,166 79	3,121,006 15	244,062 93	4,972,235 87
1901-02.....	1,315	1,770,941 13	3,644,513 42	255,931 36	5,671,385 91
1902-03.....	1,315	1,927,916 97	4,128,255 00	268,151 75	6,324,323 72
1903-04.....	1,321	2,021,568 40	4,041,122 48	276,540 55	6,339,231 43

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INTERCOLONIAL RAILWAY.

STATEMENT showing the Number of Tons of Local and Through Freight Carried from June 30, 1876, to June 30, 1904.

Year.	Miles in operation.	Local freight.	Through freight.	Total.
1876-7	714	The information for these years was destroyed when the general offices in Moncton were burned.		421,327
1877-8	714			522,710
1878-9	714			510,861
1879-0	829			561,924
1880-1	840			725,777
1881-2	840	571,684	267,272	838,956
1882-3	840	537,025	443,936	970,961
1883-4	887	584,581	424,656	1,009,237
1884-5	941	506,574	483,362	989,936
1885-6	946	589,076	443,712	1,032,788
1886-7	977	633,455	509,565	1,143,020
1887-8	971	727,599	561,224	1,288,823
1888-9	971	624,436	594,441	1,218,877
1889-0	971	756,696	612,123	1,368,819
1890-1	1,094	797,492	507,042	1,304,534
1891-2	1,142	750,783	513,792	1,264,575
1892-3	1,142	1,030,628	357,452	1,388,080
1893-4	1,142	966,114	376,596	1,342,710
1894-5	1,142	901,374	366,442	1,267,816
1895-6	1,142	1,011,229	368,389	1,379,618
1896-7	1,145	927,167	368,859	1,296,028
1897-8	1,201	1,053,569	381,007	1,434,576
1898-9	1,315	1,351,569	399,192	1,750,761
1899-0	1,315	1,713,928	437,280	2,151,208
1900-1	1,315	1,633,671	477,639	2,111,310
1901-2	1,315	1,914,551	471,265	2,385,816
1902-3	1,315	2,239,993	550,744	2,790,737
1903-4	1,321	2,123,261	540,888	2,664,149

NOTE.—According to this table, the Through Freight business appears to be less than 17 years ago. This is explained by Montreal having become a local station after the I. C. Ry. was extended to that city. Another cause is the opening of the C. P. Ry. to St. John.

4-5 EDWARD VII., A. 1905

INTERCOLONIAL RAILWAY.

STATEMENT of the Number of Local and Through Passengers carried from June 30, 1876, to June 30, 1904.

Year.	Miles in Operation.	Number of Local Passengers.	Number of Through Passengers.	Total.
1876-7.....	714	The information for these years was destroyed when the general offices in Moncton were burned.		613,420
1877-8.....	714			618,957
1878-9.....	714			640,101
1879-00.....	829			581,483
1880-1.....	840		631,245	
1881-2.....	840	647,534	132,460	779,994
1882-3.....	840	728,186	150,414	878,600
1883-4.....	887	784,715	159,921	944,636
1884-5.....	941	812,028	145,200	957,228
1885-6.....	946	784,817	148,063	932,880
1886-7.....	977	814,032	128,752	942,784
1887-8.....	971	948,324	91,839	1,040,163
1888-9.....	971	1,050,592	85,680	1,136,272
1889-00.....	971	1,112,695	91,531	1,219,233
1890-1.....	1,094	1,203,814	94,490	1,298,304
1891-2.....	1,142	1,198,649	99,083	1,297,732
1892-3.....	1,142	1,188,827	104,051	1,292,878
1893-4.....	1,142	1,216,027	85,035	1,301,062
1894-5.....	1,142	1,272,284	80,383	1,352,667
1895-6.....	1,142	1,386,803	85,063	1,471,866
1896-7.....	1,145	1,416,631	85,059	1,501,690
1897-8.....	1,201	1,438,590	89,854	1,528,444
1898-9.....	1,315	1,504,652	98,443	1,603,095
1899-1900.....	1,315	1,678,858	112,896	1,791,754
1900-1.....	1,315	1,905,599	119,696	2,025,295
1901-2.....	1,315	2,061,196	125,030	2,186,226
1902-3.....	1,315	2,255,013	149,217	2,404,230
1903-4.....	1,321	2,447,843	215,313	2,663,156

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The following table shows the number of tons of coal carried over the Intercolonial Railway from the Nova Scotia collieries to Ste. Rosalie, Montreal and St. John for points west thereof, and to local stations in each year since the road was opened as a through line :—

Year.	For the West.			To Local Stations.	Total.
	Via Ste. Rosalie.	Via Montreal.	Via St. John.		
1876-77				103,420	103,420
1877-78				97,043	97,043
1878-79		300		112,232	112,532
1879-80		1,097		135,369	136,466
1880-81		5,102	4,022	174,483	184,607
1881-82		18,015	11,779	218,364	248,158
1882-83		12,837	22,206	227,380	262,423
1883-84		22,014	19,534	252,014	293,562
1884-85		133,440	1,773	213,791	349,004
1885-86		171,170	21,150	215,272	407,592
1886-87		192,871	27,536	233,178	453,585
1887-88		183,704	36,228	309,727	529,659
1888-89		160,026	27,923	338,538	526,487
1889-90		164,453	25,126	366,967	556,546
1890-91		113,996	39,213	344,829	498,038
1891-92		35,447	5,918	392,441	433,806
1892-93		136,868	3,775	402,653	543,296
1893-94		102,273	8,028	367,390	478,691
1894-95		67,082	7,865	310,253	385,200
1895-96		53,124	9,681	369,708	432,513
1896-97		38,395	12,395	331,469	382,172
1897-98		9,084	9,796	351,069	369,949
1898-99		4,644	5,399	484,163	494,206
1899-1900		3,495	Nil.	599,714	603,289
1900-01	136	Nil.	Nil.	506,454	506,590
1901-02	1,131	5,763	3,640	546,986	557,520
1902-03	2,200	7,817	6,775	725,727	742,519
1903-04	2,260	637	513	691,346	694,761

It thus appears that the largest tonnage of coal carried over the road for the west was in the year 1886-7, when it reached 220,407 tons, since which the through coal traffic for points west of the Intercolonial Railway has greatly declined.

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TABLE showing the number of bushels of grain carried during each year for shipment at Halifax since the road was opened as a through line to the west.

Year.	Bushels.		Total.	Year.	Bushels.		Total.
	Via Chaudière.	Via St. John.			Via Chaudière.	Via St. John.	
1876-77.....				1890-91.....	148,803	59,534	218,337
1877-78.....				1891-92.....	845,997	519,500	1,265,497
1878-79.....				1892-93.....	152,306	197,669	352,975
1879-80.....				1893-94.....	Nil.	8,026	8,026
1880-81.....				1894-95.....	Nil.	Nil.	Nil.
1881-82.....				1895-96.....	Nil.	Nil.	Nil.
1882-83.....	31,011		31,011	1896-97.....	Nil.	Nil.	Nil.
1883-84.....	73,389		73,389	1897-98.....	8,000	Nil.	8,000
1884-85.....	300,901		300,901	1898-99.....	30,000	Nil.	30,000
1885-86.....	389,122		389,122	1899-1900.....	13,239	Nil.	13,239
1886-87.....	575,880		575,880	1900-01.....	147	Nil.	147
1887-88.....	69,021		69,021	1901-02.....	Nil.	Nil.	Nil.
1888-89.....	129,725		129,725	1902-03.....	Nil.	Nil.	Nil.
1889-90.....	502,012		502,012	1903-04.....	147,438	Nil.	147,438

TABLE showing the number of barrels of flour and meal carried during each year since the road was first opened as a through line to the west.

Year.	Barrels.	Year.	Barrels.
1876-77.....	254,710	1890-91.....	1,013,129
1877-78.....	557,778	1891-92.....	954,015
1878-79.....	620,329	1892-93.....	856,913
1879-80.....	535,248	1893-94.....	944,967
1880-81.....	672,310	1894-95.....	938,351
1881-82.....	692,095	1895-96.....	822,097
1882-83.....	983,916	1896-97.....	847,701
1883-84.....	817,134	1897-98.....	987,408
1884-85.....	935,977	1898-99.....	1,157,250
1885-86.....	761,127	1899-1900.....	1,234,076
1886-87.....	763,894	1900-01.....	1,292,106
1887-88.....	871,838	1901-02.....	1,311,707
1888-89.....	948,514	1902-03.....	1,521,540
1889-90.....	1,116,050	1903-04.....	1,607,050

TABLE showing the number of bushels of grain carried during each year since the road was first opened as a through line to the west.

Year.	Bushels.	Year.	Bushels.
1876-77.....	292,852	1890-91.....	2,890,921
1877-78.....	331,170	1891-92.....	3,776,677
1878-79.....	302,921	1892-93.....	1,514,619
1879-80.....	534,021	1893-94.....	1,304,684
1880-81.....	565,678	1894-95.....	1,036,384
1881-82.....	560,253	1895-96.....	1,064,385
1882-83.....	1,195,601	1896-97.....	1,093,499
1883-84.....	654,673	1897-98.....	1,551,372
1884-85.....	734,902	1898-99.....	2,595,353
1885-86.....	849,800	1899-1900.....	2,720,453
1886-87.....	1,018,395	1900-1901.....	3,535,364
1887-88.....	1,219,035	1901-02.....	2,959,761
1888-89.....	1,256,158	1902-03.....	3,302,252
1889-90.....	2,610,202	1903-04.....	2,788,772

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TABLE showing the quantity of lumber in feet carried during each year over the road since it was first opened for traffic as a through line to the west.

Year.	Feet.	Year.	Feet.
1876-77.....	50,096,474	1890-91.....	184,188,324
1877-78.....	56,626,547	1891-92.....	175,474,340
1878-79.....	55,626,696	1892-93.....	181,211,013
1879-80.....	55,462,654	1893-94.....	200,507,949
1880-81.....	72,841,888	1894-95.....	202,247,269
1881-82.....	78,356,418	1895-96.....	226,332,715
1882-83.....	104,633,417	1896-97.....	243,355,725
1883-84.....	131,120,948	1897-98.....	354,093,816
1884-85.....	138,493,075	1898-99.....	306,554,031
1885-86.....	117,186,512	1899-1900.....	379,350,074
1886-87.....	161,801,763	1900-1901.....	396,858,964
1887-88.....	197,753,272	1901-02.....	428,051,029
1888-89.....	199,507,777	1902-03.....	459,231,589
1889-90.....	210,886,071	1903-04.....	465,379,803

TABLE showing the number of live stock carried during each year over the road since it was first opened for traffic as a through line to the west.

Year.	Number.	Year.	Number.
1876-77.....	34,414	1890-91.....	95,529
1877-78.....	46,498	1891-92.....	87,889
1878-79.....	47,584	1892-93.....	93,369
1879-80.....	70,990	1893-94.....	79,203
1880-81.....	61,574	1894-95.....	72,106
1881-82.....	73,479	1895-96.....	64,051
1882-83.....	68,338	1896-97.....	72,082
1883-84.....	60,090	1897-98.....	89,301
1884-85.....	70,785	1898-99.....	109,821
1885-86.....	74,498	1899-1900.....	92,813
1886-87.....	82,896	1900-01.....	95,923
1887-88.....	98,302	1901-02.....	98,495
1888-89.....	85,960	1902-03.....	127,060
1889-90.....	80,771	1903-04.....	113,006

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TABLE showing the number of tons of ocean-borne goods to and from Europe, via the port of Halifax, carried over the road during each year since it was first opened for traffic as a through line.

Year.	Via Ste. Rosalie and from the West.	Via Montreal to and from the West.	Via St. John to and from the West.	To and from local Stations.	Total.
1876-77					
1877-78		14,949		3,405	18,354
1878-79		21,628		2,643	24,271
1879-80		21,073		4,952	26,025
1880-81		15,454		3,334	18,788
1881-82		21,607		4,168	25,775
1882-83		24,875		7,911	32,786
1883-84		19,696		6,533	26,229
1884-85		22,787		8,405	31,192
1885-86		13,464		8,216	21,680
1886-87		16,923		9,811	26,734
1887-88		41,864		8,878	50,742
1888-89		17,340		11,481	28,821
1889-90		9,895		11,730	21,625
1890-91		9,923		10,764	20,687
1891-92		9,719	17	23,835	33,571
1892-93		7,295	100	12,319	19,714
1893-94		3,023	204	13,455	16,682
1894-95		6,749	213	10,399	17,361
1895-96		3,767	314	16,748	20,829
1896-97		2,654	263	17,239	20,156
1897-98		5,950	1,637	18,633	26,220
1898-99		2,465	243	31,555	34,263
1899-1900		2,379	307	37,108	39,794
1900-01	322	6,860	1,142	155,514	163,838
1901-02	1,106	7,780	1,528	172,733	183,147
1902-03	817	11,925	1,194	124,695	138,631
1903-04	2,079	21,377	2,994	146,070	174,520

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TABLE showing the number of tons of raw and refined sugar carried over the road during each year since it was first opened as a through line.

Year.	Raw Sugar.					Refined Sugar.				
	Via Ste. Rosalie.	To Montreal for the West	To St. John for the West.	To Local Stations	Total.	To Ste. Rosalie for the West.	To Montreal for the West.	To St. John for the West.	To Local Stations	Total.
		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77.....		340			340					
1877-78.....		186			186					
1878-79.....		1,041			1,041					
1879-80.....		12,220			12,220					
1880-81.....		13,872			13,872		4,022		2,902	6,924
1881-82.....		14,256		1,290	15,546		7,146		3,607	10,753
1882-83.....		9,465		508	9,973		11,126		5,497	16,623
1883-84.....		13,778		3,068	16,846		14,543		7,265	21,808
1884-85.....		10,381		3,661	14,042		18,024		8,445	26,469
1885-86.....		4,394		3,998	8,392		7,674		5,858	13,518
1886-87.....		20,450		8,500	28,950		15,044		8,395	23,439
1887-88.....		14,320		14,085	28,405		21,641		7,133	28,774
1888-89.....		24,358		7,160	31,518		12,955		11,120	24,075
1889-90.....		7,390		8,913	16,303		6,778		6,125	12,903
1890-91.....		5,088	4,670	8,215	17,973		10,130	468	5,996	16,594
1891-92.....		7,142	3,960	10,535	21,637		12,633	7,647	12,414	32,721
1892-93.....		Nil.	Nil.	10,137	10,137		8,327	6,456	7,840	22,623
1893-94.....		Nil.	Nil.	6,775	6,775		17,729	6,967	8,885	33,581
1894-95.....		Nil.	Nil.	10,342	10,342		13,351	15,819	4,695	33,865
1895-96.....		Nil.	Nil.	9,824	9,824		15,138	13,734	11,309	40,181
1896-97.....		Nil.	Nil.	4,925	4,925		5,694	8,069	6,957	20,720
1897-98.....		Nil.	Nil.	Nil.	Nil.		6,624	8,821	10,989	26,534
1898-99.....		Nil.	Nil.	Nil.	Nil.		8,138	2,193	15,833	26,164
1899-1900.....		96	Nil.	Nil.	96		9,795	257	19,655	29,967
1900-01.....		489	Nil.	Nil.	489	403	14,791	12	10,615	25,821
1901-02.....		90	Nil.	11,553	11,643	3,101	6,831	861	18,839	29,632
1902-03.....		194	Nil.	17,137	17,331	3,183	5,763	1,636	20,529	31,111
1903-04.....	357	875	Nil.	7,495	8,727	6,013	8,628	879	29,400	44,920

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TABLE showing the number of tons of fresh and salt fish carried over the road during each year since it was opened as a through line.

Year.	Fresh Fish.					Salt Fish.				
	To Ste. Rosalie for the West.	To Mont- real for the West.	To St. John for the West.	To Local Sta- tions.	Total.	To Ste. Rosalie for the West.	To Mont- real for the West.	To St. John for the West.	To Local Sta- tions.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1876-77.....		530	921	527	1,978		551	1,848	802	3,201
1877-78.....		596	1,015	474	2,085		898	1,644	805	3,347
1878-79.....		471	1,336	817	2,624		988	1,938	1,048	2,974
1879-80.....		519	1,362	453	2,334		1,612	2,238	959	4,809
1880-81.....		498	1,879	920	3,297		2,418	937	1,051	4,406
1881-82.....		475	1,619	957	3,051		4,031	1,066	2,487	7,584
1882-83.....		542	384	393	1,319		3,229	759	1,354	5,412
1883-84.....		838	1,682	412	2,932		1,322	1,143	1,224	3,689
1884-85.....		1,062	1,885	484	3,431		3,563	3,600	1,596	8,759
1885-86.....		1,669	1,645	902	4,216		1,689	2,047	3,376	7,103
1886-87.....		1,278	1,572	2,008	4,858		3,236	569	1,747	5,552
1887-88.....		1,533	1,477	1,031	4,041		2,617	476	1,099	4,193
1888-89.....		2,474	2,000	1,870	6,344		3,070	7,746	2,994	13,810
1889-90.....		2,235	1,787	2,111	6,223		2,449	847	3,288	6,584
1890-91.....		2,029	2,788	1,848	6,665		1,953	1,917	3,236	7,106
1891-92.....		1,367	1,746	547	3,660		1,946	928	1,889	4,763
1892-93.....		1,683	1,875	3,340	6,898		3,262	1,811	2,176	7,249
1893-94.....		1,959	2,192	2,224	6,375		2,921	1,814	2,962	7,697
1894-95.....		2,006	3,726	1,160	6,892		2,075	1,849	5,285	10,209
1895-96.....		1,966	3,059	1,319	6,344		1,863	1,087	2,791	5,741
1896-97.....		3,307	3,115	1,286	7,708		2,168	1,176	2,536	5,880
1897-98.....		3,575	3,703	1,052	8,330		1,729	1,066	2,210	5,005
1898-99.....		1,210	2,070	3,305	6,583		1,631	1,198	3,625	5,474
1899-1900.....		2,547	2,706	3,686	8,939		2,421	1,563	2,659	6,643
1900-01.....	37	2,009	3,207	4,125	9,333	360	3,419	1,346	4,643	9,768
1901-02.....	219	3,013	4,373	5,477	13,082	283	3,150	1,413	5,196	10,042
1902-03.....	140	2,269	3,040	4,842	10,289	493	2,808	1,615	6,579	11,495
1903-04.....	539	1,939	3,588	5,002	11,068	225	2,359	564	5,848	8,996

206 miles of 57 lb. and 67 lb. rails were taken up and replaced by 162 miles of 80 lb. and 44 miles of 67 lb. rails; 644,683 ties and 156 sets of switch ties were renewed.

CAPITAL ACCOUNT.

Total cost of road and equipment up to June 30, 1904:—

Road, including \$1,464,000 paid on account purchasing Drummond County Railway.....	\$58,778,794 87
Rolling stock.....	13,957,140 93
Total.....	\$72,735,935 80

The work of increased accommodation at the deep water terminus at Halifax is progressing, which facilitates the work of conducting the traffic.

Both the road and rolling stock have been efficiently maintained during the year.

The net results in the operation of this road are not as favourable as those of the year previous. Additions to the rolling stock continue to be made, as being a necessity for the efficient working of the traffic.

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WINDSOR BRANCH.

This road continues to be operated by the Dominion Atlantic Railway Company, formerly the Windsor and Annapolis Railway Company, the company receiving two-thirds of the gross earnings for working the traffic, and the government one-third of the gross earnings for maintaining the way and works.

This road has been maintained in efficient condition.

TABLE showing the earnings and its division between the Windsor Branch, and the Main Line of the Intercolonial Railway between Windsor and Halifax, the maintenance expenses and net earnings of the Windsor Branch for each year since 1880.

Year.	Miles in operation.	One-third gross earnings.	Proportion of one-third gross earnings credited to line Windsor Junction to Halifax.	Proportion of one-third gross earnings credited to the Windsor Branch.	Maintenance expenses.	Profit.	Loss.
			§ cts.	§ cts.			
1880-81..	32	28,434 29	7,217 76	21,216 53	20,502 26	714 27	
1881-82..	32	28,461 07	7,407 88	21,052 19	13,099 55	7,953 64	
1882-83..	32	31,199 77	8,085 88	24,113 89	23,103 93	1,009 96	
1883-84..	32	30,428 39	7,409 46	23,018 93	22,140 86	878 07	
1884-85..	32	32,246 30	7,794 95	24,451 35	18,751 96	5,699 39	
1885-86..	32	31,185 63	7,527 52	23,658 11	19,229 49	4,428 62	
1886-87..	32	33,564 58	8,237 00	25,327 58	26,042 33		714 75
1887-88..	32	32,242 85	6,689 30	24,553 55	24,040 33	513 22	
1888-89..	32	37,313 43	8,941 32	28,372 11	20,856 50	7,515 61	
1889-90..	32	39,544 19	9,381 73	30,162 46	18,982 82	11,179 64	
1890-91..	32	39,519 56	9,284 43	33,508 35	28,931 71	1,303 42	
1891-92..	32	42,891 23	9,382 38	30,235 13	19,514 37	13,994 48	
1892-93..	32	43,901 28	9,585 17	34,316 11	16,889 95	17,426 16	
1893-94..	32	41,834 70	8,859 23	32,975 47	17,645 09	15,330 38	
1894-95..	32	50,703 84	11,626 20	39,077 64	14,640 07	24,437 57	
1895-96..	32	47,456 74	10,894 91	36,561 83	16,476 46	20,985 37	
1896-97..	32	54,208 81	13,605 58	40,603 23	10,821 04	29,782 19	
1897-98..	32	48,892 21	11,665 57	37,226 64	18,181 09	14,045 01	
1898-99..	32	56,314 51	13,840 48	42,474 04	12,873 06	29,600 94	
1899-1900	32	62,266 61	14,925 18	47,351 43	12,891 56	34,459 87	
1900-01..	32	62,523 20	15,261 31	47,261 89	16,862 66	30,399 23	
1901-02..	32	65,315 38	15,710 79	49,604 59	16,376 27	33,228 32	
1902-03..	32	56,417 38	13,856 57	42,560 81	17,843 19	24,717 62	
1903-04..	32	72,708 54	19,074 49	53,634 05	24,281 09	29,352 96	

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PRINCE EDWARD ISLAND RAILWAY.

CAPITAL ACCOUNT.

The cost of road and rolling stock up to June 30, 1904 :—

Road, &c.	\$5,544,192 68
Rolling stock.	583,924 12
Total.	<u>\$6,128,116 80</u>

The rolling stock provided on capital account consisted of:—

Engines.	Passenger Car Stock.			Official cars.	Box, Cattle and Refrigerator cars.	Platform cars and Coal cars.	Conductors' vans.	Pay car.	Snow ploughs.	Flangers.
	1st class cars.	2nd class cars.	Baggage, smoking and postal.							
27	23	16	4 3 4 <hr/> 11	1	220 21 1 <hr/> 241	147 20 <hr/> 167	4	1	9	7

The capital expenditure during the year amounted to \$698,877.47, of which was expended on the construction of the Murray Harbour branch railway and on the Hillsboro' bridge \$645,230.98.

Statement of rolling stock rebuilt during the year :—

Two locomotives, 1 platform car.

The following works are being carried on, on capital account:—

- Bridge over the Hillsboro' river at Charlottetown, of which Mr. M. J. Haney is the contractor for the substructure, which work is well advanced. Total expenditure up to June 30, 1903. \$ 735,101 99
Expenditure from June 30, 1903, to June 30, 1904. 418,982 76

Total expenditure up to June 30, 1904. \$1,154,084 75

- Murray Harbour branch, of which Mr. Willard Kitchen is the contractor. Total expenditure up to June 30, 1903. \$757,423 48
Expended from June 30, 1903 to June 30, 1904. 226,248 22

Total expenditure up to June 30, 1904. \$983,671 70

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The following table shows the working expenses, the gross and net earnings, the tons of freight and number of persons carried each year since June 30, 1875, when the road was first opened for traffic :—

Year.	Miles in operation.	Working expenses.		Gross earnings.		Loss.	Tons of freight carried.	No. of passengers carried.	
		\$	cts.	\$	cts.				\$
1875-76	199	214,930	43	118,060	96	96,869	47	28,358	93,964
1876-77	199	228,595	25	130,664	92	97,930	33	41,039	93,478
1877-78	199	221,599	49	135,899	60	85,699	89	38,668	111,428
1878-79	199	223,313	12	125,855	99	97,457	21	38,923	105,046
1879-80	199	164,640	55	113,851	11	50,789	44	37,208	90,533
1880-81	199	203,122	88	131,131	43	71,991	45	45,336	102,937
1881-82	199	228,259	97	137,267	54	90,922	43	48,315	118,436
1882-83	199	252,808	41	146,170	42	106,637	99	51,920	117,162
1883-84	199	236,428	13	144,504	12	91,924	01	51,841	118,988
1884-85	211	211,207	01	158,588	06	52,618	95	57,346	130,423
1885-86	211	216,744	34	155,584	36	61,159	98	57,913	120,374
1886-87	211	204,237	37	155,303	37	48,934	00	63,589	103,067
1887-88	211	229,639	95	158,365	62	71,276	33	59,693	131,246
1888-89	211	247,559	44	171,369	56	76,189	89	55,682	152,780
1889-90	211	266,485	85	160,971	78	105,514	07	51,694	133,099
1890-91	211	257,990	08	174,258	05	83,732	03	59,511	145,508
1891-92	211	289,706	38	157,442	69	132,263	69	51,065	139,389
1892-93	211	226,422	17	162,690	42	63,731	75	56,718	132,111
1893-94	211	226,891	06	158,533	83	68,357	23	53,577	123,727
1894-95	211	232,105	19	149,654	71	83,259	41	48,325	125,089
1895-96	211	225,138	56	146,476	54	78,662	02	46,395	122,586
1896-97	211	240,489	90	153,443	13	87,946	77	52,151	121,498
1897-98	211	231,418	74	158,950	61	72,468	13	57,539	126,510
1898-99	211	218,053	01	165,021	03	53,040	98	57,938	129,667
1899-1900	211	220,931	81	174,738	73	46,193	08	62,227	147,471
1900-01	211	261,766	24	193,833	48	67,883	76	73,696	157,793
1901-02	210	270,159	97	197,999	97	72,160	00	75,381	184,748
1902-03	209	259,637	82	217,714	24	41,923	58	80,582	205,265
1903-04	209	335,693	44	234,390	03	101,305	41	86,286	224,517

Steel rails (50 and 56 lb. to yard) 205

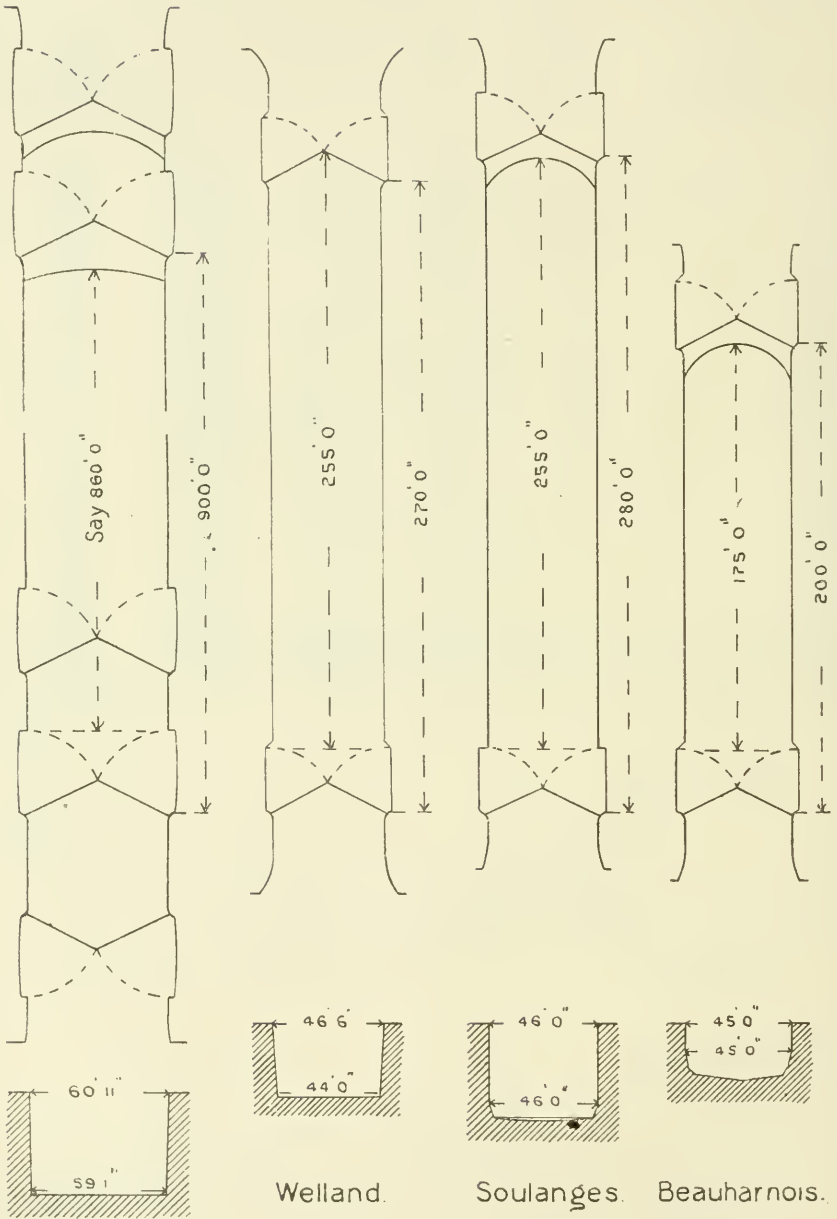
Iron rails (40 lb. to yard) 4

Total length of road 209

The road and rolling stock are in good running condition.

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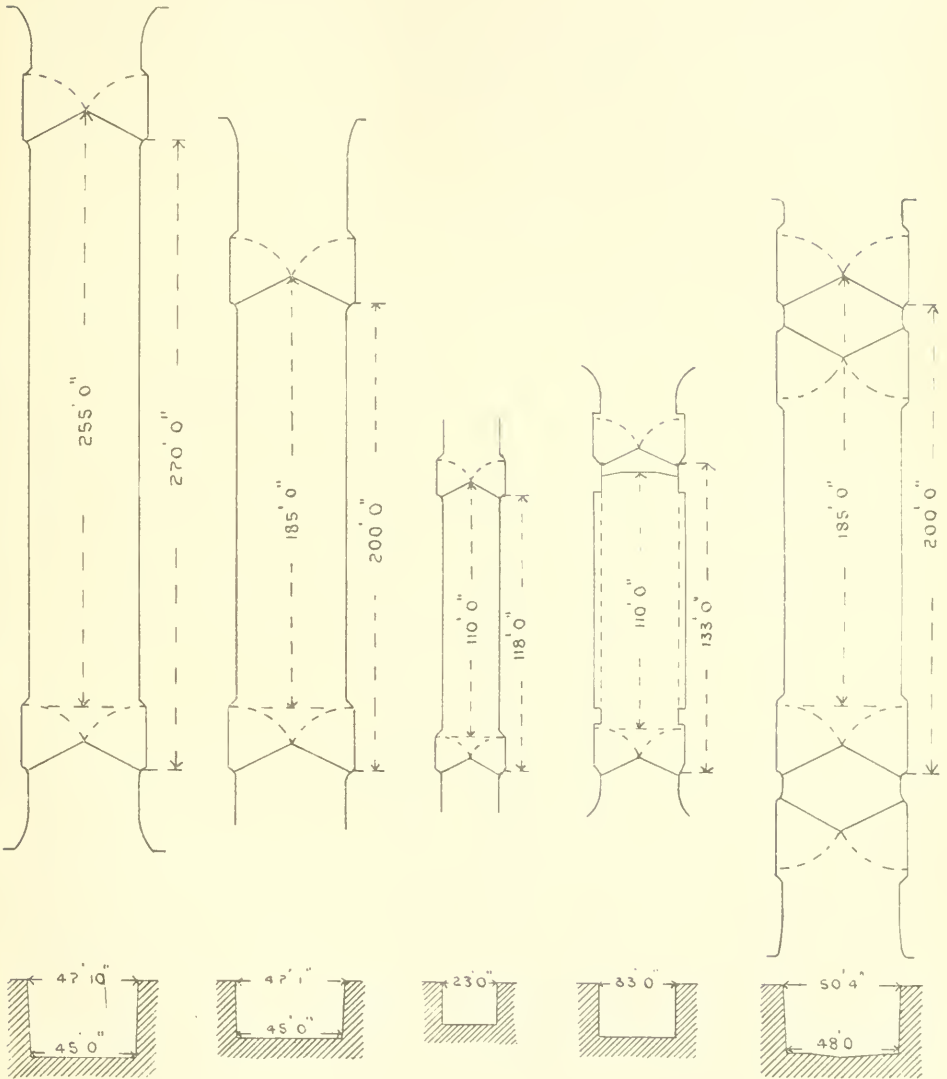
Plans and Sections showing the
on each of the Canadian Canal
Canal which is uncompleted.



There are no locks on the through
Montreal of less dimension than

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dimensions of the smallest lock Systems. Except the Trent



Lachine.

St Anne,
St Ours,
Carillon,
& Grenville.

Chamblay.

Rideau.

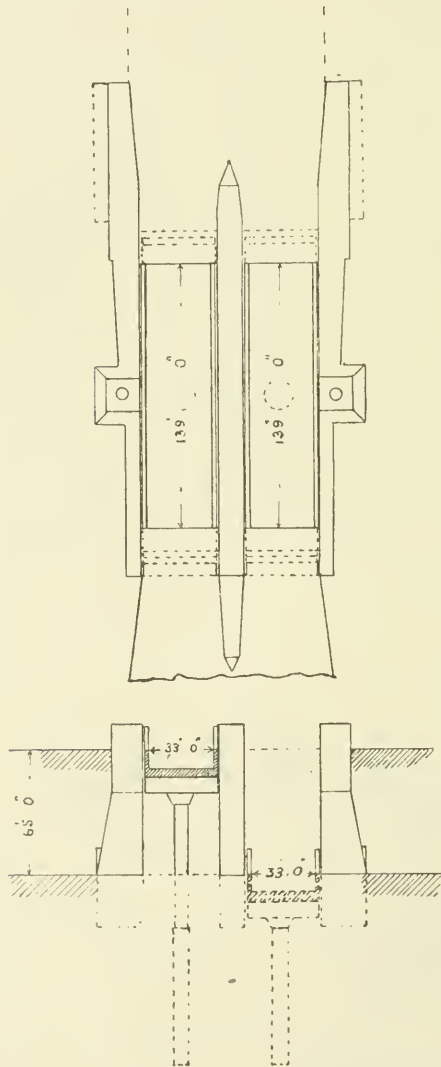
St Peter's

route between Lake Superior and those of the Welland Canal locks.

TRENT CANAL

HYDRAULIC LIFT-LOCK AT PETERBOROUGH.

— 65.Feet Lift —



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CANALS.

The preceding diagrams of the locks on the Lachine, Soulanges, Welland and Sault Ste. Marie canals practically give the key to the whole navigation between Montreal and Lake Superior. There are no locks to be passed of less dimensions than those of the Welland canal.

The dimensions of the locks of the Beauharnois, Carillon and Grenville, St. Anne, Chambly, St. Ours, Rideau, Trent and St. Peter's are also shown.

CONSTRUCTION.

SOULANGES CANAL.

This canal extends from Coteau Landing to Cascades, a distance of 14 miles.

The works of construction of this canal are completed.

Total expenditure up to June 30, 1903.	\$6,738,643 32
Expended during the year ended June 30, 1904.	113,328 45
	<hr/>
Total expenditure up to June 30, 1904.	\$6,851,971 77
Expended from June 30, 1904, to October 1, 1904.	75 75
	<hr/>
Total expended up to October 1, 1904.	\$6,852,047 52

There yet remains some further payments to be made.

SAULT STE. MARIE CANAL.

This canal is cut through St. Mary's island; it is $1\frac{1}{2}$ miles in length. The depth of water on the mitre sill at low water is 20 feet 4 inches, 22 feet in the prism, 21 feet 5 inches in the lower entrance, with a minimum width of 315 feet. In the upper entrance there is only a depth of 18 feet of water at low water, but the work of deepening to 21 feet 5 inches is in progress. The Heckler Bros. have completed their contract for a portion of the work of deepening, and a contract has been recently entered into with Mr. Boone to continue the work of deepening and widening, which, when completed, will give safe passage for vessels approaching and departing from the canal.

It having been found necessary to lengthen the entrance piers at each end of the canal, a contract has been entered into with Mr. Birmingham to extend south lower entrance pier 800 feet. The work is well advanced, but will not be completed until next season. For the extension of 800 feet to the south upper entrance pier, a contract has recently been entered into with Mr. Boyle, and he is making preparation to commence the work. Tenders are being invited for the erection of a small rest house for the men employed in operating the canal. When these works are brought to a finish the construction of the canal may be considered complete, unless, with a view to appearances of neatness and beauty, it is considered desirable to level up the grounds, lay them out in parterres, and plant them with trees and shrubs.

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Total expenditure up to June 30, 1903.	\$4,281,464 76
Expended from June 30, 1903, to June 30, 1904.	32,029 54

Total expenditure up to June 30, 1904.	\$4,313,494 30
Expenditure from June 30, 1904, to October 1, 1904.	25,859 70

Total expenditure up to October 1, 1904.	\$4,339,354 00

TRENT CANAL.

This canal is designed to extend from the waters of Lake Ontario to the Georgian bay on Lake Huron, at the mouth of the Severn river, the total distance being about 200 miles, of which 20 miles are canal and about 180 miles river and lake navigation.

Sections 1 and 2, on the Peterborough-Lakefield division, 9'61 miles, which were constructed by Messrs. Brown, Love & Aylmer and Messrs. Corry & Laverdure respectively, were opened for traffic on July 9 last, on which date the hydraulic lift lock at Peterborough was formally put in operation by the Hon. H. R. Emmerson, Minister of Railways and Canals, before a large gathering of people. Its operation was admirable, and it is a work that does credit to the resident engineers directly in charge of its construction, as well as to the contractors who carried it out, viz. : Messrs. Corry & Laverdure, the contractors for the substructure, and the Dominion Bridge Company, the contractors for the superstructure. The lock has a lift of 65 feet.

*NOTE—The two lock chambers, in which the vessels are raised or lowered, are steel basins measuring 140 by 33 feet, with a plating of 9 feet 10 inches deep. Those basins weigh about 400 tons each and when filled with water to the depth of 88 feet weigh 1,700 tons. They are each supported by heavy steel trusses of the double cantilever style upon a ram 90 inches in diameter and weighing 120 tons. These rams have a 65 foot stroke and work in two steel water tight presses, one under each chamber. The foundations for the presses are on solid rock in wells 70 feet deep.

The pressure caused by this 1,700 ton weight on the 90 inch ram is about 600 pounds to the square inch, and the two presses are connected by a pipe 12 inches in diameter. This connection enables the two chambers to work practically automatically. That is when the valve connecting these two presses opened the chamber that is at the top descends and the one at the bottom ascends until they are at a level unless there is greater weight in one than the other. In actual operation the chamber which it is desired to lower, will be loaded down until it contains about 8 inches of extra water which will give it an increased weight of 100 tons, sufficient to more than break the balance and send the chamber to the bottom. This operation may be carried on without regard to whether there are boats in the chambers or otherwise since it is a well-known scientific fact that any body floating in the water always displaces its own weight and a chamber containing three or four or half a dozen boats may be raised by the weight of the water in the other chamber with the extra 8 inches of water.

While it has been said that theoretically the lock is automatic, practically it is hardly so, in view of the fact that there is bound to be a certain amount of leakage in the presses, in which the rams work, similar to the piston in an engine, with this difference that in the case of the ram, it touches the press at only one point, at the top, where the gland is, while in the case of engine piston it touches the cylinder for its entire length and may have pressure on both sides of it.

As an auxiliary to the automatic operation and to provide for the inevitable leakage, an accumulator has been erected in the east side tower. This accumulator has a ram 20 inches in diameter, with a stroke of 30 feet 6 inches, and has been loaded down to create a pressure of 640 pounds to the square inch, or 40 pounds more than that under which the main presses work. A pair of triple cylinder pumps installed in the breast wall is used to pump water into the accumulator. These pumps are operated by a water turbine, 16 inches in diameter, of 100 horse power, working under a 65 foot head.

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Balsam-Simcoe Lake Division.

For section No. 1 Mr. Andrew Onderdonk was the contractor. He completed his contract some time ago, but as it is only a section of this division, it is only occasionally used, and has not been formally opened for public traffic. It is about six miles in length.

Section No. 2 is under contract with Messrs. Larkin & Sangster, except for the steel superstructure of the hydraulic lift lock. Their work is completed, with the

This accumulator is also used to operate the hydraulic engines with which the gates are opened or closed, and also for the capstan used in towing vessels in and out of the chambers. This accumulator is simply an auxiliary to the main presses, which in reality are the heart of the operation.

The rams upon which the chambers are supported are worthy of special mention. It should not be forgotten that the 90 inch ram is the only place where the chamber rests, and it is fixed directly in the centre of the chambers. The ram is made of cast iron in sections and has a perfectly smooth surface, and the metal is $3\frac{1}{4}$ inches thick. The presses in which the rams work are steel castings, $3\frac{1}{2}$ inches thick and 92 $\frac{1}{2}$ inches internal diameter.

The gate valve on the 12 inch pipe connecting the two presses, and upon which depends the upward and downward motion of the chambers, is operated by the lock master from his cabin in the centre tower, who is in complete control of the operations of the lock. This cabin has been fitted up in first-class shape, the interior fittings being of British Columbia cedar, varnished and finished in natural wood. It is here that the working of the lock is controlled, there being three main levers to do the work. Three men in all are required to perform a lockage; the lock master, who raises and lowers the chambers, and one man at each gate to operate the engine opening and closing the gates, and also to manipulate the capstans used to tow the boats and control them while in the chambers. No steamers will be allowed to enter the chambers under their own steam.

There is a space of about $1\frac{1}{2}$ inches between the ends of the movable lock chambers and the upper and lower reaches of the canal. To close this space and prevent leaking, there is a collapsible tube, which, when inflated with air supplied by a Taylor hydraulic air compressor, effectively prevents any leakage.

The method of operating the lock to allow a vessel to go from the lower to the upper reaches of the canal may be described briefly as follows:—

One chamber is up the other down; the bottom of the upper chamber is then about 10 inches lower than the bottom of the canal above, and has about 8 feet 10 inches of water on the sill. The seal tube is then inflated in the lower gate, thus making good the opening between the chamber and the canal. The lower gates are then opened outwards, thus lengthening the lower reach of the canal by the length of the chamber, 140 feet. The gates of the chamber and those of the reaches fit in together, and the same operation opens or closes both. The vessel is then towed in by the capstan, the gates raised and the tubes deflated, and the chamber is then ready for its vertical motion. The lockmaster opens the main valve between the two presses gradually, and as he does so, the difference in weight in the upper chamber, by reason of the greater quantity of water in it, causes it to lower, and the opposite chamber to rise. At the end of the stroke the lock master closes the valve, and by a similar series of operations to that which allowed the vessel to enter, it is taken out, and proceeds under its own steam.

The total length of time required to make a lockage is about 12 minutes from the time that the gates are lowered at the bottom to allow the boat to enter to the time when it leaves the chamber above. The actual time taken in the ascent is about three minutes.

The lock presents a very handsome and symmetrical appearance and the embankments are beautifully sodded in terraces. The concrete work is of a massive character, the breast wall being 40 feet thick, 85 feet high, and 126 feet long. A driveway is made through the breast wall and under the driveway is the pump room, in which are located the pumps mentioned above, as well as a turbine for generating electricity for lighting purposes. The wing walls extend towards the embankments 100 feet. The towers, of which there are three, and whose duties are to guide the chambers in their vertical course, are 105 feet high from the bottom of the pit, which is 27 feet below the level of the water in the lower reaches. The side towers at the base are 30 x 40 feet with a vertical shaft 18 x 18 feet 6 inches, surmounted by a cap, and with cornices of ornamental design. The central tower is 12 feet wide throughout. The operator's cabin on the top of the central tower is a 9 x 15 feet inside dimensions, the structure being copper sheathed. The length of the lock from end to end is about 300 feet and it is 220 feet from the well of the presses to the operator's cabin.

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exception of the construction of the arch concrete bridge over the canal at the 4th concession of Eldon and the building of the road approaching the bridge across the flooded lands. The work under this contract is well and substantially executed. Tenders are now about to be invited for the steel superstructure of the hydraulic lift lock, the lift of which is 48·44 feet.

Section No. 3 is under contract with Messrs. Brown and Aylmer. The length of the section is $5\frac{1}{2}$ miles, and it extends to Lake Simcoe. This contract work will not be completed until next season. The concrete entrance piers in Lake Simcoe will be finished in about a week's time. The cutting from the entrance piers to Centre road is about three-quarters done. The concrete lock No. 4, of which the foundations are laid, will probably occupy three weeks in the spring to complete. These are the only works of any magnitude remaining to be done to complete the contract. Upon the completion of this section there will be unbroken navigation available from Heeley's Falls to Lake Simcoe, a distance of about 160 miles.

To complete this canal, which is designed to extend from the Georgian bay to the waters of Lake Ontario, there remains to be placed under contract the section from Lake Simcoe to Georgian bay and the work between Heeley's Falls and Lake Ontario waters.

The following is a statement of the expenditure made on the construction of this canal from its commencement up to October 1, 1904:—

Expended prior to June 30, 1867.	\$ 309,371 31
Expended subsequent to June 30, 1867, and June 30, 1894 (date of works since contracted for).	782,524 88
Expended from June 30, 1894, to June 30, 1901.	2,070,431 18
	<hr/>
Total expenditure up to June 30, 1901.	\$3,162,327 37
Expended from June 30, 1901, to June 30, 1903.	973,026 19
	<hr/>
Total expenditure up to June 30, 1903.	\$4,135,353 56
Expended during year ended June 30, 1904.	489,038 44
	<hr/>
Total expenditure up to June 30, 1904.	\$4,624,392 00
Expended from June 30, 1904, to October 1, 1904.	85,489 16
	<hr/>
Total expenditure up to October 1, 1904.	\$4,709,881 16

ENLARGEMENT.

LACHINE CANAL.

This canal extends from Montreal to Lachine, a distance of $8\frac{1}{2}$ miles. The mitre sills of the locks have 14 feet of water upon them. The building of the stone lining of the slopes of the prism has progressed very slowly; there still remains much to be done to complete this work. Tenders will shortly be invited for the balance of the work remaining to be done. The government dredge has been engaged during the year in

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dredging for a depth of 20 feet below low water, as far as St. Gabriel basin, so that large vessels can enter the several basins. The work will not be completed during the current year, nor until the underpinning of the wall on the south side of the basin is completed. Owing to unforeseen delays with the work the machinery for operating the lock gates, valves and bridges by electricity has not been in condition to be used. The paving of Mill street with granite blocks is completed. The wooden bridges at Napoleon street and Coté St. Paul have been removed and replaced by steel structures resting on concrete piers. These new structures have a clear opening of 75 feet on each side of the pivot pier, and are 36 feet wide. They will be operated by electricity.

The total expenditure for original construction from	
1843 to 1848..	\$2,587,532 85
Expenditure in 1869..	2,000 00
<hr/>	
Total expenditure up to June 30, 1869..	\$2,589,532 85
Total expenditure for enlargement up	
to June 30, 1903..	\$8,591,631 27
Expended in year ended June 30, 1904.	181,487 06
<hr/>	
Total expenditure to June 30, 1904.	\$8,773,118 33
Expended from June 30, 1904, to Octo-	
ber 1, 1904..	20,339 59
<hr/>	
Total expenditure for enlargement to	
October 1, 1904..	8,793,457 92
<hr/>	
Total expenditure for construction and enlargement	
to October 1, 1904..	\$11,382,990 77

CORNWALL CANAL.

This canal extends from Cornwall to Dickenson's Landing, a distance of 11 miles. These works are completed, with the exception of the machine shop and office, the electrical appliances, the enlargement of the old weir at lock 17, and the strengthening of the bank opposite the town of Cornwall, all of which works will, it is confidently expected, be finished before the close of the current year.

Total expenditure for construction to June 30, 1875.	\$1,945,624 71
Total expenditure for enlargement up	
to June 30, 1903..	\$5,017,674 24
Expended in year ended June 30, 1904.	113,795 16
<hr/>	
Total expenditure to June 30, 1904..	\$5,131,469 40
Expended from June 30, 1904, to	
October 1, 1904..	13,673 15
<hr/>	
Total expenditure to October 1, 1904..	5,145,142 55
<hr/>	
Total expenditure on construction and enlargement	
to October 1, 1904..	\$7,090,767 26

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FARRAN'S POINT CANAL.

This canal commences at Farran's Point and extends a mile westward.

The work of enlargement on this canal is completed.

The total expenditure for construction and enlargement up to June 30, 1903, is	\$550,281 58
Expended during year ended June 30, 1904.	18,700 00
	<hr/>
Total expenditure up to June 30, 1904.	\$568,981 58
Expended from June 30, 1904, to October 1, 1904.	12,973 15
	<hr/>
Total expenditure up to October 1, 1904.	\$581,954 73

RAPIDE PLAT CANAL.

This canal extends from Morrisburg westward $3\frac{2}{3}$ miles. The work of enlargement on this canal is completed with the exception of work at the upper entrance under contract with Mr. P. H. Gilbert to the value of about \$4,000, which will be completed this season. The work consists of masonry upon the upper entrance pier.

Total expenditure up to June 30, 1903.	\$2,122,602 84
Expended during year ended June 30, 1904.	26,774 27
	<hr/>
Total expenditure up to June 30, 1904.	\$2,149,377 11
Expended from June 30, 1904, to October 1, 1904.	1,679 75
	<hr/>
Total expenditure up to October 1, 1904.	\$2,151,056 86

GALOPS CANAL.

The works of enlargement of both the Iroquois section and the Cardinal section of this canal are completed, and the engineers are preparing the final estimates, the details of which, in order to meet the requirements of the Auditor General's office, are very voluminous.

The work on the upper entrance section, for which Messrs. Murray and Cleveland are the contractors, is drawing to a close, and will it is confidently expected be completed during the current year.

The proposed wharf at the upper entrance of the Cardinal cutting has not as yet been placed under contract, as there is no parliamentary appropriation available.

Total expenditure on enlargement up to June 30, 1903.	\$5,271,050 16
Expended from June 30, 1903, to June 30, 1904.	256,536 30
	<hr/>
Total expenditure up to June 30, 1904.	\$5,527,586 46
Expended from June 30, 1904, to October 1, 1904.	36,779 81
	<hr/>
Total expenditure up to October 1, 1904.	\$5,564,366 27

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WELLAND CANAL.

Improvements.

The Trunk Line extends from Port Dalhousie on Lake Ontario to Port Colborne on Lake Erie, a distance of 26 $\frac{3}{4}$ miles. At Port Colborne improvements are in progress. Messrs. Hogan and McDonnell are the contractors for this work. The condition of the works may be stated to be as follows:—About 50 per cent of the work in the entrance channel and canal basin north of the lighthouse on the end of the west pier is done. The docking on the east side of the canal basin south of the Grand Trunk Railway's elevator is advancing satisfactorily. The rock excavation to form a wide channel with a depth of 22 feet of water to deep water in the lake is nearing completion. The cribwork and concrete walls forming the two elevator docks are completed, with the exception of 100 feet in each dock where an opening is temporarily left to admit of scow loads of materials entering. The filling of these docks will require about 180,000 cubic yards of material, of which about 60 per cent has already been deposited. Considering the vigour with which the work is now being prosecuted, appearances indicate that the whole work under contract will be completed next season. In the past, this work has progressed slowly, inasmuch as it was very important that the breakwaters forming a harbour and protection to the entrance of the canal, under contract by these same contractors with the Public Works Department, should be pushed forward vigorously; thence these contractors were allowed to specially direct their attention to the completion of these breakwater works rather than to our inside works.

Total expenditure up to June 30, 1903.	\$527,960 36
Expended from June 30, 1903, to June 30, 1904	190,501 24
	<hr/>
Total expenditure up to June 30, 1904.	\$718,451 60
Expended from June 30, 1904, to Oct. 1, 1904.	28,107 22. .
	<hr/>
Total expenditure up to October 1, 1904.	<u><u>\$746,568 82</u></u>

REMOVAL OF OBSTRUCTIONS AND IMPROVEMENTS.

The obstructions referred to are the pivot piers of the bridges in the centre of the canal. It is proposed, each year, to tear down two or three of the old bridges and build new structures spanning the entire channel, until all the bridges have been so treated. The following named bridges have already been so rebuilt, viz.:—The Humberstone, the Junction, the Welland and the Port Robinson. The Quaker bridge has been torn down and abandoned, as being no longer necessary. The following named bridges are now being torn down and rebuilt with the one span covering the whole prism of canal, viz.:—The Allanburg and the Marlatts bridges. Mr. Joseph Battle is the contractor for the building of the substructure, and the Dominion Bridge Company are the contractors for the superstructure. Other improvements of various kinds have been carried out.

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Total expenditure up to June 30, 1903.	\$125,116 72
Expended from June 30, 1903, to June 30, 1904.	177,380 11
	<hr/>
Total expenditure up to June 30, 1904.	\$302,496 83
Expended from June 30, 1904, to October 1, 1904.	27,031 62
	<hr/>
Total expenditure up to October 1, 1904.	<u>\$329,528 45</u>

DEEPENING PORTIONS OF LONG LEVEL.

This work is being executed by Messrs. Magann and Phinn, contractors. They have completed the work between Allanburg and Welland, and are now working between Welland and Humberstone. They have shown themselves to be capable, energetic contractors, having carried on the work with skill and energy.

Total expenditure up to June 30, 1903.	\$ 85,349 71
Expended from June 30, 1903, to June 30, 1904	99,939 05
	<hr/>
Total expenditure up to June 30, 1904.	\$185,288 76
Expended from June 30, 1904, to Oct. 1, 1904.	74,139 41
	<hr/>
Total expenditure up to October 1, 1904.	<u>\$259,428 17</u>

DEEPENING CANAL FROM PORT COLBORNE TO HUMBERSTONE.

This is submarine rock work, Messrs. Hogan and McDonnell are the contractors. They have made good progress with the work, and it is believed they will complete their contract during the current year.

Total expenditure up to June 30, 1903.	\$66,411 01
Expended from June 30, 1903, to June 30, 1904.	19,790 00
	<hr/>
Total expended up to June 30, 1904.	\$86,201 01
Expended from June 30, 1904, to October 1, 1904.	Nil.
	<hr/>
Total expended up to October 1, 1904.	<u>\$86,201 01</u>

DEEPENING ROCK CUT AT RAMEY'S BEND.

This is submarine rock work. Messrs. Weddell, Battle and Manley are the contractors. Very little work has been done by them up to June 30, 1904. The work is progressing well.

Total expenditure up to June 30, 1904.	\$ 1,730 00
Expenditure from June 30, 1904, to Oct. 1, 1904.	9,970 00
	<hr/>
Total expenditure up to October 1, 1904.	<u>\$11,700 00</u>

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	Construction.	Enlargement.
Total expenditure up to June 30, 1903.	\$7,693,824 03	\$16,940,333 28
Expended from June 30, 1903, to June 30, 1904..		555,751 00
		<hr/>
Total expenditure up to June 30, 1904.		\$17,496,084 28
Expended from June 30, 1904, to October 1, 1904		132,443 69
		<hr/>
Total expenditure up to October 1, 1904.		<u><u>\$17,628,527 97</u></u>

ST. LAWRENCE RIVER AND LAKE IMPROVEMENTS.

LAKE ST. LOUIS.

The channel cut through this lake is two miles long, 300 feet wide, with 17 feet of water at low water. The hydrographic surveying has been transferred to the Marine and Fisheries Department, who are now completing the surveys of this lake which were commenced by this department.

Total expenditure up to June 30, 1903.	\$290,259 21
Expended from June 30, 1903, to June 30, 1904.	7,916 90
	<hr/>
Total expenditure up to June 30, 1904.	<u><u>\$298,176 11</u></u>

LAKE ST. FRANCIS.

The following named shoals have been cut through and channels formed for 14 feet navigation:—St. Regis bar, the Hamilton Island channel, Clark's Island shoal, the Middle ground, the Highland shoal. The work was finished last year.

Total expenditure up to June 30, 1904.	<u><u>\$ 75,906 71</u></u>
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GALOPS RAPIDS.

A channel 3,000 feet long, 300 feet wide in width, with a depth of 17 feet of water is being cut through the upper bar, North Caledonia shoals, Island shoal and lower bar. This work will be completed during the current year. The Gilbert Dredging Company is the contractor for the work. It is expected that after the work is completed this channel will be largely used by vessels.

Total expenditure up to June 30, 1903.	\$903,441 85
Expended from June 30, 1903, to June 30, 1904.	6,450 00
	<hr/>
Total expenditure up to June 30, 1904.	\$909,891 85
Expended from June 30, 1904, to October 1, 1904.	11,402 37
	<hr/>
Total expenditure up to October 1, 1904.	<u><u>\$921,294 22</u></u>

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NORTH CHANNEL.

This channel is about $2\frac{1}{2}$ miles in length, 300 feet wide, with 16 feet of water at low water. It commences about one mile west of the upper entrance to the Galops canal, and runs in a direct line to deep water off Chimney Point. The work comprises the building of a dam from Adam's island to Galops (Ogden) island. These works have been continued to be prosecuted during the year, the substructure of the dams having been completed and the work of dredging in the north channel having been continued and is still in progress, with every prospect of this contract being completed during the current year.

Total expenditure up to June 30, 1903.	\$1,294,940 43
Expended from June 30, 1903, to June 30, 1904.	68,595 42
<hr/>	
Total expenditure up to June 30, 1904.	\$1,363,535 85
Expended from June 30, 1904, to October 1, 1904.	12,980 00
<hr/>	
Total expenditure up to October 1, 1904.	<u>\$1,376,515 85</u>

ST. LAWRENCE RIVER AND CANALS:

Although payments have been made for works under this heading, they were made on final estimates of work done the year previous. Mr. Rheame, the engineer looking after the works for the time being, recommends the further straightening of the channel at the following named points:—

First.—Immediately east of the lower entrance of the Farran's Point canal; Baker's Point should be reduced.

Second.—Between Aultsville and Morrisburg, Jack Ass shoal should be removed.

Third.—Rose Point, immediately below the lower entrance of the Rapide Plat canal should be reduced, materially improving the channel.

Fourth.—Robertson's Point, at the head of the Rapide Plat canal on the north side of the river, could with advantage to navigation be reduced.

Fifth.—On the north side of the river at Iroquois, Pine Tree Point should be reduced, materially improving the channel thereby.

He suggests that, with a view of these improvements, a careful examination and survey should be made. As the hydrographic survey service has been transferred from this department to the Marine and Fisheries Department, this work, it appears to me, will devolve upon them.

Total expenditure up to June 30, 1903.	\$448,452 03
Expended from June 30, 1903, to June 30, 1904.	9,634 66
<hr/>	
Total expenditure up to June 30, 1904.	\$458,086 69
Expended from June 30, 1904, to October 1, 1904.	435 65
<hr/>	
Total expenditure up to October 1, 1904.	<u>\$458,522 34</u>

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SUMMARY.

To summarize, I may state the cost of construction and enlargement of the canals and improvements to the river and lakes up to June 30, 1904, to be as follows, viz. :—

Route from Montreal to Port Arthur.

	Original Construction of Canals.		Enlargement of Canals.		Improvement to St. Lawrence River and Lakes.		Total.
	\$	cts.	\$	cts.	\$	cts.	
Lachine Canal.....	2,589,532	85	8,773,118	33			11,362,651 18
Lake St. Louis.....					298,176	11	298,176 11
Soulanges Canal.....	6,851,971	77					6,851,971 77
Lake St. Francis.....					75,906	71	75,906 71
Cornwall Canal.....	1,945,624	73	5,131,469	40			7,077,094 13
Williamsburg Canals.....	1,320,655	54	2,486	63			
Farran's Point Canal.....			868,981	58			9,869,087 32
Rapide Plat Canal.....			2,149,377	11			
Galops Canal.....			5,527,586	46			
Galops Rapids.....					909,891	85	909,891 85
River Reaches.....					685,495	42	685,495 42
North Channel.....					1,363,535	85	1,363,535 85
Murray Canal.....	1,248,720	26					1,248,720 26
Welland Canal.....	7,693,824	03	17,496,084	28			25,189,908 31
Sault Ste. Marie Canal.....	4,313,494	30					4,313,494 30
Total.....	25,963,823	48	39,949,103	79	3,333,005	94	69,245,933 21

If to the above total there is added the cost of the Beauharnois canal—\$1,636,690.26, now not required for navigation—the total expenditure is \$70,882,623.47.

Route from Lachine to Ottawa.

	Original Construction.		Enlargement.		Total.
	\$	cts.	\$	cts.	
St. Anne's Lock.....	134,456	51	1,035,759	12	1,170,215 63
Carillon and Grenville Canals.....	63,053	64	4,119,039	32	4,182,092 96
Total.....	197,510	15	5,154,798	44	5,352,308 59

Construction by the Imperial Government is not included. Records relating to same were kept in Ordnance Office, Montreal, and were destroyed by fire in 1852.

Route from Ottawa to Kingston.

	Original Construction.		Enlargement.		Total.
	\$	cts.	\$	cts.	
Rideau Canal.....	4,084,323	37			4,084,323 37
Tay Canal.....	489,599	23			489,599 23
Total.....	4,573,922	60			4,573,922 60

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Route from St. John's, P.Q., to Sorel.

	Original Construction.	Enlargement.	Total.
	\$ cts.	\$ cts.	\$ cts.
Chambly Canal	637,056 76	.....	637,056 76
St. Ours Lock.....	121,537 65	.....	121,537 65
Total	758,594 41	.....	758,594 41

Route from Lake Ontario to Georgian Bay.

	Original Construction.	Enlargement.	Total.
	\$ cts.	\$ cts.	\$ cts.
Trent Canal.....	4,314,459 19	.....	4,314,459 19
Total.....	4,314,459 19	.....	4,314,459 19

Route from Atlantic Ocean to Bras D'Or Lakes.

	Original Construction.	Enlargement.	Total.
	\$ cts.	\$ cts.	\$ cts.
St. Peter's Canal—Cape Breton.....	248,762 84	399,784 30	648,547 14
Total.....	248,762 84	399,784 30	648,547 14

The Culbute canal has been abandoned and the Beauharnois canal is no longer required for navigation purposes, but has to be maintained as a power canal.

The construction of these two canals cost:—

Culbute canal.	\$ 382,776 46
Beauharnois canal.	1,636,690 26

Total.	\$2,019,466 72
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MAINTENANCE AND OPERATION.

LACHINE CANAL.

Operation.

No interruption occurred to the traffic through this canal during the season of 1903.

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Maintenance.

The repairs on old locks 1 and 2 are still in progress and are drawing near completion.

The cost of repairs made during the year ended June 30, 1904, is as follows:—

Ordinary repairs under head of staff and repairs	\$ 50,660 92
Special repairs under head of income—	
Tail race, Côte St. Paul, and cement.....	\$ 4,452 18
Renewing wall, Basin No. 2.....	9,021 48
Cement for masonry wall, Basin No. 2.....	1,752 66
Repairs to old Locks 1 and 2.....	89,064 66
Raising Shed No. 1, St. Gabriel Basin.....	8,505 55
Repairs to buildings	2,559 19
Water service for protection against fire	1,799 85
Completing work of paving Mill Street.....	25,663 48
Lock gates	19,886 09
	162,705 14
Total.....	\$ 213,366 06

SOULANGES CANAL.

Operation.

The operation of this canal was conducted without interruption except for twenty-four hours on August 15, 1903, when one of the upper gates in the guard lock was thrown off its pivot by rush of water caused by a gale of wind. The cost of repairs made during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs..	\$39,382 01
Special repairs under head of income:	
Land and damages.....	\$ 650 00
Repairing breach in bank between locks 1 and 2.....	14,958 69
	15,608 69
Total.....	\$54,990 70

CORNWALL CANAL.

Operation.

No interruption occurred to the traffic through this canal during the season of 1903.

The canal is well lighted by electricity, and the lock gates, valves, weirs and bridges have continued to be operated most successfully by electrical power.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs..	\$20,932 55
Special repairs under head of income:	
Strengthening and protecting north bank.....	1,730 16
Total.....	\$22,662 71

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WILLIAMSBURG CANALS.

Operation.

The only interruption to traffic through these canals was in the Farran's Point canal on August 22, 1903, when the steam barge 'Erin' sunk in the lock and blocked traffic three days, and in the Galops canal on November 21, 1903, owing to the water having been lowered to stop a leak which had developed in the bank, which interrupted traffic for two days.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs..	\$19,430 05
Special repairs under the head of income:	
Building a working scow..	1,978 85
	<hr/>
Total..	\$21,408 90

WELLAND CANAL.

Operation.

No interruption to traffic occurred on this canal during the season of 1903. The removal of the pivot piers from the centre of the canal, which is being done by degrees, is a great benefit to navigation, and is much appreciated by the transportation companies which use the canal.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs. . . .	\$ 85,717 88
Special repairs under the head of income:	
Stone protection to banks of old canal . . .	\$ 4,670 68
Changing valves and hanging gear of new canal lock gates.	14,998 62
Remodelling gate yard and repair shops at Port Dalhousie.	5,000 00
Rebuilding dam and bridge at Dunnville to complete.	370 81
Improving drainage along feeder.	1,155 00
Repairing foundations of Port Maitland lock.	4,945 47
	<hr/>
	31,140 58
	<hr/>
Total.	<u><u>\$116,858 46</u></u>

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SAULT STE MARIE CANAL.

Operation.

No interruption to navigation has occurred in this canal during the season.

During the season of 1903, 5,502,185 tons of freight and 32,019 passengers passed through the canal and 3,538 vessels.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs...	\$ 9,491 44
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CHAMBLY CANAL.

Operation.

The only interruption to navigation on this canal was for 36 hours from the 29th to 31st of May, 1903, caused by requisite repairs to the canal, which were taking place.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs...	\$ 25,656 00
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Special repairs under the head of income:

Repairs electric station and Bye-wash, Ste.

Thérèse.....	\$5,999 54
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To complete waste weir at electric power

house.....	468 00
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Extend and repair wall at head Ste. Thérèse

Island....	748 29
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Macadamizing 2¼ miles of road.....	3,000 00
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Macadamizing tow path.....	1,507 30
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Rebuilding culvert at Little River, Iroquois.	7,867 85
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Water supply at shops.....	399 65
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Damages by flooding.....	1,711 00
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Renewing bridges 7 and 8.....	4,999 96
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26,701 59

\$52,357 59

ST. OURS LOCK AND DAM.

Operation.

There was no interruption to navigation on this canal during the season of 1903.

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Maintenance.

The cost of repairs during the year ended June 30, 1904, was as follows:—

Ordinary repairs under the head of staff and repairs..\$	1,690 61
Special repairs under the head of income:	
Stop logs.....	\$ 868 89
Repairing landing wharfs....	7,115 52
	7,984 41
Total.....	\$ 9,675 02

STE. ANNE'S LOCK.

Operation.

There was no interruption to navigation on this lock during the season of 1903.

Maintenance.

The cost of repairs during the year ended June 30, 1903, is as follows:—

Ordinary repairs under the head of Staff and Repairs ..\$	2,244 13
..	..

CARILLON AND GRENVILLE CANALS.

Operation.

There was no interruption to navigation on these canals during the season of 1903.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs..	\$17,262 29
Special repairs under head of income:	
Repairing guide piers.....	9,150 07
Total..	\$26,412 36

BEAUHARNOIS CANAL.

Operation.

This canal is not maintained for general navigation but as a power canal; however some two or three market boats were allowed to navigate it for local business.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of Staff and Repairs ..	\$11,936 37
	..

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MURRAY CANAL.

Operation.

There was no interruption to navigation on this canal during the season of 1908.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs. . . .	\$6,075 94
Special repairs under the head of income:	
Building wire fence and making land plan.	2,521 13
	<hr/>
Total.	\$8,597 07
	<hr/> <hr/>

RIDEAU CANAL.

Operation.

There was no interruption to navigation on this canal during the season of 1903.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows:—

Ordinary repairs under the head of staff and repairs. . . .	\$38,496 78
Special repairs under the head of income:	
Rebuilding swing bridge at Hog's Back.	\$2,499 05
Rebuilding lockmaster's house at Kingston	
Mills.	1,595 27
Building swing bridge at Concession street	
Ottawa.	9,430 72
	<hr/>
	13,525 04
	<hr/>
Total.	\$52,021 82
	<hr/> <hr/>

TRENT CANAL.

Operation.

There was no interruption to navigation on this canal during the season of 1903.

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Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows :—

Ordinary repairs under the head of staff and repairs.	\$21,179 12
Special repairs under the head of income :—	
Building new entrance pier at Peterborough \$1,996 89	
Building new entrance pier at Burleigh.	1,484 79
Building new entrance pier at Lovesick.	1,489 80
Dredging shoals between Peterborough and Heeley's Falls.	2,628 60
Dredging shoals at Ketchawannoe and Buckhorn lakes.	3,366 99
Rebuilding dam at Peterborough.	8,902 87
Contribution towards building bridge at Gannon's Narrows.	1,000 00
Contribution towards building road—Lind- say and Fenelon Falls.	388 61
	21,228 55
Total.	<u>\$42,407 67</u>

ST. PETER'S CANAL.

Operation.

There was no interruption to navigation on this canal for the season of 1903.

Maintenance.

The cost of repairs during the year ended June 30, 1904, is as follows :—

Ordinary repairs under the head of staff and repairs.	\$122 45
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CULBUTE CANAL.

This canal has been abandoned, but some claims in connection with flooding of lands are yet undisposed of.

Damage caused by flooding land.	\$2,204 50
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Summary.

Cost of maintenance and operation of the canal sys- tem for the year ended June 30, 1904.	\$1,099,771 68
Net revenue of canals after deducting refunds.	72,253 11
Excess of cost of maintenance and operation over revenue.	<u>\$1,027,518 57</u>

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TABLE showing the dates of opening and closing of the canals for the season of 1903.

Name of Canal.	Navigation opened 1903	Navigation closed 1903.
Lachine	May 1	December 3
Soulanges.....	" 1	" 2
Cornwall.....	" 1	" 4
Farran's Point.....	" 1	" 4
Rapide Plat.....	" 1	" 4
Galops.....	" 1	" 4
Murray.....	April 1	November 30
Welland.....	" 13	December 12
Sault Ste. Marie.....	" 2	" 12
Grenville.....	" 27	November 30
Carillon.....	" 27	" 30
Ste. Anne's.....	" 28	" 30
Chambly.....	May 20	" 30
St. Ours.....	April 8	" 26
Rideau..... (At Ottawa.....	" 28	" 24
..... (At Kingston.....	May 1	" 16
Trent.....	April 2	" 18
Beauharnois.....	May 1	" 30
St. Peter's.....	April 15	December 31

CANAL STATISTICS.

These statistics are for the season of 1903: they have, as usual, been prepared by Mr. R. Devlin, the officer in charge of the canal statistics office.

TABLE showing the tons of freight passing through each canal, the number of trips of vessels passing through each canal for the season ended December, 1903.

Name of Canal.	Tons of Freight passed through.	No Tolls charged.	No. of Trip of Vessels passing through.
Welland.....	1,002,919	.....	1,787
St. Lawrence.....	1,681,206	.....	9,698
Chambly.....	546,571	.....	3,445
Ottawa.....	486,473	.....	2,094
Rideau.....	61,160	.....	3,966
St. Peter's.....	90,864	.....	1,760
Trent.....	42,407	.....	2,599
Murray.....	30,389	.....	762
Sault Ste. Marie.....	5,511,868	.....	4,351

GENERAL REMARKS.

For details as regards the subjects treated in this report, I refer you to the reports of the officers in charge of the government railways and canals, which form appendices hereto.

4-5 EDWARD VII. A. 1905

RAILWAY SUBSIDIES.

The subsidies voted for railways, as I have stated in my previous annual reports, are in such a form that it is not possible to show the amount of cash subsidy granted, as the amount of subsidy will, in many cases, be based upon the cost of each road. For this reason, I am again this year unable to give the amount of each subsidy available; but, as heretofore, I shall show the amount paid, also the number of miles of railway for which subsidy is granted per mile, was available on July 1, 1903, and the number of miles of railway built up to July 1, 1904, for which cash subsidy per mile was granted. There will also be found the amount of subsidy per annum paid up to July 1, 1904, with the number of miles built.

Amount of cash subsidy per mile paid up to July 1,	
1904.	\$26,615,375 96
Number of miles of railway on which cash subsidy per	
mile was paid up to July 1, 1904.	4,708 41
Amount of cash subsidy per mile paid up October 1,	
1904.	\$26,739,215 96
Cash subsidy per annum paid up to July 1, 1904.	2,799,000 00
Number of miles built on cash subsidy per annum to	
July 1, 1904.	252

The foregoing statements do not include the grants in cash and land to the Canadian Pacific Railway, the Canada Central Railway and the Esquimalt and Nanaimo Railway.

These roads, as previously reported, received in cash as follows:—

Esquimalt and Nanaimo Railway (mileage, 71)	750,000
Canadian Pacific Railway (mileage, 1905)	\$25,000,000
Canada Central Railway (mileage, 120)	1,525,250
	<hr/>
Total.	\$27,275,250

RAILWAY COMMITTEE OF THE PRIVY COUNCIL.

The report of the secretary of the Railway Committee of the Privy Council enumerates the cases which were before the committee from October 1, 1903, to the date when the duties of the committee were transferred to the Railway Commissioners under the Railway Act of 1903, being February 1, 1904, a period of four months, within which period there were five meetings of the Railway Committee as follows:—

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October 31, 1903.

November 10, 1903.

December 1, 1903.

January 9, 1904.

January 25, 1904.

The character of the business before them was:

- 1st. For permission to make highway crossings over railways.
- 2nd. For permission of one railway to cross another railway.
- 3rd. For permission of one railway to form a junction with another railway.
- 4th. For permission for railways to cross and run along streets and highways.
- 5th. For approval of plan and proposed site of bridges over navigable waters.
- 6th. For permission to use crossings before installation of interlocking appliances.
- 7th. For permission to construct branch lines.
- 8th. For protection of streets and highways crossed by railways.
- 9th. For running powers of one railway over another railway.
- 10th. For permission to change location of sections of railways.
- 11th. For permission to close streets and highways and to divert them.
- 12th. To determine the terms on which one railway shall use the passenger stations and tracks of another railway.
- 13th. To direct a railway to widen a street bridge over railways.
- 14th. To direct the removal of obstructions to free flow of water in a river.
- 15th. For orders for a railway to provide necessary sidings.
- 16th. To direct that Bay of Quinté Railway be not allowed to run through a mining property.
- 17th. To direct that a railway be compelled to allow water pipes to be laid under their tracks.

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CANAL STATISTICS.

These statistics are for the season of 1903. They have been prepared by Mr. R. Devlin, the officer in charge of the canal statistics.

COMPARATIVE Statement of Tolls collected in season of 1902 and what would have been collected in season of 1903 had not the canals been made free.

Name of Canal.	Season of 1902.	Season of 1903.
	§ cts.	§ cts.
Welland Canal.....	98,601 50	136,842 89
St. Lawrence Canals.....	65,081 11	123,189 47
Chambly Canal.....	22,713 31	24,759 24
Ottawa Canal.....	24,852 37	29,439 21
Rideau Canal.....	3,831 15	4,999 77
St. Peter's Canal.....	3,034 14	3,293 34
Trent Canal.....	1,328 98	1,508 07
Murray Canal.....	1,060 80	1,134 98
Sault Ste. Marie Canal.....	No tolls.	No tolls.
Total.....	220,503 36	325,166 97

COMPARATIVE Statement of Tons of Freight which passed through the canals in seasons of 1902 and also of 1903.

Name of Canal.	Season of 1902.	Season of 1903.	Number of trips of vessels passing through.	
			Season of 1902.	Season of 1903.
Welland Canal.....	665,387	1,002,919	1,568	1,787
St. Lawrence Canals.....	1,093,133	1,681,206	8,400	9,698
Chambly Canal.....	379,442	346,571	3,791	3,445
Ottawa Canal.....	444,682	436,473	1,906	2,094
Rideau Canal.....	50,879	61,120	2,871	3,966
St. Peter's Canal.....	73,538	90,864	1,671	1,760
Trent Canal.....	41,690	42,407	2,550	2,599
Murray Canal.....	35,178	30,389	830	762
Sault Ste. Marie Canal.....	4,729,268	5,511,868	5,044	4,351
Total tons.....	7,513,197	9,203,817	28,631	30,462

GENERAL REMARKS.

For details as regards the subjects treated in this report, I refer you to the reports of the officers in charge of the government railways and canals, which form appendices hereto.

SESSIONAL PAPER No. 20

SUMMARY of Tables of Steam Railways for the years ended June 30, 1903, and June 30, 1904.

	June 30, 1903. Steam Railways only.	June 30, 1904. Steam Railways only.
Miles of railway completed (track laid).....	19,077	19,611
" sidings.....	2,953	3,327
" iron rails in main line.....	101	66
" steel rails.....	18,976	19,545
" " (double track).....	695	763
Capital paid (including the 4 following items).....	1,146,550,769	1,186,546,918
Government (Dominion and Provincial) bonuses paid.....	189,874,202	195,805,982
" " loans paid.....	20,613,214	20,613,214
" (Provincial only) subscriptions to shares paid.....	300,000	300,000
Municipal aid paid.....	16,551,044	17,157,810
Miles in operation.....	18,988	19,431
Gross earnings.....	96,064,527	100,219,436
Working expenses.....	67,481,524	74,563,162
Net earnings.....	28,583,003	25,656,274
Passengers carried.....	22,148,742	23,640,765
Freight carried (tons).....	47,373,417	48,097,519
Train mileage.....	60,382,920	61,312,002
Passengers killed.....	53	25
Number of elevators.....	261	286
" highway crossings at rail-level, with watchman.....	221	239
" " " without watchman.....	12,829	13,493
" overhead bridges, highway crossings over railway.....	468	463
" highway crossings under railway.....		333
" level crossings of other railways.....	256	272
" junction with other railways.....	374	381
" " branch lines.....	223	224
" engines owned.....	2,488	2,640
" " hired.....	99	128
" sleeping cars owned.....		156
" " hired.....		15
" parlor cars owned.....	*290	44
" " hired.....	14	6
" dining cars owned.....		37
" " hired.....		5
" official cars owned.....		60
" first class cars owned.....	1,106	1,153
" " hired.....	42	78
" second class and immigrant cars owned.....	579	583
" " " hired.....	11	12
" baggage, mail and express cars owned.....	796	839
" " " hired.....	22	21
" refrigerator cars owned.....	979	1,297
" " " hired.....	242	268
" cattle and box freight cars owned.....	49,652	51,951
" " " hired.....	3,455	2,926
" platform cars owned.....	17,784	18,254
" " " hired.....	501	390
" coal cars owned.....	7,356	8,172
" " " hired.....	283	304
" conductors' vans owned.....	1,107	1,229
" " " hired.....	19†	19
" tool cars owned.....	*1,070	823
" " " hired.....	4	5
" snow ploughs owned.....	308	300
" " " hired.....	5	4
" flangers owned.....	345	354
" " " hired.....	2	2
" other rolling stock.....		‡1,421
Included in the above there are the following:—		
Number of cars with air brakes owned.....	63,788	71,795
" " " " hired.....	4,348	3,478
" " with automatic couplers owned.....	71,964	76,816
" " " " hired.....	4,572	3,769

* Including water tank cars, steam shovels, pile drivers, store cars, gravel cars, boarding cars, &c.

† Sleeping, dining, parlor and official cars in this total.

‡ Includes tank cars, steam shovels, derricks, pile drivers, &c.

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SUMMARY of Tables of Electric Railways for the years ended June 30, 1903, and June 30, 1904.

	Comparative Statement.	
	June 30, 1903.	June 30, 1904.
Miles of railway completed (track laid).....	759	767
" sidings.....	32	33
" iron rails in main line.....	7	22
" " steel " ".....	752	745
" " " double track.....	185	188
Capital paid (including the 3 following items).....	\$47,274,853	50,399,188
Government (Dominion and Provincial) bonuses paid.....	\$156,800	60,800
Municipal aid paid.....	\$173,000	173,000
Miles in operation.....	759	767
Gross earnings.....	\$7,233,677	8,453,609
Working expenses.....	\$4,472,858	5,325,517
Net earnings.....	\$2,760,819	3,127,092
Passengers carried.....	155,662,812	181,689,998
Freight carried (tons).....	371,286	400,161
Car mileage.....	38,028,529	42,066,124
Passengers killed.....	10	10
Number of highway crossings at rail-level with watchman.....	7	10
" " " without watchman.....	307	286
" overhead bridges highway crossings over railway.....	16	17
" highway crossings under railway.....	11	9
" level crossings of other railways.....	89	102
" junctions with.....	42	42
" branch lines.....	13	7
" power houses (steam power) owned.....	28	30
" " " hired.....	2	
" " " (water power) owned.....	11	9
" " " hired.....	4	3
" passenger cars (motor) owned.....	*2,027	2,137
" " " hired.....	6	
" " " (trailers) owned.....	290	223
" official cars owned.....		1
" locomotives owned.....	1	2
" baggage, mail and express cars owned.....	11	13
" cattle and box freight cars owned.....	†15	†15
" platform cars owned.....	70	**77
" tool cars owned.....	16	13
" snow ploughs owned.....	26	79
" snow sweepers owned.....	71	33

* Three are official cars. † Includes one conductors' van. ‡ Includes two coal cars. ** Includes snow sweepers.

The following shows the several routes of railway giving through communication between the Atlantic and Pacific coasts:—

The routes available between Halifax and Montreal are four in number, in all of which the Intercolonial is used, either in whole or in part, as follows:—

Halifax to Montreal.

	Miles.
1. Intercolonial Railway, via Lévis, to Montreal....	837
2. Intercolonial Railway to St. John.....	275
Canadian Pacific Railway, from St. John to Montreal....	840
Total.....	755

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	Miles.
3. Intercolonial Railway to St. John....	275
Canadian Pacific Railway, from St. John to Vanceboro'..	90
Maine Central Railway, from Vanceboro' to Danville Junction....	224
Grand Trunk Railway, from Danville Junction to Montreal	270
	<hr/>
Total....	859
	<hr/> <hr/>
4. Intercolonial Railway to St. John....	275
Canadian Pacific Railway from St. John to Edmundston	170
Temiscouata Railway, from Edmundston to Rivière du Loup	81
Intercolonial Railway, from Rivière du Loup to Montreal	278
	<hr/>
Total.....	804
	<hr/> <hr/>

St. John to Montreal.

1. Intercolonial Railway, via Lévis, to Montreal..	740
	<hr/> <hr/>
2. Canadian Pacific Railway to Montreal.....	480
	<hr/> <hr/>
3. Canadian Pacific Railway to Edmundston.....	170
Temiscouata Railway, from Edmundston to Rivière du Loup....	81
Intercolonial Railway, from Rivière du Loup to Montreal	278
	<hr/>
Total....	529
	<hr/> <hr/>

MONTREAL, OR QUEBEC, TO THE PACIFIC COAST.

Montreal to Vancouver.

	Miles.
1. Canadian Pacific Railway to Vancouver.....	2,906
Canadian Pacific Railway from North Bay to Vancouver	2,546
	<hr/> <hr/>
2. Grand Trunk Railway to North Bay.....	560
	<hr/>
Total....	3,102
	<hr/> <hr/>

Quebec to Vancouver.

1. Canadian Pacific Railway to Vancouver....	3,052
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	Miles.
2. Intercolonial Railway to Montreal.....	162
Canadian Pacific Railway from Montreal to Vancouver..	2,906
Total.....	3,068
3. Grand Trunk Railway to Montreal.....	172
Canadian Pacific Railway from Montreal to Vancouver..	2,906
Total.....	3,078
4. Grand Trunk Railway to North Bay.....	732
Canadian Pacific Railway from North Bay to Vancouver..	2,542
Total.....	3,274

The Canadian Pacific Railway was opened for through traffic on June 28, 1886.

INTERCOLONIAL RAILWAY.

The Intereolonial Railway touches six Atlantic Ocean ports, namely, Point du Chene, Pietou, Halifax, St. John, Sydney and North Sydney, as well as the ports of Quebec and Montreal on the River St. Lawrence.

The total length of the road operated during the year ended June 30, 1904, was 1,322 miles, and for freight branches 12'50 miles, making a total of 1,334½ miles.

The following are the through distances:—

	Miles.
Halifax to Montreal, via Lévis.....	837
St. John to Montreal, via Lévis.....	740
Sydney to Montreal, via Lévis.....	990
North Sydney to Montreal, via Lévis.....	983

Freight is carried direct via St. Henri to Montreal, which would reduce each of the above distances by 3 miles.

WINDSOR BRANCH.

This road extends from Windsor Junction, on the Intercolonial Railway, to Windsor, a distance of 32 miles.

PRINCE EDWARD ISLAND RAILWAY.

LENGTH OF LINE.

	Miles.
Souris to Tignish.....	166
Mount Stewart to Georgetown.....	24
Charlottetown to Royalty Junction.....	5
Emerald Junction to Cape Traverse.....	13
Alberton to Casumpee wharf.....	1
	209

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Communication between the Prince Edward Island Railway and the Intercolonial Railway is afforded in summer by steamer between Summerside and Point du Chene, between Charlottetown and Pictou and between Georgetown and Pictou, and in winter by specially built steamers between Georgetown and Pictou and between Charlottetown and Pictou. There is also further provision made for communication by ice boats between Cape Traverse on Prince Edward Island and Cape Tormentine on the mainland, a distance of about 9 miles, at which latter place connection is made with the New Brunswick and Prince Edward Railway about 40 miles in length, connecting with the Intercolonial Railway at Sackville. This winter service across the Straits of Northumberland is efficiently worked by the Marine and Fisheries Department.

CANALS.

The following statements give in concise form the essential features of the government canal works and the intermediate water navigation:—

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....	33
3. Cornwall Canal.....	11
River St. Lawrence.....	5
4. Farran's Point Canal.....	1
River St. Lawrence.....	10
5. Rapide Plat Canal.....	3½
River St. Lawrence.....	4
6. Galops Canal.....	7¼
River St. Lawrence and Lake Ontario....	236
7. Welland Canal.....	26¾
Lake Erie, Detroit River, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie Canal.....	1¼
Lake Superior to Port Arthur.....	266
Total.....	1,923¼
To Duluth.....	1,357
Chicago.....	1,286

Second.—Ottawa to Lake Champlain.

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

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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 the 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 2,200 statute miles. The distance to Duluth is 2,343 miles. The distance to Chicago 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 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,

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and Sault Ste. Marie. Their aggregate length is 73 miles; total lockage (or height directly overcome by locks), 551 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.

LACHINE CANAL.

Length of canal.....	8½ statute miles.
Number of locks.....	5
Dimension of locks.....	270 feet by 45 feet.
Total rise or lockage.....	45 feet.
Depth of water on sills, at two locks.....	18 "
" " 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 986 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Length of canal.....	14 statute miles.
Number of locks {lift.....	4
{guard.....	1
Dimensions of locks.....	280 feet by 45 feet.
Total rise or 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

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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.

Length of canal.....	11 statute miles.
Number of locks.....	6
Total rise of lockage.....	270 feet by 45 feet.
Total rise or lockage.....	48 feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	164 "

The old lift locks, 200 feet by 45 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, $32\frac{3}{4}$ 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.

Length of canal.....	1 mile.
Number of locks.....	1
New lock.....	800 feet by 45 feet.
Old lock.....	200 "
Total rise or lockages.....	3 $\frac{1}{2}$ 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.

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RAPIDE PLAT CANAL.

Length of canal.....	3 $\frac{3}{4}$ miles.
Number of locks.....	2
Dimensions of locks.....	270 feet by 45 feet.
Total rise or lockage.....	11 $\frac{1}{2}$ 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 10 $\frac{1}{2}$ miles. The canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

GALOPS CANAL.

Length of canal.....	7 $\frac{1}{2}$ miles.
Number of locks.....	3
Dimension of locks. { one of which is }.....	2-270 by 45.
{ a guard lock. }.....	1-800 by 45.
Total rise or lockage.....	15 $\frac{1}{2}$ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	144 "

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

MURRAY CANAL.

Length between eastern and western pier heads....	5 $\frac{1}{2}$ miles.
Breadth at bottom.....	80 feet.
Breadth at water surface.....	120 "
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 Quinté and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

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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							
Number of locks	} lift... 26	25							
	} guard... 1	1							
Dimensions.....	<table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td rowspan="4" style="font-size: 4em; vertical-align: middle;">}</td> <td style="padding: 2px;">1 lock 200 x 45</td> <td rowspan="4" style="font-size: 4em; vertical-align: middle;">}</td> <td rowspan="4" style="padding: 0 10px;">270 feet x 45 feet.</td> </tr> <tr> <td style="padding: 2px;">1 lock 200 x 45</td> </tr> <tr> <td style="padding: 2px;">1 (tidal) 230 x 45</td> </tr> <tr> <td style="padding: 2px;">24 locks 150 x 45</td> </tr> </table>		}	1 lock 200 x 45	}	270 feet x 45 feet.	1 lock 200 x 45	1 (tidal) 230 x 45	24 locks 150 x 45
}	1 lock 200 x 45	}		270 feet x 45 feet.					
	1 lock 200 x 45								
	1 (tidal) 230 x 45								
	24 locks 150 x 45								
Total rise or lockage...	326¾ feet	326¾ feet.							
Depth of water on sills...	10¼ "	14 " °							

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 feet.
Chippewa Cut to River Niagara...	1,020 feet.
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 border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td rowspan="2" style="font-size: 4em; vertical-align: middle;">}</td> <td style="padding: 2px;">1 of 150 by 26½ feet.</td> <td rowspan="2" style="font-size: 4em; vertical-align: middle;">}</td> </tr> <tr> <td style="padding: 2px;">1 of 200 by 45 "</td> </tr> </table>	}	1 of 150 by 26½ feet.	}	1 of 200 by 45 "
}	1 of 150 by 26½ feet.		}		
	1 of 200 by 45 "				
Total rise or lockage...	7 to 8 feet.				
Depth of water on sills...	9 feet.				

PORT MAITLAND BRANCH.

Length of canal.....	1¾ miles.
Number of locks...	1
Dimensions of locks...	185 feet by 45 feet
Total rise or lockage...	7½ feet.
Depth of water on sills...	11 feet.

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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 Allanburgh, $11\frac{3}{4}$ miles, there are two distinct lines of canal in operation, the old line and the enlarged or new line.

From Allanburgh 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 266 miles, and to Duluth 400 miles.

SAULT STE. MARIE CANAL.

Length of canal, between the extreme ends of the entrance piers.	5,967 feet.
Number of locks.	1
Dimensions of locks.	900 feet by 60 feet.
Depth of water on sills (at lowest known water level).	20 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.

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.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine canal, the navigation section of the lower River Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the River Rideau and the Rideau canal to Kingston, on Lake Ontario—a total distance of $245\frac{5}{8}$ miles.

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

Ottawa River Canals.

The Ste. Anne's Lock.	Grenville Canal.
Carillon Canal.	Rideau Canal.

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

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

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

STE. ANNE'S LOCK.

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

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

THE CARILLON CANAL.

Length of canal.....	$\frac{3}{4}$ mile.
Number of locks.....	2
Dimensions of locks.....	200 x 45 feet.
Total rise or lockage.....	13 feet.
Depth of water on sills.....	9 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	110 "

This canal overcomes the Carillon rapids.

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

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

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GRENVILLE CANAL

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

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.

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.....	446 $\frac{1}{4}$ feet { 282 $\frac{1}{4}$ rise and 164 fall } at high water.
Dimensions of locks.....	134 x 33 feet.
Depth of water on sills.....	5 feet.
Navigation depth through the several reaches....	4 $\frac{1}{2}$ feet.
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

PERTH BRANCH.

Length of canal.....	6 miles.
Number of locks.....	2.
Dimensions of locks.....	134 feet x 32 feet
Total rise or lockage.....	26 "
Depth of water on sills.....	5 " 6 inches.
Length of dam.....	200 "
Breadth of canal at bottom.....	40 "
Breadth of canal at surface at water.....	{ 40 " in rock. 60 " in clay

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:—

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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 south-west 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 down 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

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ST. OURS LOCK AND DAM.

Length.....	1/2 mile.
Number of locks....	1
Dimensions of lock.....	200 feet by 45 feet.
Total rise or 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.

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.....	7 "
Breadth of canal at bottom....	36 "
Breadth of canal at surface of water...	60 "

} From 22 1/2 to 24 feet wide.

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,

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the summit water, about 165 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe; thence across Lake Simcoe to the Severn river; thence by the River Severn to Georgian Bay, Lake Huron; the total distance being about 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial government in 1837, was deferred. By certain works, however, below specified, sections of these waters have been made practicable for navigation, and the whole scheme 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 190 miles from Trenton.

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

	Navigable Miles.	Unnavigable Miles.
From Trenton, Bay of Quinté to Nine Mile rapids.	—	0
Nine Mile rapids to Percy landing.	19½	—
Percy landing to Heeley's Falls dam.	—	14½
Heeley's Falls dam to Peterborough.	51¾	—
Peterborough to Lakefield.	—	9½
Lakefield to a point across Balsam lake.	61	—
Balsam Lake to Lake Simcoe.	—	18¾
Across Lake Simcoe to Severn River.	18	—
Lake Simcoe to Georgian Bay via Severn River.	—	14
	150¼	65¾
Total distance, Bay of Quinté to Georgian Bay.		212
From Sturgeon Point on Sturgeon lake, 48¾ miles from Lakefield, the branch through the town of Lindsay to Port Perry at the head of Lake Scugog.		27

The works by which the Trent navigation has been improved comprise canals, with locks and bridges, at Young 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. The lock here, it should be observed, is controlled by the Provincial government.

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At Burleigh Rapids, 10 miles from Young's Point, a canal, about $2\frac{1}{4}$ 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, $15\frac{3}{4}$ miles from Buckhorn Rapids, a dam, 553 feet long, controls the water level up 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 Fenlon. 134' x 33' x 5' 0" to 7' 6" depth of water on mitre sill.
- 1 " Lindsay. 134' x 33' x 5' 0" to 7' 0" " "
- 1 " Bobcaygeon. 134' x 33' x 5' 8" to 7' 6" " "
- 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 (a provincial government work) 134' x 33' x 5' 0" to 14' 0" depth of water on mitre sill.
- 1 " Peterborough. 134' x 33' x 5' 0" to 10' 0" depth water on mitre sill.
- 1 " Hastings. 134' x 33' x 7' 0" to 10' 6" " "
- 1 " Chisholm's. 134' x 33' x 5' 0" to 8' 6" " "
- 1 Hydraulic lift lock at Ashburnham.

—
14

ST. PETER'S CANAL, CAPE BRETON.

- Length of canal. About 2,400 feet.
 Breadth at water line. 55 feet.
 Lock. One tidal lock, 4 pairs of gates.
 Dimensions. 200 feet by 48 feet.
 Depth of water on sills. 18 " at lowest water.
 Depth through canal. 19 "
 Extreme rise and fall of tide in St.
 Peter's bay. 4 "

This canal connects St. Peter's bay on the southern 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.

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BEAUHARNOIS CANAL.

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, it is to be presumed that the Beauharnois canal will be abandoned for navigation purposes.

I have the honour to be, sir,

Your obedient servant,

COLLINGWOOD SCHREIBER,

Deputy Minister and Chief Engineer of Railways and Canals.

The Honourable H. R. EMMERSON,
Minister of Railways and Canals.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY OF CANADA.

OFFICE OF THE GENERAL MANAGER,

MONCTON, N.B., September 14, 1904.

SIR,—I have the honour to submit the following report on the working of the Intercolonial Railway during the fiscal year ended June 30, 1904.

I inclose the report of the Chief Engineer on the works charged to capital account, the report of the General Superintendent, and of the Engineer of Maintenance on the repair and renewal of the permanent way, buildings and works, and the report of the Superintendent of Motive Power and of the Mechanical Accountant with the statement relating to the mechanical department; also the following statements of the accounts of the railway prepared by the Chief Accountant and Treasurer:—

1. Capital account.
2. Revenue.
3. Locomotive power.
4. Car expenses.
5. Maintenance of way and works.
6. Station expenses.
7. General charges.
8. Special votes.
9. General stores.
10. General balance.
11. Comparative statement of averages.

The length of railway in operation during the year was 1,320'92 miles, an increase of 6'25 miles over last year, on account of the addition of the Rivière Ouelle branch, 6'25 miles.

Towards improving ferry service at Strait of Canso.

This expenditure was for providing electric light plants on each side of the strait, and installing same, also furnishing a portion of the materials for cribwork protection at Point Tupper.

New machinery for locomotive and car shops.

This is for additional machinery for the construction and repair of locomotives and cars and for the installation of it.

Rolling stock.

Ten consolidation locomotives for freight service and two shunting locomotives were purchased, also four first-class sleeping cars, eight first-class passenger coaches, six second-class sleeping cars, two hundred and seven box freight cars, each of 80,000 pounds capacity, and nine auxiliary cars. One air-brake instruction car was built in the railway shops in Moncton.

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To equip passenger cars with vestibules.

Six passenger cars were equipped with vestibules of the wide pattern.

To equip ten passenger cars with Pintsch gas.

Six cars were equipped during the year.

To change air brakes of passenger cars to quick action brakes and apply air signals.

The change of brakes was made on thirty-one cars, and air signals were applied to thirty-eight cars.

To exchange drawbars of freight cars.

Six hundred and fifty-five freight cars and two flangers were changed from the link and pin drawbar to the M.C.B. coupler.

Air brakes to freight cars.

One hundred and twelve freight cars, four freight vans, and one wing plough were equipped during the year with the Westinghouse automatic quick action air brake.

The explanations in regard to the other expenditures on capital account will be found in the report of the Chief Engineer.

REVENUE ACCOUNT.

The gross earnings and the working expenses for the year compare as follows:—

Gross earnings.....	\$6,339,231 43
Working expenses.....	7,239,982 04

Deficiency.....	\$ 900,750 61
-----------------	---------------

The gross earnings compare as follows with those of the previous year:—

In 1903-04.....	\$6,339,231 43
In 1902-03.....	6,324,323 72

Increase.....	\$ 14,907 71
---------------	--------------

The earnings from passenger traffic compare as follows:—

In 1903-04.....	\$2,021,568 04
In 1902-03.....	1,927,916 97

Increase.....	\$ 93,651 43
---------------	--------------

The earnings from freight traffic compare as follows:—

In 1903-04.....	\$4,041,122 48
In 1902-03.....	4,123,255 00

Decrease....	\$ 87,132 52
--------------	--------------

The earnings from mails and express freight compare as follows:—

In 1903-04.....	\$ 276,540 55
In 1902-03.....	268,151 75

Increase.....	\$ 8,388 80
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The earnings by mile of railway compare as follows:—

In 1903-04.....	\$	4,799 10
In 1902-03.....		4,810 56

The earnings by train mile compare as follows:—

	<i>Cents.</i>
In 1903-04.....	
In 1902-03.....	99'66

The number of passengers carried compare as follows:—

In 1903-04.....	2,663,156
In 1902-03.....	2,404,230

Increase.....	258,926
---------------	---------

Of this increase 192,830 were local passengers and 66,096 were through passengers.

The weight of freight carried compares as follows:—

	<i>Tons.</i>
In 1903-04.....	2,664,149
In 1902-03.....	2,790,737

Decrease.....	126,588
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The decrease in local freight was 116,732 tons and in through freight 9,856 tons.

The following is a comparative statement of a few of the chief articles of freight, showing the quantity carried in this and in the previous year:—

Articles.	1902-3.	1903-4	Increase.	Decrease.
Barrels of flour and meal.....	1,521,540	1,607,050	85,510	
Bushels of grain.....	3,392,272	2,788,772	5,510	603,480
Lumber in superficial feet.....	459,231,589	465,379,803	6,148,214	
Head of live stock.....	127,060	113,006		14,054
Coal in tons.....	750,076	694,761		55,315
Manufactured goods in tons.....	590,526	522,410		68,116
Cords of firewood.....	55,002	53,606		1,394
All other articles in tons.....	493,225	1,194,163	700,938	

There was an increase over last year in the quantity of the following articles carried:—Flour, meal and other mill products, potatoes and other vegetables, butter and cheese, apples, horses, logs, ship timber, pulp wood, pit props, railway ties, clapboards, laths and palings, extract of hemlock bark, ore, iron and other metals, fresh fish, oysters and clams, molasses, sugar, salted and fresh beef, hides and skins and leather.

There was a decrease in the quantity of the following:—Grain, hay and straw, eggs, calves, horned cattle, pigs, sheep and lambs, lumber, telegraph poles, tanbark, firewood, shingles, coal, stone, lime and cement, brick, sand, salted fish and dried fish.

WORKING EXPENSES.

The working expenses compare as follows with the previous year:—

In 1903-04.....	\$7,099,982 04
In 1902-03.....	6,056,653 19

Increase.....	\$1,043,328 85
---------------	----------------

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The averages compare with those of last year, as follows:—

Per mile run by engines—

	Cents.
In 1903-04.	86'32
In 1902-03.	75'52

Per mile run by trains—

In 1903-04.	109'17
In 1902-03.	95'45

Working expenses per mile of railway—

In 1903-04.	\$5,375 03
In 1902-03.	4,606 97

The rent paid to the Grand Trunk Railway Company, \$140,000, is not included in the above, as it would disturb the comparison with previous years; no corresponding charge relating to the cost of any portion of the railway having been included in the working expenses previous to the year 1898-99.

The permanent way and structures and all the works of the railway received necessary repairs and are in good order.

The number of ties renewed was 644,683. One hundred and fifty-seven sets of switch ties were also renewed.

Thirty-six miles of track were rebalasted, 53,645 cubic yards of ballast being used.

Bridges, culverts, wharfs and buildings received necessary repairs.

The fences were repaired and 105 miles of fences were built.

The snow sheds and snow fences were repaired.

The rolling stock received necessary repairs and is in good order.

Five passenger locomotives were purchased and three built in the railway shops at Moncton, to replace an equal number of smaller ones taken out of service.

One second-class sleeping car, three express and baggage cars, two hundred and forty box, eight refrigerator and one hundred and seventy-five platform cars were purchased, fifteen box, thirteen platform, one hopper, two large coal cars and eight vans were built in the railway shops in Moncton, to replace an equal number taken out of service. These freight cars were of much greater capacity than the ones they replaced.

STORES.

The value of stores purchased was.	\$3,450,953 02
The value of stores used.	3,445,708 27
The value of material sold was.	246,111 46

The value of stores on hand at the end of the year was:—

Miscellaneous.	\$ 326,654 07
Fuel.	294,362 66
Track materials	429,668 70
Iron and steel rails	372,671 12
 Total	 \$1,423,356 55

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GENERAL.

In the month of November, 1903, the station and other railway buildings at Mitchell were destroyed by fire.

In the month of May, 1904, the old coal shed on the east side of Rivière du Loup bridge was destroyed by fire.

In the month of June, 1904, the coal shed and trestle at St. John were partly destroyed by fire, and about 300 tons of coal were also consumed.

The winter was a very severe one, in fact one of the coldest and most stormy experienced in a great many years. The train service, however, was effectually maintained, and there were no serious blockades of trains. The cost of operating the railway was, however, much increased both directly and indirectly by the severity of the weather.

On April 21, 1904, Mr. G. R. Joughins was appointed superintendent of motive power, and took charge of the locomotive and car departments on that date.

I have the honour to be, sir,

Your obedient servant,

D. POTTINGER,

General Manager, Government Railways.

Collingwood Schreiber, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa, Ont.

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No. 1.—INTERCOLONIAL RAILWAY.
CAPITAL ACCOUNT, year ended June 30, 1904.

Dr.

Cr.

1903, June 30, 1904, June 30,	To cost of Intercolonial Railway to date.	1903, June 30,	By Dominion of Canada.	1903, June 30,	cts. 70,855,079 20
		%		%	cts.
	To expenditure for current year				
	To increase accommodation at Sydney.	25,682			61
	Original construction.	1,979			18
	To strengthen bridges.	164,928			08
	To increase accommodation at Lewis.	62,107			67
	Air brakes to freight cars.	24,990			02
	New machinery for locomotive car shops.	17,006			55
	To exchange draw bars of freight cars.	16,000			00
	To equip ten passenger cars with Pintsch gas apparatus.	4,652			89
	Rolling stock.	643,020			83
	Increased accommodation at Stellarton.	11,565			61
	New superstructure for Restigouche bridge.	95,106			08
	Towards double tracking parts of line.	85,138			57
	Improvements at Point Tupper.	4,888			11
	Yard for freight business at Rivière du Loup.	9,760			72
	To change air brakes of passenger cars to quick action brakes and apply air signals.	2,000			00
	To extend freight car repair shop at Moncton.	26,377			39
	Engine house, machine shop, car shop, &c., at Rivière du Loup.	48,895			68
	Engine house, &c., at Chaudière Junction.	48,475			90
	Increased accommodation at St. John.	67,355			82
	Increased accommodation at Halifax.	105,762			91
	Improvements at North Sydney.	1,109			20
	Building a spur line of railway from Intercolonial Railway station at Rivière Ouelle to the wharf on the St. Lawrence.	8,349			65
	To increase accommodation at Moncton.	32,369			96
	To equip passenger cars with vestibules.	95,198			78
	Dwelling for agent at Bel River.	7,129			78
	Increased accommodation at Abouqui.	1,699			60
	Towards improving ferry service at Strait of Canso.	662			51
	Increased accommodation at Truro.	27,472			81
	Improvements at Nicolet.	16,613			11
	Improvements at Little Meads and diverting public road.	1,525			19
	Increased accommodation and facilities along the line.	496			99
	Steel rails and fastenings.	1,192			96
	Additional sidings along the line.	1,829			36
		30,935			57
		50,356			09
		55,118			19

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To dredge and blast rock at deep water terminals, Halifax	8,896 20		
Protection to Grand Narrows bridge,	9,998 07		
To compensate the Anchor Line for salvage service to ss. <i>Scotica</i>	16,072 23		
Dredging at Point Tupper	3,162 61		
New Glasgow—extension to freight shed and crane for loading platform,	1,071 50		
To increase water supply,	567 99		
Improvements at St. Alexis,	3,216 50		
New freight shed at Daveluyville,	1,328 40		
St. Andre—extension of siding	1,000 00		
Freight houses at Elgin Road, L'Anse à Gilles and Trois Saumons,	1,347 00		
St. Charles Junction—bore hole for water supply,	4,621 00		
Siding on wharf at Campbellton,	1,250 00		
Sussex—platform extension of military siding	581 36		
Bore hole for water supply at Springhill Junction	1,911 00		
Siding at Pictou Landing,	13,690 99		
To purchase power-saw for sawing rails, &c	930 00		
	1,902,340 15		
Less New superstructure for south-west Miramichi bridge (credit value of old bridge),	1,894,836 90		
Refunds of previous years,	14,000 30	1904,	
	1,880,836 60	June 30,	By Dominion of Canada
	72,735,435 80		1,880,836 60
			<u>72,735,435 80</u>

T. WILLIAMS,
Chief Accountant and Treasurer.

E. and O. E.,
MONTREAL, N.B., June 30, 1904.

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No. 2.—INTERCOLONIAL RAILWAY.
REVENUE ACCOUNT, year ended June 30, 1904.

Previous Year.	Expenditure.	Year ended June 30, 1904.	Previous Year.	Earnings.	Year ended June 30, 1904.
\$ cts.		\$ cts.	\$ cts.		\$ cts.
2,176,160 76	Locomotive power. Abstract No. 1.	2,616,922 26	1,927,916 97	Passenger traffic.	2,021,568 40
1,338,857 68	Car expenses " 2.	1,707,927 96	4,128,255 00	Freight traffic...	4,041,122 48
1,386,350 29	Main way and works " 3.	1,491,673 18	268,151 75	Mails & sundries.	276,549 55
789,346 84	Station expenses " 4.	878,673 02			
477,373 77	General charges " 5.	517,936 79			
6,168,089 34		7,212,533 21			
111,436 15	Car mileage.....	112,551 17			
6,056,653 19		7,099,982 04			
140,000 00	Rental of leased lines.....	140,000 00			
6,196,653 19		7,239,982 04	6,324,323 72		6,339,231 43
127,670 53	Balance			Balance	900,750 61
6,324,323 72		7,239,982 04	6,324,323-72		7,239,982 04

E. and O. E.,
MONCTON, N.B., June 30, 1904.

T. WILLIAMS
Chief Acct. and Treasurer.

No. 3.—INTERCOLONIAL RAILWAY.
LOCOMOTIVE POWER, year ended June 30, 1904.

Previous Year.		Year ended June 30, 1904.
\$ cts.		\$ cts.
17,061 86	Mechanical superintendent's salary, clerk, office and travelling expenses...	16,372 66
513,160 91	Wages of drivers, firemen and cleaners.....	631,711 91
1,111,725 32	Fuel	1,234,927 25
29,881 77	Oil, tallow and waste and small stores.....	34,048 47
407,861 03	Repairs to engines, tenders and engine tools.....	592,640 87
44,149 60	Water, including pump and tank repairs.....	48,058 65
52,320 27	Miscellaneous.....	59,162 45
2,176,160 76		2,616,922 26

E. and O. E.,
MONCTON, N.B., June 30, 1904.

T. WILLIAMS,
Chief Acct. and Treasurer.

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No. 4.—INTERCOLONIAL RAILWAY.

CAR EXPENSES, year ended June 30, 1904.

Previous Year.		Year ended June 30, 1904.
§ cts.		§ cts.
152,672 78	Repairs to passenger cars	181,201 65
33,002 79	Repairs to postal, express and baggage cars	54,354 50
412,612 08	Repairs to freight cars and vans	601,030 04
13,250 37	Repairs to snow ploughs and flangers	6,611 71
497,753 65	Wages of conductors, train baggage masters and brakemen	651,137 08
9,211 14	Oil and waste for packing	8,890 72
151,411 46	Small stores and fuel	140,490 05
68,943 41	Miscellaneous	64,212 21
1,338,857 68		1,707,927 96

E. and O. E.,
MONCTON, N.B., June 30, 1904.

T. WILLIAMS,
Chief Acct. and Treasurer

No. 5.—INTERCOLONIAL RAILWAY.

MAINTENANCE OF WAYS AND WORKS, year ended June 30, 1904.

Previous Year.		Year ended June 30, 1904.
§ cts.		§ cts.
6,796 26	Chief and assistant engineer's salaries, clerks, office and travelling expenses	7,235 24
591,742 85	Wages in repairing roadway, fences, semaphores, including new sidings laid in	644,450 60
185,746 44	Rails and fastenings, including new sidings laid in	173,558 47
193,333 92	Ties	194,458 92
179,557 07	Timber, lumber, &c., for repairs to bridges, cattle-guards, snow sheds, fences, &c	201,129 66
17,967 55	Repairs to wharfs	27,175 77
97,894 01	Repairs to buildings and platforms, including extensions and additions to same	90,416 10
19,985 12	Repairs to tools	19,871 66
89,480 70	Cleaning snow and ice	130,652 35
3,846 37	Miscellaneous	2,724 41
1,386,350 29		1,491,673 18

E. and O. E.,
MONCTON, N.B., June 30, 1904.

T. WILLIAMS,
Chief Acct. and Treasurer.

4-5 EDWARD VII., A. 1905

No. 6.—INTERCOLONIAL RAILWAY.

STATION EXPENSES, year ended June 30, 1904.

Previous Year.		Year ended June 30, 1904.
§ cts.		§ cts.
644,939 90	Salaries and wages of station-masters, agents, clerks, telegraph operators, station baggage-masters, yardmasters, switchmen and labourers.....	738,964 14
144,406 94	Fuel, oil and light, stationery, tickets and other incidental expenses.....	139,108 88
789,346 84		878,073 02

E. and O. E.,
MONCTON, N.B., June 30, 1904.T. WILLIAMS,
Chief Acct. and Treasurer.

No. 7.—INTERCOLONIAL RAILWAY.

GENERAL CHARGES, year ended June 30, 1904.

Previous Year.		Year ended June 30, 1904.
§ cts.		§ cts.
197,442 67	General manager, general superintendent, traffic manager, district superintendents, train despatchers, general freight agent, general passenger agents' salaries, clerks, office and travelling expenses.....	213,633 75
50,091 96	Chief accountant and treasurer, traffic auditor, paymaster, cashiers' salaries, clerks, office and travelling expenses.....	53,966 56
24,075 20	Damage to men, animals and goods.....	31,205 37
69,624 15	Ferry service.....	80,440 66
2,883 80	Telegraph expenses, not including pay to operators.....	3,701 70
64,978 03	Miscellaneous, printing, advertising, &c.....	60,976 45
67,761 29	Agency expenses.....	73,872 30
476,857 10		517,796 79
516 67	To pay Ida E. Robertson and Mary E. Thompson.....	
477,373 77		517,796 79
	To pay Bridget M. Brown.....	140 00
477,373 77		517,936 79

E. and O. E.,
MONCTON, N.B., June 30, 1904.T. WILLIAMS,
Chief Acct. and Treasurer.

No. 8.—INTERCOLONIAL RAILWAY.

SPECIAL VOTES, year ended June 30, 1904.

Previous Year.	Rental of Leased Lines.	Year ended June 30, 1904.
§ cts.		§ cts.
140,000 00	Rent of Grand Trunk Railway—Chaudière Curve to Chaudière and Ste. Rosalie to Montreal, including the Victoria Bridge and terminals to Montreal.....	140,000 00

E. and O. E.,
MONCTON, N.B., June 30, 1904.T. WILLIAMS,
Chief Acct. and Treasurer.

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No. 9. INTERCOLONIAL RAILWAY.

GENERAL STORES ACCOUNT, year ended June 30, 1904.

Cr.

		\$	cts.	%	cts.			%	cts.
1903.									
June 30....	To Balance.....			917,941	73	By	Issues during year.....	3,445,708	27
							Sales material, fuel, &c.	43,079	00
							Sales old material.....	203,032	46
1904.									3,691,819
June 30....	To Purchases during year.....	3,450,953	02			By	Balance—	1,011,043	67
	Charges from other departments...	600,716	86				Ordinary stores, including fuel...	412,312	48
	Labour, &c.....	127,012	62				Iron and steel rails and fastenings...		
	Staff pay rolls.....	18,552	05						1,423,356
				4,197,234	55				5,115,176
									28

E. and O. E.,
MONTGOMERY, N.B., June 30, 1904.

T. WILLIAMS,
Chief Accountant and Treasurer.

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Inverness and Richmond Ry.	16,719 23
Central Vermont Ry.	140 22
Grand Trunk Ry.—Suspense.	98 75
Drummond County Ry.	7,199 87
Wabash Ry.	29 57
Newfoundland Ry.	349 11
Maine Central Ry.	98 81
Midland Ry. of Nova Scotia.	2,463 71
Central Ry. of New Brunswick.	41,811 54
New York, N. H. and H. Ry.	3 32
Lake Shore and M. S. Ry.	1 18
Great Northern Ry. of Canada.	21 66
Ballston Terminal Ry.	396 41
Delaware & Hudson Ry.	2 47
Michigan Central Ry.	2 71
Canada Atlantic Ry.	116 81
Cleveland, C. C. and St. Louis Ry.	1 66
Erie Ry.	5 33
Swift Refrigerator Line.	0 40
Whedding and Lake Erie Ry.	1 69
Illinois Central Ry.	42 40
Nova Scotia Central Ry.	132 20
New York, Chicago and St. Louis Ry.	0 61
Quebec & Lake St. John Ry.	7 90
New York Central and H. River Railway.	25 79
Canada Northern Ry.	0 47
Eastern S.S. Co.	7 60
Elgin and Havelock Ry.	2 96
St. Martin's and Upham Ry.	583 04
Detroit Southern Ry.	2 94
Warren Refining Co.	1 37
Salisbury and Harvey Ry.	982 27
Prince Edward Island Ry.	128,325 47
Charlottetown Steam Navigation Co.	14 30
Baltimore and Ohio Ry.	10 25
Street's Western Car Stable Co.	25 62
Armour Refrigerator Line	0 54
Pere Marquette Ry.	4 66
Chicago, Burlington and Quincy Ry.	1 05
Grand Rapids and Indiana Ry.	0 36
Chicago and Northwestern Ry.	4 83
Toledo, St. Louis and Western Ry.	1 10
Rome, Watertown and O. Ry.	5 00
Minn., St. Paul and Sault St. M. Ry.	1 39
Pennsylvania Co.	0 71
Chicago and Great Western Ry.	3 00
Buffalo, Rochester and Pitts. Ry.	6 20
Chicago, Rock Island and Pacific Ry.	2 14

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No. 10—INTERCOLONIAL RAILWAY—Continued.

GENERAL BALANCE, year ended June 30, 1904—Continued.

Dr.	\$	cts.	Cr.	cts.
Chicago, Mil. and St. Paul Ry.	0	81		
Beersville Ry. and Coal Co.	3,061	74		
Cincinnati, Hamilton and D. Ry.	7	82		
Lake Erie and Western Ry.	10	37		
Archison, Topeka and S. F. Ry.	0	60		
Pittsburg, Cincinnati, C. and St. L. Ry.	1	20		
Rutland Ry.	2	20		
Cape Breton Ry.	1	51		
Moncton and Buctouche Ry.	269	04		
Canada Atlantic and Plant Lmr.	3	48		
Maritime Coal Co.	35	18		
Montreal Rolling Mills	1,784	14		
Finska Lloyd Navigation Co.	1	80		
I. C. R. Employees R. and I. Assn.	1	40		
Great Northwestern Telegraph Co.	55	00		
North American Transportation Co.	2,183	63		
Cumberland Ry. and Coal Co.	38	04		
Canada Coals and Ry. Co.	141	40		
SS. <i>Manit.</i>	268	14		
SS. <i>Verda</i>	50	78		
SS. <i>Lake Ontario</i>	17	94		
Acadia Coal Co.	62	54		
Intercolonial Coal Co.	41	57		
Dominion Coal Co.	1,289	60		
Western Union Telegraph Co.	1,550	67		
Royal Visit	10,189	80		
Dominion Iron and Steel Co.	8,097	75		
Baldwin Locomotive Works	181	10		
Standard Car Truck Co.	465	30		
Nova Scotia Steel and Coal Co.	9,402	46		
Halifax Station Labour	1,000	00		
Engineering Contract Co.	518	68		
New Brunswick Wire Fence Co.	25	72		
Macnae Mining Co.	317	84		
Montagny Light and P. Co.	1,653	53		
Portland Rolling Mills	1,778	56		
Londonderry Iron and Mining Co.	6,338	55		
Hamilton Bridge Co.	204	40		
Acadia Sugar Refining Co.	0	67		
Maritime Engineering Co.	51	70		
Canadian Bridge Co.	86	69		

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Peerless Tank Line	0 39
Seaboard Air Line	12 74
Cotton Belt Route	0 28
Atlantic Coast Line	0 60
Frisco System	1 37
Quebec Bridge and Ry. Co.	126 15
Elgin Branch Ry.	726 10
Polson Iron Works	273 25
Union Bearing Co.	928 18
Town of Dartmouth	32,000 00
St. John Street Ry.	31 00
Springhill and Parrishoro Ry.	3,161 99
Coldbrook Rolling Mills	1,967 41
Dominion Bridge Co.	88 74
Doud Stock Car Co.	15 08
Halifax and Cape Breton Ry.	1,151 42
Allan SS. Line	1,892 13
Remittances destroyed	788 81
Schooner <i>Mary Jane</i>	71 30
Uncurrent and failed bank notes.	82 20
Trois Pistoles Station.	\$ 37 37
Eel River	32 61
Nauwigevauk	3 00
Glongay	5 00
Blenfield	25 21
Coal Branch	65 84
Weldford	55 00
Bic	22 00
St. Arsène	107 12
Sts. Luce	80 00
Dalhousie	19 69
Valley	6 65
Loua	72 71
Isle Verte	25 00
Kent Junction	28 38
Gloucester Junction Station	78 87
Campbellton Freight	25 00
Derby Junction	231 04
Sts. Louise	0 65
Nicolet	35 00
Rivière du Loup, freight	136 82
St. Alexandre	25 90
Red Pine	20 00
Rivière du Loup ticket	16 00
Newcastle	102 75
Napan	40 00
Newnamcook	7 54
St. John, freight	3,095 46

No. 10.—INTERCOLONIAL RAILWAY—Concluded.
 GENERAL BALANCE, year ended June 30, 1904—Concluded.

DR.		%		%		Ck.		%	
Amherst, freight station			3 31						
Bosdale			7 80						
Sackville			10 17						
Wentworth			33 24						
Rockingham			27 47						
New Glasgow			633 90						
Nash's Creek			6 25						
Shediac			34 70						
Eureka Mills			13 56						
Halifax, freight			887 49						
Forestdale			6 34						
Athol			4 44						
Camphellton, ticket			94 85						
Moncton, freight			20 00						
Individual accounts								6,246 14	
Total								26,379 02	
									2,151,378 21

E. and O. F.,
 Moncton, N.B., June 30, 1904.

T. WILLIAMS,
 Chief Accountant and Treasurer.

Total.....2,151,378 21

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INTERCOLONIAL RAILWAY.

INDIVIDUAL ACCOUNTS, year ended June 30, 1904.

<i>Dr.</i>	\$ cts.	\$ cts.
J. Barnes Construction Co.		0 50
S. Cunard & Co.		24 24
Purcell & Fallon.		11,182 53
F. E. Came.		2,760 70
J. Norris & Co.		22 22
Ryan and McDonnell.		3,736 29
T. A. S. DeWolf & Co.		9 51
M. J. O'Brien.		4 45
M. Beattie & Sons.		1 14
A. R. McDonald.		2 76
T. Malcolm.		997 25
Furness, Withy & Co.		37 87
Rhodes, Curry & Co.		4,894 22
Warren Taylor.		8 25
T. B. Calhoun.		10 00
J. W. C. McConnell.		50 00
A. H. Lindsay.		400 00
J. Hardwell.		65 50
Geo. McDougall & Co.		1,466 00
L. R. Harrison.		1,343 41
Pickford & Black.		147 54
I. X. Pouliot.		352 20
R. A. & J. Stewart.		41 39
Wallace Ross.		33 70
J. Richards & Son.		116 24
J. Cook & Son.		19 80
P. E. Gallant.		173 36
J. J. McLeod.		644 16
A. Forbes.		82 18
H. J. Cameron.		1,679 07
H. M. Hamilton.		316 66
R. Hamilton.		1,131 52
H. Atkinson.		12 80
T. Atkinson.		49 87
Gray & Lawrence Bros Co.		6 75
St. François Bridge Co.		49 59
		31,873 67
<i>Cr.</i>		
Dubs & Co.	98 63	
H. M. Price & Co.	17 00	
Cloutier & Gaudreau.	22 50	
J. W. Bryson.	25 00	
Illsley & Horn.	5,331 52	
		5,494 65
		26,379 02

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No. 11.—INTERCOLONIAL RAILWAY.

COMPARATIVE STATEMENT of Averages, year ended June 30, 1904.

	1903.	1904.
Mileage of railway	1,314·67	1,320·92
Engine mileage	8,019,320	8,224,858
Train mileage.....	6,345,500	6,503,579
Car mileage.....	80,690,353	81,030,759
Receipts per engine mile.....Cents	78·86	77·07
Receipts per mile of railway.....Dollars	4,810·56	4,799·10
Percentage of passenger earnings to gross earnings.....	30·48	31·89
" freight " " 	65·28	63·75
" other " " 	4·24	4·36
Expenses per engine mile—		
Drivers, firemen and cleaners' wages.....Cents	6·40	7·58
Fuel.....	13·86	15·02
Oil, tallow, waste and small stores	·37	·41
Repairs to engines	5·09	7·21
Water and tank repairs.....	·55	·58
Miscellaneous.....	·65	·72
Total.....	26·92	31·62
Mechanical superintendent's salary, office and travelling expenses.....	·21	·20
	27·13	31·82
Locomotive power per engine mile.....Cents	27·13	31·82
Car expenses	16·70	20·76
Maintenance way and works per engine mile	17·29	18·14
Station expenses per engine mile.....	9·84	10·67
General charges	5·95	6·30
	76·91	87·69
Less car mileage.....	1·39	1·37
Total.....	75·52	86·32
Rental of leased lines.....	1·75	1·70
Total per engine mile	77·27	88·02
Locomotive power per train mile.....Cents	34·29	40·24
Car expenses	21·10	26·26
Maintenance way and works per train mile.....	21·85	22·94
Station expenses	12·44	13·50
General charges	7·52	7·96
	97·20	110·90
Less car mileage.....	1·75	1·73
Total.....	95·45	109·17
Rental of leased lines	2·20	2·15
Total per train mile.....	97·65	111·32
Working expenses per mile of railway:—		
Ordinary.....	4,606·97	5,375·03
Rental of leased lines	106·49	105·99
	4,713·46	5,481·02

T. WILLIAMS,

*Chief Accountant and Treasurer.*E. and O. E.,
MONCTON, N.B., June 30, 1904.

SESSIONAL PAPER No. 20

INTERCOLONIAL RAILWAY.

OFFICE OF THE ENGINEER OF MAINTENANCE,

MONCTON, N.B., September 10, 1904.

SIR,—I have the honour to submit the report of the Maintenance of Way and Works Department for the year ending June 30, 1904:—

TRACK.

During the year 206'05 miles of 56. 58 and 67-pound rails were taken up, and 43'66 miles of 67-pound rails were relaid.

TIES.

During the year 644,683 ordinary ties, and 157 sets of switch ties, were renewed.

BALLASTING.

During the year 35'76 miles of track were ballasted, using 37,227 cubic yards of gravel, and 16,418 cubic yards of ashes and cinders.

SWITCHES AND SEMAPHORES.

Distant electric semaphore signals were erected or extended at the following stations:—

Ste. Flavie.	1	Bic.	2
St. Fabien.	1	Trois Pistoles.	1
Montmagny.	1	St. Pierre.	1
St. Michel.	1	St. François.	1
Chaudière Junction.	1	Rivière Ouelle.	1
Lévis.	2	Hadlow.	2
St. Henri.	1	St. Moise.	1
Causapsca.	2	Amqui.	2
Assametquaghan.	2	Little Metis.	1
Millstream.	2	Flat Lands.	2
Ste. Rosalie.	1	Drummondville.	1
Mitchell.	1	Forestdale.	2
Moose Park.	2	Chaudière.	1

Two hundred and twelve new switches were put up on the main line during the year.

New telegraph signals were provided at the following stations:—

Plumsweep.	Brown's Point.
Hampton.	Halifax.
Richmond.	Harlaka Junction.
Forestdale.	Aston Junction.
Moose Park.	Mitchell.

Necessary repairs were made to all semaphores, switches and station telegraph signals throughout the line, where required.

SIDINGS.

During the year 7'01 miles of additional siding accommodation has been provided at different points throughout the line.

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FENCE BUILT BY CONTRACT.

During the year 59'60 miles of Strathy wire fence was built at different points on the line.

FENCE BUILT BY OUR OWN MEN.

40'56 miles new page wire and 5'09 miles of second-hand barbed wire fence were built at different points on the line.

Necessary repairs were made to fences throughout the line.

SNOW FENCES.

There was built during the year 95 rods of stationary snow fence, 10 feet high, and 1,011 rods of portable snow fence.

Necessary repairs were made to snow sheds and snow fences where required.

WHARFS AND TRESTLES.

Repairs.

Point du Chene, wharf.
 St. John, ballast wharf.
 St. John, coal trestle.
 Courtney Bay, breakwater.
 St. John, fenders on long wharf.
 St. John, flooring at ballast wharf.
 St. John, flooring long wharf.
 St. John, winter port wharf.
 St. John, D. A. R. drop.
 Little Forks, cribwork.
 Springhill Junction, coal trestle.
 Halifax, repairs to pier No. 2.
 Halifax, repairs to pier No. 3.
 Halifax, repairs to pier No. 4.
 Halifax, repairs to pier No. 5.
 Halifax, repairs to pier No. 6.
 Halifax, repairs to pier No. 7.
 Halifax, repairs to pier No. 8.
 Halifax, repairs to pier No. 9.
 Richmond, coal trestle.
 Lock Broom, cribwork.
 Tatamagouche, cribwork.
 Stellarton, trestle.
 Pugwash, wharf.
 Pictou, copper crown trestle.
 Pictou, cribwork.
 Pictou Landing, wharf.
 Murphy's, cribwork.
 Mulgrave, wharf.
 Moir's, cribbing.
 Point Tupper, wharf.
 Orangedale, cribbing.
 Sydney, wharf.
 Newcastle, coal trestle.
 Newcastle, wharf.

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Indiantown, cribwork.
 Lévis, cribwork.
 Point Lévis, Princess pier wharf.
 Drummondville, coal trestle.

BRIDGES AND CULVERTS.

Repairs.

Quispamsis, overhead bridge.
 Lawlor's, overhead bridge.
 St. John, drawbridge.
 St. John, Dorchester street bridge.
 St. John, bridge long wharf.
 Sackville, overhead bridge.
 Dorchester, overhead bridge.
 Lynches, bridge.
 Wentworth, culvert.
 Halifax, North street, overhead bridge.
 Waverley, bridge.
 Dartmouth, culvert.
 Haliburton's, bridge.
 Tatamagouche, bridge.
 French River, bridge.
 Waugh's River, bridge.
 Dewar's River, bridge.
 Wallace River, bridge.
 Middle River, bridge.
 Pugwash, bridge.
 West River, draw.
 Pine Tree, bridge.
 Sutherland River, bridge.
 James River, bridge.
 New Glasgow, bridge.
 Pomquet, bridge.
 New Glasgow, west of, bridge.
 New Glasgow, culvert.
 Marshy Hope, bridge abutments.
 Merigomish, culvert.
 South River, bridge.
 Afton, culvert.
 Orangedale, culvert.
 Point Tupper, wharf.
 North Sydney, wharf.
 Boisdale, east of, culvert.
 Beaver Cove, west of, culvert.
 Beaver Dam, bridge.
 Beaver Dam, culvert.
 Caribou Crossing, bridge.
 Cleveland, bridge.
 Morrison's, bridge.
 Christmas Island, culvert.
 Cumming's, bridge.
 River Denys, bridge.
 Grand Narrows, bridge.

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Chatham Junction, culvert.
 Moncton, west of, culvert.
 Adamsville, culvert
 Bathurst, north of, overhead bridge.
 Salmon Lake, culvert.
 Near Campbellton, culvert.
 Near Matapedia, culvert.
 Near Causapsca, culvert.
 Near Amqui, culvert.
 Near Flat Lands, culvert.
 Near St. Octave, culvert.
 Near Cedar Hall, culvert.
 Near St. Moise, culvert.
 Near Assametquaghan, culvert.
 Trois Pistoles, overhead bridge.
 Trois Pistoles, culvert.
 St. Henri, bridge.
 St. Romuald, culvert.
 St. Jean Chrysostome, culvert.
 St. Valier, culvert.
 Between Hadlow and Chaudière Curve, culvert.
 Trois Saumons, bridge.
 Ste. Anne, culvert.
 Ste. Louise, culvert.
 Aston, east of, culvert.
 Mitchell, west of, culvert.
 St. Nicholas, west of, culvert.
 St. Leonard, west of, culvert.
 Bagot, culvert.
 St. Eugene, $\frac{1}{4}$ mile west of, culvert.
 Between St. George and Ste. Rosalie, six culverts.
 St. Leonard, east of, two culverts.
 Duncan, east of, culvert.
 St. Eugene, $\frac{3}{4}$ mile west of, culvert.
 St. Leonard, bridge.
 Cap St. Ignace, culvert.

BRIDGES AND CULVERTS.

New Work.

McManus', bridge.
 Halifax, North street, overhead bridge from high level to power house.
 Brown's Point, culvert.
 Oxford Junction, culvert.
 Point Tupper, culvert.
 Iona, west of, culvert.
 Derby Junction, southwest Miramichi bridge.
 Chatham Junction, culvert.
 St. Leonard bridge, west of, culvert.
 St. Eugene, $1\frac{1}{4}$ miles west of, culvert.
 St. Joseph, overhead bridge.

MASONRY WORK DONE.

Repairs.

Shediac, Secoudouc bridge.
 Passekeag, bridge.

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Penobsquis, bridge.
 Athol, cattle guards.
 Palmer Pond, retaining wall.
 Springhill Junction, ash pit.
 Springhill Junction, arch culvert.
 Between Maccan and Nappan, culvert.
 Dorchester Grade, two double box culverts.
 Dorchester Grade, open culvert.
 Westcock Tank, culvert.
 Westcock Tank, 1 mile east of, two cattle guards.
 Near Sackville, box culvert.
 Folley, $\frac{1}{2}$ mile west of, open culvert.
 Folley, $1\frac{1}{4}$ mile west of, pipe culvert.
 Folley, $\frac{3}{4}$ mile west of, pipe culvert.
 Folley, $1\frac{1}{2}$ mile east of, cattle guard.
 Athol, 1 mile west, arch culvert.
 Sackville, overhead bridge.
 Oxford Junction, box culvert.
 Oxford Junction, $1\frac{1}{4}$ miles west, box culvert.
 Near Oxford Junction, culvert.
 Graham's Siding, west of, culvert.
 Between Truro and Murray's Siding, culvert.
 Elmsdale, west of east semaphore, box culvert.
 Millar's brickyard, box culvert.
 Between Millar's brickyard and Stewiacke Station, culvert.
 Shubenacadie, beam culvert.
 Alton, culvert.
 McKay's Siding, west of, culvert.
 Stewiacke, box culvert.
 Dickie's Mill, $\frac{1}{4}$ mile east, arch culvert.
 Stewiacke west tool house, culvert.
 Stewiacke $\frac{1}{2}$ mile west, arch culvert.
 Dewis Siding, $\frac{3}{4}$ mile west, bridge.
 Dewis Siding, $\frac{1}{4}$ mile west, culvert.
 Dewis Siding, $\frac{1}{2}$ mile west, culvert.
 Milford, $1\frac{3}{4}$ miles west of, box culvert.
 Lansdown, 1 mile west of, box culvert.
 Lantz Siding, east of, culvert.
 Spears Siding, $\frac{1}{4}$ mile east of, pipe culvert.
 Lorne Siding, $\frac{1}{2}$ mile west of, box culvert.
 Truro, track scale.
 Brown's Point, culvert.
 Tatamagouche, culvert.
 Denmark, three culverts.
 Pugwash, ash pit.
 Pugwash, bridge.
 New Glasgow, 59 miles east, box culvert.
 New Glasgow, $72\frac{1}{2}$ miles east, beam culvert.
 New Glasgow, 72 miles east, beam culvert.
 New Glasgow, $59\frac{1}{2}$ miles east, box culvert.
 West Merigomish, $\frac{1}{2}$ mile west, culvert.
 West Merigomish, 1 mile east, culvert.
 Point Tupper, transfer.
 North West Miramichi River bridge.
 South West Miramichi River bridge.

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Trois Pistoles, $\frac{1}{4}$ mile west of, culvert.
 Trois Pistoles, $\frac{3}{4}$ mile west of, culvert.
 Isle Verte, $4\frac{1}{2}$ miles west of, culvert.
 Montmagny, $\frac{1}{4}$ mile east, bridge.
 Montmagny, $\frac{1}{2}$ mile east, bridge.
 St. Charles, east of, culvert No. 1.
 Chaudiere Curve, east of, culvert No. 7.
 St. Charles, east of, culvert No. 10.
 St. Charles, east of, culvert No. 11.
 St. Valier, west of, culvert No. 3.
 St. Valier, station, culvert No. 4.
 Montmagny, west of station, culvert No. 1.
 Chaudiere Junction, culvert No. 5.
 St. Valier Station, culvert No. 5.
 Chaudiere Station, culvert No. 2.
 St. Valier Station, east of, culvert No. 6.
 Chaudiere Junction, 2 miles east of, culvert No. 7.

New Work.

Milford, $1\frac{1}{2}$ miles west of, retaining wall.
 Kiusack, $\frac{1}{2}$ mile east of, pipe culvert.
 Chaudiere Junction, track scales.

Alterations.

Anagance, culvert.
 Penobsquis, culvert.
 Athol, culvert.
 Aulac, Etter aboideau.
 Sackville, cattle guard torn down and culvert built.
 Sackville Crossing, cattle guard torn down and box culvert built.
 Elmsdale, retaining walls.
 St. Charles, bridge.

Masonry.

Hilden Station, chimney foundation.
 Villeroy, putting foundation under agent's dwelling house.
 DeLotbinière, repairs to cellar under station.
 St. Cyrille, repairs to cellar under station.
 St. Wenceslas Station, putting foundation under.

Painting.

Jackson's bridge.
 Campbell's bridge.
 Leitches Creek bridge.
 Balls Creek bridge.
 Sydney River bridge.
 Trois Pistoles bridge.
 Grand Bic bridge.
 Gilnores Brook bridge.
 Clark's Brook bridge.
 Sayabec bridge.
 McKinnon's Brook bridge.
 Nepisiguit River bridge.

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Little River bridge.
 Middle River bridge.
 Tetagouche bridge.
 Grant's Brook bridge.
 Nashes Creek bridge.
 Nigadoo bridge.
 Eel River bridge.
 Louison's Brook bridge.
 Nashes Creek bridge.
 Millstream bridge.
 Trout Creek bridge.
 Milner bridge.
 Sackville, bridge.
 North West Miramichi Bridge.
 Murphy's 'Truss' bridge.
 Murphy's roll beam deck girder, bridge.
 Murphy's deck plate girder, bridge.
 Yankee Grant's bridge.
 St. Croix bridge.
 Big Bog bridge.

BUILDINGS AND PLATFORMS.

Repairs.

St. John, shed on long wharf.
 St. John, platform, ballast wharf.
 St. John, platform, Wall Street bridge.
 St. John, skylights, train shed.
 St. John, Mill Street crossing.
 St. John, bumper, No. 5 shed.
 St. John, coal shed.
 St. John, boat house.
 St. John, tenement house.
 St. John, shed on ballast wharf.
 St. John, train shed floor.
 St. John, freight shed floor.
 St. John, door No. 2 shed.
 St. John, shutters in waiting room.
 St. John, Mill Street crossing gates.
 St. John, drop No. 9 shed.
 St. John, round house roof.
 St. John, doors freight sheds.
 St. John, freight shed No. 1.
 St. John, freight shed No. 9.
 Coldbrook, platform.
 Torryburn, hand car house.
 Torryburn, platform.
 Riverside, station platform.
 Rothsay, coal house.
 Rothsay, station.
 Rothsay, station shingled.
 Rothsay, station platform.
 Armstrong's, platform.
 Quispamsis, station platform.
 Model Farm, platform.

Jubilee, platform.
 Nauwigewauk, station.
 Nauwigewauk, platform.
 Hampton, freight house.
 Hampton, station.
 Hampton, platform.
 Passakeag, platform.
 Bloomfield, station.
 Apohaqui, platform.
 Sussex, platform.
 Sussex, station.
 Plumweseep, platform.
 Penobsquis, platform.
 Penobsquis, station.
 Penobsquis, freight house.
 Anagance, station.
 Anagance, freight house.
 Anagance, cattle-pen.
 Petitcodiac, platform.
 Petitcodiac, station.
 Boundary Creek, station.
 Boundary Creek, platform.
 Moncton, ice house.
 Moncton, coal boxes.
 Moncton, cattle shed.
 Moncton, battery room door.
 Moncton, machine shop floor.
 Moncton, platform at check office.
 Moncton, coal shed.
 Moncton, cottages Nos. 3, 4, 5, 6, 7, 8, 10 and 11.
 Moncton, round houses.
 Moncton, general offices.
 Moncton, freight house.
 Moncton, erecting shop floor.
 Moncton, switchman's shanty.
 Moncton, cottages 2, 9 and 12.
 Moncton, electric building floor.
 Moncton, pit in erecting shop.
 Moncton, station.
 Moncton, station platform.
 Moncton, freight house platform.
 Moncton, check office.
 Moncton, old station building.
 Moncton, sidewalk.
 Moncton, cottage.
 Moncton, oilers shanty.
 Moncton, sidewalk Barton's shop.
 Shediac, platform.
 Pt. du Chene, agent's dwelling.
 Pt. du Chene, freight house.
 Painsec Junction, freight house door rollers.
 Painsec Junction, station.
 Calhouns, freight shed.
 Calhouns, W.C.
 Calhouns, station.

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Memramcook, freight house door rollers.
 Memramcook, platform.
 College Bridge, platform.
 College Bridge, station.
 Upper Dorchester, station.
 Dorchester, station.
 Evans, station.
 Sackville, platform.
 Aulac, handcar house.
 Fort Lawrence, loading platforms.
 Amherst, loading platform.
 Nappan, loading platform.
 Maccan, freight shed.
 Springhill Junction, platform.
 River Philip, freight shed.
 Oxford Junction, platform.
 Thomson, cattle pen.
 Greenville, platform.
 Greenville, freight shed.
 Greenville, cattle pen.
 Wentworth, platform.
 Wentworth, station.
 Folley, station.
 Folley, dwelling apartments.
 Londonderry, tank house.
 Truro, freight house.
 Truro, station.
 Truro, blacksmith shop.
 Truro, woodshed
 Truro, round house.
 Truro, doors express building.
 Truro, doors mail room.
 Truro, doors car shop.
 Truro, roof of oil store.
 Truro, platform.
 Hilden, platform.
 Hilden, station.
 Brookfield, cattle pen.
 Shubenacadie, w.c.
 Shubenacadie, platform
 Shubenacadie, office and waiting room doors.
 Dewis Siding, flag station.
 Milford, platform.
 Milford, station.
 Elmsdale, kitchen roof.
 Elmsdale, cattle pen.
 Elmsdale, coal house and baggage room.
 Enfield, station ticket window.
 Oakfield, cattle pen.
 Oakfield, loading platform.
 Windsor Junction, platform.
 Windsor Junction, station.
 Dartmouth, station.
 Bedford, station.
 Rockingham, station.

Richmond, cattle pens and gates.
Richmond, cattle shed.
Richmond, coal chute and trestle.
Richmond, machine shop roof.
Richmond, car shop.
Richmond, roof blacksmith shop.
Richmond, Norris house.
Richmond, coal shed.
Richmond, grain elevator.
Richmond, coal drop.
Richmond, car cleaning shed.
Richmond, floors and pit timbers in round house.
Fairview, flag station.
Fairview, erected old Rockingham station.
Fall River, platform.
Deep water terminus, coal drop and chute, pier No. 4.
Deep water terminus, roof shed No. 1.
Deep water terminus, sheds Nos. 2, 3 and 4.
Deep water terminus, elevator.
Deep water terminus, loading platform.
Deep water terminus, coal shed and chute.
Halifax, North street station.
Halifax, car cleaning shed.
Halifax, tower train shed.
Halifax, water tank, North street.
Halifax, train shed.
Halifax, shed pier No. 4.
Halifax, power house.
Halifax, train shed skylights.
Halifax, shed doors piers 3 and 4.
Halifax, coal shed.
Halifax, doors sheds 1 and 2.
Halifax, car shed floor.
Halifax, cattle pen platform.
Halifax, North street head house.
Valley, cattle pen.
Union, station.
Riversdale, station doors.
West River, loading platform.
West River, station.
West River, coal shed.
West River, freight house.
Lansdown, station.
Lansdown, freight house.
Eureka, platform.
Ferrona Junction, station windows.
Waverly, platform.
Dartmouth, station.
Dartmouth, dwelling house.
Dartmouth, platform.
Dartmouth, freight house.
Pugwash Junction, station.
Pugwash, ash pit engine-house.
Wallace, freight shed.
Wallace, platform.

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Melagash, platform.
 River John, station.
 Meadowville, loading platform.
 Scotsburn, cattle pen.
 Scotsburn, station.
 Scotsburn, loading platform.
 Westville, freight shed room.
 Westville, platform.
 Pictou, cattle pen.
 Pictou, ash pit in engine-house.
 Pictou, freight shed.
 Pictou, down spouting.
 Pictou, ice house.
 Pictou, baggage-room.
 Stellarton, station.
 Stellarton, platform.
 Stellarton, scale house.
 Stellarton, coal chute.
 Stellarton, freight shed.
 Lourds, station.
 New Glasgow, freight shed.
 New Glasgow, superintendent's office.
 New Glasgow, platform.
 New Glasgow, station.
 New Glasgow, bonded wareroom.
 Woodburn, coal shed.
 Woodburn, station.
 Merigonish, station.
 Piedmont, station.
 Avondale, cattle pen.
 Avondale, station.
 James River, station.
 James River, platform.
 James River, cattle pen.
 Antigonish, water closet.
 Antigonish, station platform.
 South River, coal box.
 Pomquet, station.
 Bayfield, cattle pen.
 Bayfield, station.
 Tracadie, cattle pen.
 Har. au Bouche, platform.
 Har. au Bouche, cattle pen.
 Pirate Harbour, engine shed.
 Mulgrave, platform.
 Mulgrave, baggage room.
 Mulgrave, freight house.
 Trenton, freight house.
 Trenton, station.
 Trenton, platform.
 McIntyre's Lake, platform.
 West Bay Road, station.
 West Bay Road, platform.
 Orangedale, station.
 McKinnon's Harbour, platform.

Grand Narrows, station flooring.
 McPhee's, station.
 Boisdale, platform.
 North Sydney, station.
 Leitch's Creek, station.
 Hawkesbury, shelter.
 Sydney, freight shed.
 Sydney, station.
 Sydney, platform.
 Berry's Mills, cellar.
 Canaan, platform.
 Canaan, station.
 Coal Branch, cellar.
 Orangeville, freight platform.
 Adamsville, loading platform.
 Adamsville, station platform.
 Adamsville, waiting room.
 Harcourt, cellar.
 Kent Junction, station.
 Rogersville, freight house platform.
 Chatham Junction, station.
 Chatham Junction, freight house platform
 Chatham Junction, station platform.
 Derby Junction, platform.
 Millerton, loading platform.
 Parker's, platform.
 Newcastle, freight house platform.
 Newcastle, freight shed.
 Newcastle, coal shed.
 Newcastle, blacksmith shop.
 Newcastle, shanty cars.
 Newcastle, loading platform.
 Newcastle, round house.
 Indiantown, station.
 Indiantown, platform.
 Indiantown, engine shed.
 Beaver Brook, station.
 Beaver Brook, tank house.
 Bartibogue, station.
 Red Pine, pump house.
 Gloucester Junction, platform.
 Bathurst, station.
 Petite Roche, platform.
 Elm Tree, station platform.
 Belledune, loading platform.
 Belledune, station.
 Hodgins, loading platform.
 Jacquet River, tank house.
 Jacquet River, tool house.
 Jacquet River, platform.
 Nashes Creek, station.
 New Mills, tool house.
 New Mills, station.
 Dickies, shelter.
 Charlo, platform.

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Charlo, cellar floor.
 Charlo, tank house.
 Dalhousie Junction, station.
 Dalhousie Junction, tank house.
 Dalhousie Junction, loading platform.
 Dalhousie Junction, station floor.
 Dalhousie, water closet.
 Dalhousie, coal shed.
 McLeod's, loading platform.
 Campbellton, coal shed.
 Campbellton, station.
 Campbellton, loading platform.
 Campbellton, wood shed.
 Campbellton, engine house.
 Campbellton, carpenter shop.
 Campbellton, agent's dwelling.
 Campbellton, freight house.
 Campbellton, station platform.
 Campbellton, window express office.
 Campbellton, Canadian express office.
 Campbellton, conductors' room.
 Campbellton, ice house.
 Campbellton, trackmaster's office.
 Campbellton, round house.
 Campbellton, car shop floors.
 Campbellton, machine shop floors.
 Shive's siding, passenger platform.
 Moffats, station platform.
 Matapedia, freight shed.
 Matapedia, agent's house.
 Matapedia, station cellar.
 Matapedia, station platform.
 Matapedia, snow shed.
 Matapedia, foreman's house.
 Matapedia, station doors.
 St. Alexis, station.
 Millstream, station platform.
 Assametquaghan, station platform.
 Assametquahan, tank.
 Assametquaghan, snow chute.
 Causapsca, station platform.
 Causapsca, coal shed.
 Causapsca, station.
 Salmon Lake, station.
 Salmon Lake, station platform.
 Amqui, station platform.
 Amqui, station.
 Amqui, tool house.
 Cedar Hall, station.
 Cedar Hall, tank.
 Cedar Hall, station platform.
 Sayabec, station.
 Sayabec, freight shed doors.
 St. Moïse, station.
 Little Metis, snow shed.

Little Metis, station platform.
Little Metis, station.
St. Octave, station seats.
Ste. Luce, station.
Ste. Flavie, station platform.
Ste. Flavie, machine shop.
Ste. Flavie, switchman's shanty.
Ste. Flavie, round house.
Ste. Flavie, freight house.
Ste. Flavie, station.
Rimouski, station platform.
Rimouski, station.
Sacré Cœur, station.
Sacré Cœur, station platform.
Bic, watchman's shanty.
Bic, station.
St. Fabien, station.
St. Simon, station.
St. Simon, station platform.
Trois Pistoles, platform.
Trois Pistoles, station.
St. Eloi, freight shed.
St. Eloi, station.
Isle Verte, station platform.
Isle Verte, station.
Cacouna, station platform.
Rivière du Loup, coal shed.
St. André, station.
Ste. Hélène, station platform.
Ste. Hélène, station.
Dessaint, cattle pen.
St. Paschal, station.
St. Philippe, station platform.
St. Pacôme, loading platform.
Rivière Ouelle, water closets.
Rivière Ouelle, station platform.
Rivière Ouelle, handcar house.
Ste. Anne, coal shed.
Ste. Anne, station platform.
Ste. Louise, station platform.
St. Jean Port Joli, station.
L'Islet, station platform.
Cap St. Ignace, station floor.
Montmagny, station.
St. Valier, tank.
St. Valier, station.
Chaudière Junction, car repairer's shop.
Chaudière Junction, agent's office.
Chaudière Junction, transfer shed.
Chaudière Curve, station platform.
Lévis, freight office.
Lévis, station.
Quebec, baggage room.
Pt. Levi, floor Rouleau's house, Chapman property.
Pt. Levi, floor Bernier's house, Chapman property.

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Hadlow, ash pits
 Hadlow, round house.
 Hadlow, coal shed.
 Chaudière, station.
 St. Nicholas, station.
 Laurier, storm doors for car top (agent's dwelling).
 De Lotbinière, storm doors on station.
 Villeroy, storm doors on station.
 Villeroy, agent's dwelling.
 Moose Park, station platform.
 Forestdale, fitted up boxcar for agent.
 St. Monique, freight shed.
 Aston Junction, fitted up box car for agent.
 Nicolet, station platform.
 Mitchell, water closets.
 Mitchell, station platform.
 Drummondville, platform.
 St. Germain, putting up storm doors.
 St. Germain, station doors.
 St. Eugene, station doors.
 St. Eugene, putting storm doors on agent's dwelling.
 Bagot, station doors.
 St. Cyrville, platform.
 St. Cyrville, freight shed.

BUILDINGS AND PLATFORMS.

New Work.

St. John, boat house.
 St. John, frost-proof water tank.
 St. John, cabinet for No. 9 shed.
 St. John, trap door No. 9 shed.
 St. John, fence in No. 7 shed.
 St. John, shelves in newsroom.
 St. John, frames for blue prints.
 St. John, cabinet for office, King street.
 Quispamsis, handcar house.
 Nauwigewauk, windows in station.
 Brookville, verandah at station.
 Brookville, station sheathed.
 Torryburn, handcar house.....
 Sussex, platform.
 Anagance, gates for cattle pens.
 Boundary Creek, closet.
 Boundary Creek, coal shed.
 River Glade, new closet.
 River Glade, coal shed.
 Moncton, platform at paint shop.
 Moncton, passenger platform.
 Moncton, cupboard in yardmaster's office.
 Moncton, new floor in master mechanic's office.
 Moncton, blue print room in mechanical department.
 Moncton, sidewalk from machine shop to check office.
 Moncton, case in auditor's office.
 Moncton, check office.

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Painsec Junction, shanty for trackmen.
Athol, tool house.
Londonderry, coal house.
Richmond, windows in office shed No. 3.
Richmond, water closet.
Richmond, grain elevator conveyor chutes.
Halifax, platform, North street station.
Halifax, overhead truss from power house to retaining wall.
Halifax, table telegraph office.
Halifax, customs office in shed, pier No. 2.
Graham Siding, platform.
Elmsdale, shelves, baggage room.
Lantz, platform.
Malcolm's, platform.
Valley, down spouts on station.
Dewis Siding, loading platform.
Enfield, coal bin.
Truro, customs office in freight shed.
Dartmouth, shelving in station.
Dartmouth, coal bin.
Windsor Junction, kitchen in dwelling.
Brown's Point, platform.
Pictou, winter landing.
Pictou, freight shed platform.
Pictou, office in freight shed.
Pictou, w. c. in engine house.
Tracadie, frost-proof building.
Merigomish, station platform.
Trenton, station platform.
Woodburn, coal shed.
Sutherland's Crossing, platform.
North Sydney, customs ware-room and office.
Christmas Island, platform.
Christmas Island, shelter.
Cleveland, platform.
Sydney, ice chutes.
Newcastle, dry closets.
Summit, shelter.
Campbellton, office, Canadian Express Company.
Campbellton, counter for express office.
Campbellton, cupboard for trackmaster's office.
Campbellton, fitting up shanty car.
Matapedia, platform.
Matapedia, coal and oil house.
Matapedia, barn for agent.
Matapedia, seats waiting room.
Matapedia, desk for station.
Moffat's, storm windows.
Flat Lands, porch agent's dwelling.
St. Alexis, station windows.
Amqui, tool house.
Causapscal, fitting up shanty car.
St. Moise, porch foreman's dwelling.
St. Moise, storm windows.
St. Octave, porch agent's dwelling.

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Metis Bridge, tank.
 Metis Bridge, pump house.
 Ste. Luce, hand-car house.
 St. Anaclet, tank.
 St. Eloi, freight shed extended.
 Isle Verte, tank.
 St. Arsene, coal shed.
 Cacouana, coal shed.
 St. Andre, loading platform
 St. Andre, new sink in station.
 Lévis, temporary baggage room.
 Lévis, telegraph table.
 Lévis, sheathing towers new station.
 Lévis, shelter on engine 192.
 Lévis, sheathing in mail-room and baggage-room.
 Lévis, made telegraph table for Moose Park.
 Point Lévis, wood shed.
 St. Charles, cattle pen.
 Forestdale, car house.
 Moose Park, car house.
 Villeroy, platform.
 Aston, car house.
 Aston, extended station platform.
 Laurier, extended platform.
 Mitchell, telegraph table.
 Forestdale, fitted up box car for agent.
 St. Wenceslas, water closets.

BUILDINGS AND PLATFORMS.

Alterations.

Halifax, engine shed and buffer, North street.
 Halifax, grain elevator conveyer chutes.
 Rockingham, taking down station.
 Merigomish, fitted up box car for baggage room.
 Newcastle, round house.
 Campbellton, baggage master's office.
 St. Octave, making dwelling out of old station.
 Rivière Ouelle, moving hand-car house.
 Montmagny, moving buildings.

Painting.

Mines Road, station.
 McIntyre's Lake, station.
 Sydney, station.
 Lansdowne, station.
 Pictou, station.
 Mulgrave, baggage room and express office.
 Rivière du Loup, station.
 St. Moise, new part of station.
 Causapsca, interior of station.
 Causapsca, freight house.
 Nashe's Creek, station.
 Charlo, station.
 Apohaqui, station.

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Coldbrook, station.
 Salisbury, station.
 Armstrong's, station (flag).
 Nauwigewauk, station.
 Derby Junction, station.
 Painsec Junction, station.
 Greenville, roof of station.
 Greenville, roof of freight house.
 Thomson, station.
 River Philip, roof of station.
 Amherst, station.
 Amherst, roof of freight house.
 College Bridge, station.
 Truro, station.
 Hilden, station.
 Dartmouth, station.
 Dartmouth, freight shed.
 Waverly, station.

GENERAL.

New buffers were made and set up at different points on the line where required.
 Repairs were made to crossings at various points on the line where required.
 Gates and cattle-guards were repaired and renewed throughout the line where necessary.

Necessary glazing was done and new glass put in where required. Repairs were made.

A number of old box car tops were repaired and fitted up during the year for hand-car and tool houses.

Ladders for buildings and semaphores were provided where required along the line.
 Outhouses and approaches to public road crossings were whitewashed where necessary.

The new sluiceway, which was commenced last year at Etter's Aboideau, has been completed.

Turntables have been repaired throughout the line where required.

I have the honour to be, sir,

Your obedient servant,

T. C. BURPEE,

Engineer of Maintenance of Way and Works.

J. E. PRICE, Esq.,
 General Superintendent,
 Moncton, N.B.

INTERCOLONIAL RAILWAY OF CANADA.

OFFICE OF THE CHIEF ENGINEER.

MONCTON, N.B., September 13, 1904.

SIR,—I have the honour to submit the following report on capital account expenditures for the fiscal year ending June 30, 1904:—

To increase accommodation at Sydney.

The new freight shed at York street was completed. New building for car repair shop was constructed and necessary grading for site and approach thereto done

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and tracks laid and ballasted. Plans and specification were prepared and tenders were asked for a coal house with hoisting machinery. Plans and specification were also prepared for new passenger station. Concrete floor completed in engine house. Water service was extended, water being connected with new tank, and filling in and grading around foundation of tank. Twelve-inch main pipe was extended through yard, and one fire hydrant and two stand pipes put in. New tank was painted, and upright pipes inclosed in frost-proof box. A new ash pit was put in near engine house. Partition built in hot well at engine house. Additional land was purchased between York and Ferry streets for new site for freight sheds, which are to be moved from new station site.

Original construction.

Under this vote, amounts were paid for land from A. McDonald, at Dartmouth; W. A. Patterson, DeBert; Esther McLean, Long Island, C.B.; Summer Company, red pine; F. Wood and W. T. Pipes, O. & N. G. Ry. An amount was paid H. Paint for damages for closing crossing, and amounts were paid for legal expenses in connection with the above and other cases.

To strengthen bridges.

The following spans, purchased last year, have been put in place: Lydia brook, two spans 25½ feet; Scott's public crossing, one span 30½ feet; Shubenacadie bridge, one span 26½ feet; Rawdon river, two spans 31½ feet; Meadow Brookfield, two spans 22 feet; Ellis brook, one span 23 feet; Elmsdale, one span 21 feet. The following spans have been supplied and put in place: St. Joseph street, Government street, Pcmquet, Pollet river, Trout creek, Passekeag, Moosehorn, St. Francis river, Bible hill, McManus' mill, Little Elm Tree, Fournier's, Beaver river, Canal, McDermid's, Hilden station, Lydia brook fifth crossing, and Charlo river. North and south crossings partly in. The following spans have been delivered, but not yet put in: New Glasgow under-crossing, Perkins', Chisholm's, Riversdale, North river, South Cogaigue, Buctouche, South coal branch, Red Pine brook, Gordon's St. Alexis, Tobogote, West Tobogote, Cedar Hall, St. Moise, St. Moise tank, Ste. Flavie No. 1, Ste. Flavie No. 2, Ste. Luce No. 1, Ste. Luce No. 2, Ste. Luce No. 3, St. Anaclet, Bic, St Fabien No. 1, St. Fabien No. 2, Trois Pistoles, Isle Verte, Halifax, under crossing, Torryburn, Brookville public crossing and Morton's mill race. The following bridges have been doubled up: Moffatt's, seven spans started last year, completed; Rimouski, five spans; Bartibogue, one span; Belledune, three spans; Elm Tree and Benjamin river, three spans now being done. Bed-plates and rollers were put under Nepisiquit river bridge, which was doubled up last year. In connection with putting in and doubling up the above bridges, temporary sidings were put in at several places and charged to this account. The necessary addition to and changes in masonry, required in connection with the above work was also done.

To increase accommodation at Lévis.

The iron work and roofs of two covered platforms were erected in place complete, and an overhead bridge supplied but not erected. Extensive concrete foundations were put in for above. A new building was erected for baggage, heating plant, &c. A temporary heating plant with steel stack was put in. Outstanding claims for land and damages were settled. A quantity of material for the concrete platforms has been supplied. The baggage building was supplied with electric lights.

Part of the freight shed was moved and placed with the old station building, which will be used for freight business. A boiler plant, with induced draft plant has been purchased and will be installed in the new baggage and heating building. A quantity of hose for fire protection was purchased and installed in the station and other buildings.

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Increased accommodation at Stellarton.

The water service was extended and two stand pipes purchased and put in. New building for car repair shop erected. Also new building for storing wrecking crane. Plans and specification were prepared for a new passenger station and tenders asked on same.

Part of the yard was rearranged and some new tracks laid.

New superstructure for Restigouche bridge.

Metal work for the five spans has been supplied and two spans erected complete in place. Work has been resumed after the spring freshets and the erection of the balance of spans is well under way.

New superstructure for south-west Miramichi bridge.

The work of erecting the balance of the spans which remained over at the first of the year, has been completed, and the whole bridge is completely renewed and up to date. The old spans from this and the north-west Miramichi bridge have been transferred to Prince Edward Island Railway, and credit given this vote for same.

Improvements at Point Tupper.

The balance of the track-laying in the new freight yard was completed and material was supplied for a coal shed.

Yard for freight business at Rivière du Loup.

The track-laying for which the grading was done last year was completed.

To extend freight car repair shop at Moncton.

An extension of 345 feet by 78½ feet has been made to the freight car repair shop, and all work in connection therewith completed.

Engine house, machine shop, car shop, stores, office at Rivière-du-Loup.

A large piece of land was purchased at the west end of the yard at Rivière-du-Loup, and contract let for the erection thereon of a 24 stall engine house with annex, also turntable foundation and ringwall. Work on these buildings is underway, the foundations being all in and walls started. A quantity of track has been laid in connection with the above. Tenders have been asked for boiler plant for the heating of the buildings.

Engine house, &c., at Chaudière Junction.

The work on the 18 stall engine house and annex, also on a brick building for machine shop, has been completed and a hot air heating plant installed.

Increased accommodation at St. John.

The work on the new 100,000 gallon elevated tank has been completed and connected up with the city water service, and pipes laid from the tank through the yard to stand pipes, which have been set up at several points. The new 18 stall engine house with annex has been completed and hot blast heating plant installed. Contract was awarded for a brick building for stores, offices, &c., and work started.

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A 30-ton gantry crane was purchased for hoisting heavy freight, but not yet erected.

Several outstanding amounts for land purchased and land damages and legal expenses in connection with same were paid. Some track laying was done.

To increase accommodation at Halifax.

The property lying between the elevator property and Cornwallis Street in Water Street was purchased for the extension of the tracks through the elevator.

Work was completed in connection with installing heating, air and power plant at North Street station. Work on improvements to station was carried on.

Creosoted piling and hard pine for a pile wharf at pier No. 9 was purchased and delivered and sorted on the ground. Creosoted sheathing, square timber and round logs for a quay wall west of pier No. 9 has been ordered and partly delivered on the ground.

Contract has been let for the erection of the pile wharf, and plans have been prepared and tenders will be asked shortly for the quay wall. Some dredging has been done on the sites of the new pile wharf and quay wall.

The following additional track has been laid :—

Young Street siding extended east 224 feet.

No. 2 siding D. W. T. extended east 124 feet.

No. 10 car siding, Richmond, extended 429 feet.

Youlds siding extended 75 feet.

New track No. 6, pier 400 feet.

New platform and a culvert has been made at postal building, North Street station.

A bridge from the station to the power-house has been built, and interior of building for power plant fitted up.

Two concrete platforms were laid at the car cleaning shed.

New drain put in at head house, North Street station.

New shelving in Pullman supply department.

Moved and erected loading platform at D. W. T.

Plans have been prepared for a 30 stall engine house.

Some outstanding amounts for land taken and damages have been paid, also legal expenses.

To increase accommodation at Pictou.

Plans were prepared and considered in connection with several proposed sites for new passenger station.

Improvements at North Sydney.

Dredging was carried on at the extension of the wharf, and berths provided for large steamers. A freight shed 120 feet long was built on the extension of the wharf, forming an extension of the freight shed on the original wharf.

Plans were prepared for moving and extending freight sheds at North Sydney station.

Building a spur line of railway from I.C.R. station at Rivière Ouelle to the wharf on the St. Lawrence.

The ballasting, &c., of the branch, which was started last year, was completed, and wharf at St. Dennis prepared to carry trains.

Stations were built at St. Dennis wharf and Letellier, freight shed at St. Dennis wharf and an engine house at Rivière Ouelle station.

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To increase accommodation at Moncton.

The extension of the brick car shop 200 feet x 75 feet was completed, also the erection of the coal-handling plant. Check office was moved to re-arrange approach tracks to brick car shop extension.

The new water tube boiler plant was completed and the building over it finished.

A building was erected at the station for car service offices with rooms for conductors, also their outfit boxes and the express companies' transfer business. A new electric lighting plant was procured and partly installed in the power-house.

Part of yard was re-arranged on account of extensions to car shop and at transfer shed. Water service was also rearranged and extended.

New gas holders were provided at the Pinstch gas plant.

Electric lighting was installed in the following buildings :—

Extension to blacksmith shop, coal-handling plant, extension to brick car shop, and the offices and conductors' rooms building at station.

A new dry house was provided near the boiler plant.

In the upper part of the station, the partitions and rooms were re-arranged. At the restaurant, a kitchen and cellar were provided. A new freight transfer shed was erected, 580 feet long by 18 feet wide.

Improvements at St. Alexis.

An extensive breastwork was built along bank of river at station, to provide loading ground and a guard railing provided. Roadway was diverted.

Dwelling for agent at Eel river.

The dwelling was built by contract and the ground around it graded by the railway department.

Increased accommodation at Amqui.

Plans and specifications were prepared for a new station, and tenders asked. Some grading was done for new yard.

Increased accommodation at Ste. Flavie.

Some additional land was purchased and plans and specifications prepared for a 12-stall engine house and annex. A contract was let for them. Work is now well under way. Tracks to the sites of these buildings have been laid. Plans and specifications have been prepared for a building for stores, offices, &c., and tenders asked for same. Tenders have also been asked for boilers for the heating plant for these buildings.

Towards improving ferry service at Strait of Canso.

Legal services in connection with salvage of ss. 'Scotia' were paid. Electric lighting plants, including additional boilers, &c., were provided at the terminals at Mulgrave and Point Tupper. A quantity of timber, logs, &c., were provided for a guard pier at Point Tupper, and plans and specifications prepared and tenders asked for same.

Improvements at Nicolet.

Seating was provided for a new station. New water-closets were provided and a new station platform built.

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Increased accommodation at Truro.

Plans and specifications were prepared for a 30-stall engine house and surveys made of several proposed sites for same.

Improvements at Little Métis station and diverting public road.

A strip of land was purchased and a diversion of the public road from station to village graded thereon.

To increase water supply.

Surveys were made for extension to water supplies at Piedmont and Bayfield road. Land was purchased for the extension at Piedmont and a steam pump purchased for Bayfield road. Wells were provided at Ste. Helene, Ste. Rosalie and Moose Park.

Double tracking parts of line.

The work of double tracking the line between Richmond and Rockingham, including ballasting and track laying $2\frac{1}{2}$ miles, has been completed, and trains between Rockingham and North street station, Halifax, are handled on double track, 4'07 miles. A contract has been let for grading a piece of line between Bedford Bridge and Windsor Junction, and work is well advanced. Plans are being prepared for grading a further portion of the line to connect the two above mentioned parts, viz., between Rockingham and Bedford, including a diversion at Birch Cove, and tenders for the work will be asked at an early date.

Protection to Grand Narrows bridge.

A quantity of stone ballast was provided to make holding for piling, to be driven at protection piers. Creosoted sheathing and timber, logs, &c., were provided and plans and specifications prepared for an extension to the guard pier. Tenders for these will be asked shortly.

New freight shed at Develuyville.

The freight house has been provided.

New Glasgow, extension to freight shed and crane for loading platform.

A 15-ton crane has been purchased but not yet placed. Surveys made and plans prepared for an extension of the freight shed.

Matapedia, new station and other improvements.

The new station was completed and provided with seating, &c. A small building was provided for oil and fuel and a building for a barn for agent. The platform at station and freight shed was extended.

Steel rails and fastenings.

During the year, new rails were laid as follows:—

14'53 miles, 110 lb. in main line.
145'16 miles, 80 lb. in main line.
2'70 miles, 80 lb. in leads.

These rails were replacing 58 and 67 lb. rails.

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Dredging at Point Tupper—To pay M. Connolly interest on \$61,429.07, and \$16,424.69 at 6 per cent.

Payment has been made M. Connolly for the amount claimed.

To compensate Anchor Line for salvage services to ss. 'Scotia.'

Payment has been made the Anchor Line for the amount claimed.

To dredge and blast rock at deep water terminus, Halifax.

Blasting and dredging was carried on in dock between piers Nos. 3 and 4 to give a depth of 30 feet at low water, in berth at pier No. 3.

The following sidings have been put in:—

The following sidings have been put in:—

Siding at Iona to wharf	700 ft. long.
“ Belledune	2,938 “
“ Clark's Brook	1,899 “
“ Cedar Hall	1,500 “
“ Chatham Junction	2,585 “
“ Milford	800 “
“ Windsor Junction	575 “
“ Russells (Red Pine and Bartibogue)	3,437 “
“ Jacquet River	2,608 “
“ St. Moïse	2,830 “
“ Kennedy's (Assametquaghan and Mill-stream)	2,569 “
“ Busby (Bartibogue and Beaver Brook . . .	3,213 “
“ Ste. Anne, extended	2,300 “
“ Pomquet, extended	592 “

Increased accommodation and facilities along line.

The following work was done under this vote:—

At Montmagny, the section tool house was moved and a cattle pen built. Existing freight shed moved, raised and enlarged.

At Nappan, the freight shed was extended.

At Amherst, the freight shed was extended and a quantity of material supplied for extending the water service.

St. Michael, station enlarged and freight shed provided.

Ste. Hélène, station and freight shed provided.

St. Moïse, freight shed moved and extended.

Kempt, contract for new station let and work well under way.

Ste. Rosalie, new buildings provided for station and freight shed, and additional land purchased.

St. Cyrille, plans were prepared for a new freight shed.

Painsec Junction, freight shed extended.

St. Pascal, plans prepared for additional station accommodation.

Aston Junction, a section house for three families built, and small frost-proof buildings, coal houses and privies provided.

Moose Park, a section house for three families built, and small frost-proof buildings, coal houses and privies provided, and a piece of land purchased.

Petite Roche, station and dwelling apartments were enlarged.

Harbour au Bouche, station extended and enlarged.

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Pomquet, station extended.

Tracadie, plans prepared for an addition to station.

Antigonish, plans prepared for a proposed station.

Eureka, station extended and enlarged.

Avondale, freight shed extended.

St. Pacôme, a new freight shed built.

Sackville, plans prepared for station improvements.

Brookfield, station extended and enlarged.

Salmon Lake, contract let for station, additional land purchased, work partly done.

St. Léonard Junction.—Contract let for station and agent's dwelling, and work partly done.

Chaudière, plans prepared for new station.

Rimouski, new freight shed built and station accommodation improved.

Bathurst, plans prepared for toilet accommodation, drain and cesspool.

Springhill Junction, station rearranged and enlarged.

Pirate Harbour.—Plans and specifications were prepared for a new engine house and building for stores and offices, and tenders asked for same.

Bayfield Road, new station provided.

St. André, extension of siding at.

The extension has been made.

Freight houses at Elgin Road, L'Anse à Giles and Trois Saumons.

These buildings have been provided.

St. Charles Junction, bore hole for water supply.

Work on this bore hole has been done.

Campbellton, siding on wharf at.

This siding has been put in.

Sussex, platform, extension of, militia siding.

The extension of platform has been made.

Springhill Junction, bore hole for water supply.

Work on this bore hole has been done.

Siding at Pictou Landing.

A siding from Pictou Landing station to shipping pier has been graded under contract and tracks laid.

To purchase power-saw for sawing rails.

A machine for this purpose has been purchased.

PRINCE EDWARD ISLAND RAILWAY.

MURRAY HARBOUR BRANCH.

The grading, structures, &c., between Mutch's Point and Murray river have been completed and all track laid and the line ballasted, with the exception of a short portion at Mutch's Point end. The contract has been let for the buildings and platforms, and the work is well under way. That portion of the line between Murray river and Murray harbour is being graded, and the work is well advanced.

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HILLSBOROUGH RIVER BRIDGE.

Substructure.

North approach.—During the year 83 cribs have been placed along the toe of the slope, making the total number 151. There remains about 25 more to be built and placed to complete this work. A steam shovel has arrived, and will in a few days be placed at work in a borrow pit situated on the main line about $1\frac{1}{2}$ miles from Charlottetown. The material will be transported by locomotives and cars to complete the embankment. A trestle has been built by the contractor extending from the shore to the north abutment for the purpose of doing this work.

Abutment A.—The foundation of this abutment was prepared by the pneumatic process. After the site had been bored and blasted, the material down to an elevation of 54.5 was removed by the dredge. The caisson was towed to the site on September 12, 1903, and the timber work completed there; it was finally placed in its position on October 12. Concreting was begun on September 23, and completed on October 17. Air was put on November 6, and the excavation completed on the 16th, when filling the pneumatic chamber with concrete began. This was completed on the 19th. The shoe finally resting at an elevation of 42.92. Stone masonry was begun November 22, and completed on December 9. The space outside the caisson due to dredging has been partly filled with mud. The completing of the mud protection, the riprapping and some pointing remain to be done.

Pier 3.—The stone masonry on this pier was completed July 14.

Pier 5.—Stone masonry was completed on this pier July 18.

Pier 6.—The foundation for this pier was prepared by the pneumatic process. The site was first bored and blasted and the material removed by the dredge to an elevation of 14.00. The caisson was towed to the site on Aug. 24, and grounded in position on Aug. 29. The concrete in the body of the pier was completed on Sept. 10. Air was put on Sept. 18, and the pneumatic excavation completed Oct. 6, the shoe resting at an elevation of 7.37. The concrete in the air chamber was completed on Oct. 11. The stone masonry pier was begun Oct. 15, and completed on the 28th. The space outside the caisson in consequence of the dredging, has been filled with mud to the original bed of the river. The riprapping yet remains to be done.

Pier 7.—The foundation for this pier was prepared by the pneumatic process. The site being bored and blasted, the material was removed by dredging down to an elevation of 7.20. The caisson was moved to its site July 31, and was grounded and placed in position Aug. 6. The concrete in the body of the pier was completed on Aug. 19. Air was put on Oct. 12, and the excavation completed Oct 28. Filling the air chamber with concrete began Oct 29 and was completed on Nov. 4. Stone masonry was begun on Nov. 5 and completed Nov. 14, when a portion of the riprapping was done. The space around the caisson due to the dredging has been filled with mud to the original bottom. There remains the riprapping to complete.

Pier 8.—Stone masonry on this pier was completed July 18. Nearly all the riprapping required was done Sept. 11 and 12.

Pier 11.—Nothing was done to this pier during the year, it was previously completed to the top of the cutwater. The stone masonry and the riprapping will be completed in a short time.

Abut B.—The caisson was finally placed in its position July 3 and the stone masonry completed Aug. 22. It has been protected with mud and the riprapping completed.

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South approach.—Nothing done.

General.—There remains yet some mud protection and riprapping of slack spots around nearly all the piers to be done. During the year 575,948 feet B.M. of timber and 204,964 lbs. of iron have been placed in the work; 2,384 cubic yards of material have been excavated in pneumatic foundations; 8,412 cubic yards of concrete and 2,279 cubic yards of stone masonry were laid; 71 cribs have been built; 7,130 cubic yards of mud placed around pile foundations for protection; 10,575 cubic yards of riprap were placed around the piers and in the cribs. The contractor stopped work on Dec. 15, 1903, and recommenced on May 18, 1904.

SUPERSTRUCTURE.

A contract has been let for transporting and erecting the superstructure and putting on the floor and sidewalks of the bridge. Part of the metal work of the spans has been shipped from the Miramichi bridges and is partly delivered at Charlottetown. Part of the additional parts for floor and sidewalk brackets have also been shipped from the maker's works at Montreal, and the erecting stages and storing wharf is built at Charlottetown. A quantity of plant, scows, &c., are on the ground. The new swing span has been manufactured but is not yet in place.

Connection between the main line of the P.E.I. Rly. and the Hillsborough bridge.

Grading was begun on June 1 and is now in progress. The embankments are being made up from materials borrowed near Curtis Creek on the main line and transported by locomotive and cars. About 3,000 yards have been placed in the work, and all the track amounting to 0.44 miles laid.

To straighten line at Curtis' Creek.

The work of grading and building the structures on this division has been let by contract, and the grading is partly done, and a quantity of material for the work delivered on the ground.

I am, sir, your obedient servant,

WM. B. MACKENZIE,

Chief Engineer.

D. POTTINGER, Esq.,

General Manager, Government Railways,
Moncton, N.B.

INTERCOLONIAL RAILWAY OF CANADA.

OFFICE OF THE MECHANICAL ACCOUNTANT,

MONCTON, N.B., August 25, 1904.

DEAR SIR—I beg to submit the following report of the operations of this department for the fiscal year ended June 30, 1904.

A. Statement showing the number of locomotives and various classes of cars.

B. Statement showing the locomotive and car mileage and the average number of passenger and freight cars hauled per mile run by engines.

C. Abstract of locomotive returns.

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D. Statement of the cost of locomotive power for each month during the year.

E. General statement of the expenses of the mechanical department. Also a summary of the principal work done in the locomotive and car shops at Moncton, and in the shops at Richmond and River du Loup.

During the year the following were purchased on capital account and added to the rolling stock of the railway: 10 freight and 2 shunting locomotives, 8 first-class passenger coaches, 4 sleeping cars, 6 second-class sleeping cars, 207 box cars (80,000 pounds capacity), 9 auxiliary cars and 1 air-brake instruction car was built in the shops at Moncton also on capital.

Five passenger locomotives were purchased and 3 built in the Moncton shops to replace 8 of the smaller locomotives condemned.

One second-class sleeping car, 3 express and baggage cars, 240 box, 8 refrigerator, 175 platform cars were purchased, and 15 box, 13 platform, 1 hopper, 2 large coal cars and 8 vans were built in Moncton shops, all to replace an equal number of smaller cars condemned.

I am, yours very truly,

J. J. WALKER,

Mechanical Accountant.

G. R. JOUGHINS, Esq.

Superintendent Motive Power,
Moncton, N.B.

The following work was done in the locomotive shops at Moncton: Three new locomotives were built; 61 received general, 22 received specific and 48 received heavy repairs. Three boilers were built, 1 fire-box was made, 2 tube sheets and 4 side sheets and 4 half side sheets were applied, 16 smoke boxes were patched, 10 complete smoke boxes and 35 smoke box doors and rings were made and applied. 1,090 new tubes, and 23,055 tubes were repaired, and put in boilers of locomotives. Ninety-one boilers were tested. 5 steel and 4 wood tender frames, 4 tender tanks and 150 locomotive smoke stacks were made. 4 steel cabs were repaired, 24 fire boxes were patched, 3 steel cabs were made and 5,694 new stay bolts were put in fire boxes. 321 pairs driving wheel tires and 407 pairs engine truck and tender truck wheel tires were turned, 92 new driving wheel tires and 12 new driving wheel axles were turned, 6,670 engine studs were turned and screwed, 115,470 pounds of nuts were tapped, 420,000 bolts were threaded and 27 engine truck axles were fitted up. Eight locomotive cabs and 72 locomotive pilots were built. 278 locomotive and tenders were painted.

In addition to the above there was a large amount of work done in the shops for the Strait of Canso ferry service.

In the blacksmith shop the following work was done:—469,114 bolts were forged and 2,000,410 pounds of other forgings were made.

In addition to this the following work was done for the Maintenance of Way Department:—327 new frogs were made, 115 old frogs were repaired, 30 new switches were made, 25 old ones repaired, 247 guard rails and 15 pairs split rails for switches and 1,250 pairs jog plates were made.

Special work was done as follows:—

The installation of the 4 new Babcock and Wilcox boilers; to supply power and heat to the locomotive shops, round-house, car shops, mechanical offices and stores department, was completed.

A large amount of work was done in placing new machinery received on capital account, and in order to instal some of these machines and to increase the power for

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the drop pit, the old rope power transmitter was done away with and replaced by a new steel shaft.

A large amount of work was also done in changing the position of some of the machines in the shops.

The old boiler room, having been done away with, was fitted up as a tender shop for steel tenders, and a new overhead travelling hoist for handling ash pans, &c., was placed in the boiler shop.

There was erected in the blacksmith shop one new stationary 125 horse-power high speed engine, and a large bull doser was installed. One new blast and 1 new exhaust fan, and 8 Buffalo down draft patent forges were placed in position.

The following is the output of the brass foundry :--

42,898 lbs. castings.
287,988 lbs. bearings.
7,309 lbs. antimonial lead.
960 lbs. metallic packing.
14,249 lbs. babbitt metal.

MONCTON CAR SHOPS.

The following cars were built at Moncton : 1 Westinghouse air brake instruction car, on capital account, 8 conductor's vans, 13 platform cars, 15 box cars, 2 coal cars and 1 hopper on revenue to replace an equal number condemned.

The 15 cars are of 60,000 lbs. capacity to replace a similar number of lighter capacity and the hopper 15 tons to replace one of lighter capacity.

The following cars received heavy repairs : 1 official, 6 parlor, 17 sleeping, 4 dining, 42 first-class, 33 second-class, 9 second-class sleeping, 12 postal, 21 baggage, 15 freight vans, 5 snow ploughs, 9 flangers, 5 wing ploughs, 216 freight cars and 1 steam crane.

The following cars received light repairs : 10 sleeping, 4 dining, 63 first-class, 44 second-class, 14 second-class sleeping, 25 postal, 30 baggage cars, 33 freight vans, 6 flangers, 5 snow ploughs and 8 wing ploughs.

The following cars were burnt off, re-painted and varnished :—4 first-class, 11 second-class, 1 postal, 4 baggage and 1 freight van.

The following cars were scraped, filled, stained and varnished :—1 parlor, 1 sleeping, 10 first-class, 1 second-class, 2 second-class sleeping, 3 postal and 8 baggage.

The following cars were painted and varnished :—1 parlor, 7 first-class, 10 second-class, 5 postal, 4 baggage and 16 freight vans.

The following cars were renovated and varnished :—1 official, 4 parlor, 13 sleeping, 3 dining, 22 first-class, 11 second-class, 3 second-class sleeping, 6 postal and 6 baggage.

The following cars were re-painted :—173 box, 131 platform, 30 gondolas, 1 hopper, 12 stock, 4 refrigerator, 5 flangers, 3 wing ploughs and 4 snow ploughs.

Special work was done as follows :—92 wooden trucks were built, 38 Sterlingworth steel trucks were put under freight cars. 5,512 new, 1,710 second-hand chilled wheel and 108 new and 200 second-hand steel wheels were pressed on axles, 893 new axles turned, 655 freight cars and 2 flangers were changed from link and pin to M. C. B. couplers, 17 passenger cars were changed from Miller to master car builder's coupler, 6 passenger cars, 112 freight cars, 1 wing plough and 4 freight vans were fitted with the Westinghouse air-brakes. 31 passenger cars had the Westinghouse air-brake changed from the old automatic to the emergency, &c.

Thirty-eight passenger cars were fitted with the Westinghouse air signal appliance. 51 passenger cars were fitted with the American slack adjuster. 6 passenger cars were fitted with Pintsch gas. 6 passenger cars were fitted with wide vestibules.

In addition to the lumber prepared for the above repairs, 680,000 feet was milled on store orders.

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A large amount of work was also done to freight and baggage car trucks, chairs, ticket cases, station furniture and foot boards on account of store No. 1.

There were also 42 hand cars built and 30 heavily repaired, 20 push cars built and 16 heavily repaired.

RIVER DU LOUP SHOPS.

26 locomotives received general, 13 heavy, 31 medium, and 42 specific repairs. 15 fire boxes were patched. 29 boilers were retubed. 196 pairs of engine truck, tender and car wheels and 90 pairs of driving tires were turned.

Fourteen pilots and 2 tender frames were made and put in service.

Sixty-two engines and tenders were painted.

6,042 bolts were forged.

14,812 bolts were screwed.

4,046 studs were screwed.

RICHMOND SHOPS.

Two locomotives received heavy, 11 general, 3 medium and 96 specific repairs. 7 fire boxes were patched, 9 boilers were retubed. 173 pairs of engine truck, tender and car wheels and 30 pairs of driving tires were turned.

Five pilots and 2 tender frames were built and put in service.

35,000 bolts were forged.

41,000 bolts were screwed.

1,000 studs were screwed.

WATER SERVICE.

This has been maintained in efficient condition all over the line.

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A. INTERCOLONIAL RAILWAY.

STATEMENT showing the number of Locomotives and the various classes of Cars on the line on July 1, 1903, and June 30, 1904.

	Locomotives.	First Class Sleepers.	Second Class Sleepers.	Parlour Cars.	Dining Cars.	First Class Passenger.	Second Class Passenger.	Postal and Smoking.	Express and Baggage.	Air Brake Instruction.	Box.	Refrigerator.	Platform, 10, 15, 20 and 30 ton.	Oil Tank Cars.	Hopper, 6 and 15 tons.	Gondolas, 15 and 20 tons.	Coal Cars, 20 tons.	Stock Cars.	Auxiliary Tool Cars.	Vans.	Total.	Snow Ploughs.	Wing Ploughs.	Plungers.	Steam Ploughs.	Total.	Steam Cranes.
On hand serviceable July 1, 1903.....	287	27	24	5	7	107	92	32	47	5,087	76	2,546	15	785	42	537	120	10	95	9,654	49	10	22	2	38	3	
Condemned, July 1903.....	3	1	1	1	1	2	1	1	3	192	3	89	1	214	12	56	3	4	4	585	.....	.....	.....	.....	.....	.....
Received on capital account.	290	27	25	5	7	109	93	32	50	5,279	81	2,635	15	999	54	593	123	10	99	10,239	49	10	22	2	38	3	
Changed from large coal to platform.....	12	1	6	.....	.....	8	.....	.....	.....	207	.....	.....	.....	.....	.....	.....	.....	9	.....	235	.....	.....	.....	.....	.....	.....
Condemned July 1, 1903.....	392	31	31	5	7	117	93	32	50	5,486	84	2,686	15	999	54	542	123	19	99	10,474	49	10	22	2	38	3	
Condemned during year.....	3	.....	1	.....	.....	2	1	.....	3	192	8	89	.....	214	12	56	3	.....	4	585	.....	.....	.....	.....	.....	.....
Less rebuilt.....	11	.....	1	.....	.....	2	1	.....	3	255	10	137	.....	228	18	67	4	.....	8	734	1	.....	.....	.....	.....	.....
To be rebuilt	8	.....	1	.....	.....	.....	.....	.....	3	255	8	137	.....	1	.....	53	.....	.....	8	466	.....	.....	.....	.....	.....	.....
Add serviceable and repairing	3	.....	.....	.....	.....	2	1	.....	.....	.....	2	.....	.....	227	18	14	4	.....	.....	268	1	.....	.....	.....	.....	.....
Total.....	299	31	31	5	7	115	92	32	50	5,486	82	2,686	15	772	36	528	119	19	99	10,206	48	10	22	2	38	3	
Total.....	302	31	31	5	7	117	93	32	50	5,486	84	2,686	15	999	54	542	123	19	99	10,474	49	10	22	2	38	3	

J. T. WALKER,
Mechanical Accountant.

MOXTON, N.B., June 30, 1904.

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B.—INTERCOLONIAL RAILWAY.
 STATEMENT of Locomotives and Car Mileage, year ending June 30, 1904.

Month.	LOCOMOTIVE MILEAGE.			CAR MILEAGE.				Snow Ploughs.	Average Passenger.	Average Freight.
	Passenger.	Freight.	Passenger.	Express, Postal and Baggage.		Freight.	Total.			
				Passenger.	Freight.					
1903.										
July.	252,511	303,128	1,021,865	132,815	5,128,872	6,886,562	5.77	17.89		
August.	240,842	287,291	989,615	124,205	5,143,451	6,557,771	5.87	17.91		
September.	231,868	291,955	974,090	417,916	5,089,196	6,481,502	6.00	17.43		
October.	217,294	323,348	833,136	379,992	5,717,536	6,960,864	5.58	17.78		
November.	195,817	307,113	711,095	351,136	5,545,739	6,605,960	5.42	18.05		
December.	211,411	338,197	773,028	375,351	5,639,190	6,787,572	5.41	16.67		
1904.										
January.	207,667	321,773	707,451	348,026	1,802,788	5,858,268	5.09	14.93		
February.	200,435	306,659	683,615	338,076	4,452,306	5,473,997	5.10	14.52		
March.	245,520	308,725	771,055	366,211	6,165,094	7,392,393	5.28	16.72		
April.	208,217	374,949	781,833	360,761	6,934,634	8,077,228	5.48	18.49		
May.	205,730	314,338	739,374	361,796	6,098,536	7,499,706	5.35	17.72		
June.	224,868	323,710	871,060	402,272	5,565,614	6,838,946	5.66	17.19		
	2,612,180	3,891,399	9,860,220	4,568,593	66,611,946	81,030,759	5.52	17.12		

J. T. WALKER,
Mechanical Accountant.

MONCTON, N.B., June 30, 1904.

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C. INTERCOLONIAL RAILWAY.

ABSTRACT of Locomotive Returns for year ended June 30, 1904.

MONTHS.	CONSUMPTION.							AVERAGE CONSUMPTION PER 100 MILES.				
	Hours in Steam.	Locomotive Mileage.	Tons of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.	Miles run to 1 hour in Steam.	Pounds of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.	
1903.												
July.....	68,311	703,536	46,329	29,868	14,883	13,629	10.29	8,383	4.24	2.11	1.93	
August.....	64,246	664,579	25,218	27,183	12,980	12,301	10.31	8,499	4.13	1.95	1.85	
September.....	65,027	661,107	25,438	27,600	12,989	12,813	10.16	8,618	4.17	1.96	1.93	
October.....	67,807	684,894	28,021	28,238	12,992	12,906	10.10	9,161	4.12	1.89	1.88	
November.....	63,638	636,907	27,112	27,399	12,307	12,497	10.00	9,535	4.30	1.93	1.96	
December.....	70,413	695,841	32,405	30,474	13,013	13,911	9.87	10,335	4.37	1.87	2.00	
1904.												
January.....	68,260	673,116	31,318	29,482	12,602	13,513	9.86	10,422	4.37	1.87	2.01	
February.....	71,190	663,747	30,719	30,798	13,243	13,542	9.33	10,377	4.61	1.99	2.04	
March.....	77,241	746,996	34,872	36,717	15,257	16,316	9.67	10,457	4.91	2.01	2.18	
April.....	72,239	727,333	31,905	35,201	14,811	16,297	10.06	9,826	4.83	2.03	2.23	
May.....	64,770	684,801	26,903	32,016	14,000	15,196	10.25	8,820	4.68	2.05	2.22	
June.....	65,822	681,938	26,898	33,711	14,375	15,238	10.36	8,835	4.34	2.10	2.23	
	820,991	8,224,858	346,928	368,996	163,545	168,132	10.01	9,448	4.48	1.98	2.01	

J. J. WALKER,
Mechanical Accountant.

Moncton, N.B., June 30, 1904.

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D. INTERCOLONIAL RAILWAY.
STATEMENT of the cost of Locomotive Power for each month from July 1, 1903, to June 30, 1904.

Month.	Miles run by Locomotives.	AVERAGE PER 100 MILES.															
		Superintendence.	Engine-men's Wages.	Fuel.	Oil and Waste.	Repairs to Engines, Tenders and Tools.	Water.	Engine Houses and Turn-tables.	Total.	Superintendence.	Wages.	Fuel.	Oil and Waste.	Repairs.	Water.	Engine Houses and Turn-tables.	Total.
1903.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July.	703,536	1,306 18	44,371 59	94,455 13	2,732 38	40,914 39	1,843 95	3,472 03	190,155 65	19	6 32	13 50	39	5 81	26	56	27 03
August	664,579	1,210 75	43,890 85	92,030 68	2,442 59	38,045 31	6,813 56	4,050 10	188,483 84	18	6 60	13 85	37	5 73	1 02	61	28 36
September.	661,167	1,152 24	42,256 28	94,401 90	2,560 16	31,080 61	2,004 25	3,597 06	177,052 53	17	6 39	14 28	39	4 70	30	54	26 77
October.	684,891	1,227 41	45,088 36	104,639 90	2,722 03	39,756 23	3,539 13	4,553 28	201,526 34	18	6 58	15 28	40	5 80	52	66	29 42
November	636,907	1,096 45	42,640 92	101,311 18	2,800 11	39,079 32	4,979 10	5,673 62	197,640 70	17	6 69	15 91	45	6 14	78	89	31 03
December	695,841	1,118 49	74,049 66	118,082 00	2,913 04	43,538 52	5,920 38	5,860 37	251,482 46	16	10 64	16 47	42	6 26	85	84	36 14
1904.																	
January	673,116	1,147 79	73,776 46	109,541 39	2,924 56	41,567 17	4,063 89	7,025 97	240,047 23	17	10 96	16 27	43	6 18	61	1 01	35 66
February	663,747	1,241 21	52,486 03	111,897 82	3,048 98	49,919 70	6,057 29	6,845 09	231,496 12	18	7 91	16 86	46	7 52	91	1 03	34 87
March	746,996	1,196 38	56,307 70	120,612 93	3,406 89	35,076 88	5,754 64	5,361 21	227,716 63	16	7 54	16 15	46	4 69	77	71	30 48
April	727,333	1,438 82	52,494 97	103,722 01	2,837 78	44,045 69	1,773 14	4,831 33	211,143 74	20	7 22	14 26	39	6 06	24	66	29 03
May.	684,801	2,112 68	51,877 50	94,163 18	2,680 27	47,257 91	3,255 73	4,104 70	295,451 97	31	7 57	13 75	39	6 90	48	60	30 00
June.	681,938	2,064 26	52,471 59	89,569 13	2,919 68	142,359 11	2,053 59	3,287 69	294,725 05	30	7 69	13 14	43	20 88	30	48	43 22
8,224,858		16,372 66	631,711 91	1,234,927 25	34,048 47	592,640 87	48,058 65	59,162 45	2,616,922 26	20	7 68	15 01	41	7 21	58	72	31 81

J. J. WALKER,
Mechanical Accountant.

MONCTON, N.B., June 30, 1904.

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E.—INTERCOLONIAL RAILWAY.

GENERAL STATEMENT of the Expenses of the Mechanical Department, year ended
June 30, 1904.

The miles run by trains.....	6,593,579
" " engines.....	8,224,858
" " cars.....	81,030,759
" " snow ploughs.....	84,458
Cost of locomotive power.....	\$2,616,922 26
Cost of car repairs—	
Repairs to passenger cars.....	\$181,201 65
" postal, express and baggage cars.....	54,354 50
" freight cars and vans.....	601,030 04
Oil and waste for packing.....	8,890 72
Repairs to snow ploughs and flangers.....	6,611 71
	\$852,088 62
The cost of locomotive power—	
Per 100 miles by train.....	\$40 24
" " engines.....	31 81
" " cars and ploughs.....	3 22
The cost of repairs to cars and ploughs	
Per 100 miles by train.....	\$13 10
" " engines.....	10 36
" " cars and ploughs.....	1 05
The cost of oil and waste for packing—	
Per 100 miles by train.....	\$0 13
" " engines.....	0 11
" " cars and ploughs.....	0 01
The cost of repairs to cars per mile run by them—	
Passenger.....	\$1 83
Postal, express and baggage.....	1 19
Freight cars and vans.....	0 90
Ploughs and flangers.....	7 82

J. T. WALKER,
Mechanical Accountant.

MONCTON, N.B., June 30, 1904.

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INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1903.							
July 3.	18.35		Special	J. Scott	J. Scott	122	Riv. du Loup yard
" 4.	6.10		"	A. G. Cameron	J. Gallivan	174	N. Sydney Jct.
" 4.	3.00		"	W. Brownrigg	J. S. Mitchell	230	New Glasgow
" 6.	13.40		"	G. M. Armstrong	A. Wood	17	Amherst
" 8.	10.00	89	Freight	B. Wood	H. D. Thompson	13	Pugwash Jct.
" 8.	11.00		Shunter	Jos. Boyer	W. Savidant	248	Cedar Hall
" 8.	17.00		Working	J. Doiron	W. Duncan	258	2 miles West Metapedia
" 9.	6.00						West of Petitcodiac
" 11.	2.40		Special	J. Guay	—Ouellet	72	Lévis
" 15.	14.45		Working	W. N. Bovard	M. O'Shaughnessy	269	Kent Junction
" 20.	7.25			E. L. Watts	T. G. Scott	9	Dalhousie wharf
" 25.	10.16	24	Freight	G. W. Hopper	R. Kennedy	281	Amherst
" 29.			Shunter		A. McGrath		D. W. T. Halifax
Aug. 3.	16.30	75	Freight	J. W. Henderson	E. Rushton	282	Rogersville tank
" 3.	8.07	36	Express	M. Cummings	R. Bulmer	62	Eel river
" 15.	13.10	3	"	Jas. Daley	T. Wilkins	36	Pointe du Chêne
" 18.	8.15		Pilot	A. Laliberté	R. Jamieson	195	Daveluyville
" 18.	9.45		Special	J. Michaud	W. Fraser	223	McGregor's sdg.
" 20.			Shunter		B. Lutz	122	Campbellton
" 21.	24.45		Pic-nic (special)	H. A. Baker	F. Chisholm	151	Brookfield
" 22.	23.00		Shunter		F. Gagnon	120	Ste. Flavie yard
" 27.	8.15		Special	Geo. M. Armstrong	N. Sinclair	17	Amherst
" 29.	18.35		"		W. Anderson	286	St. John
" 30.	21.15		Shunter		C. Coleman	190	Halifax yard
" 31.	11.00		Special	W. A. Fleming	H. Cummings	207	Stellarton
" 31.	10.00		Shunter		A. McGrath	188	Halifax yard
" 7.	23.20	76	Freight	F. Côté	Jos. Collet		Ste. Rosalie Jct.
Sept. 2.							Springhill Jct.
" 3.							North St. Station
" 6.	8.45	33	Express	W. A. Mitchell	H. C. Goddard	171	St. Lambert
Sept. 8.	18.30		Working	J. Doiron	J. Dussault	61	
" 11.	9.15		Special	E. Herritt	W. Duncan	250	Millstream
" 12.	7.00		Special		A. Probert	101	Acadia yard
" 12.	21.25		Special	F. Walsh	C. Skimmer	87	Fraser Bros. Sdg. Richmond
" 16.	10.45		Special	R. Doyle	R. Wilson	280	Rockingham
" 16.		33	Express		H. Atkinson		Ste. Made-line
		76	Freight		Jos. Dussault		
Sept. 25.	2.00		Special	G. A. McKay	J. Hayward	225	Albion
" 25.	24.30		Shunter		W. Megarity	189	St. John yard
Oct. 3.	21.00	94	Mixed	— Frizzle	C. Stockall	24	Richmond

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RAILWAY.

line of the Intercolonial Railway during the year ended June 30, 1904.

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
A. Berubé	Brakeman	While coupling cars	Slightly injured.	
J. E. McNeil	"	While uncoupling cars	2 fingers injured.	
Anthony Costa	"	While shunting	Foot injured	
R. J. Ward	"	"	Finger injured	
J. D. McNeil	"	"	Foot injured	
Eug. Charest	"	"	"	
A. Dassiglyvas	Water boy	Foot caught between draw-bars	Foot bruised	
Jos. Roe	Neither	Found dead on track by section-man.	Fatal	Accidental.
J. Guenette	Passenger	Found in Lévis yard	Arm cut off	
Fred. Carey	Fireman	While coaling engine	Finger slightly injured.	
T. Sullivan	Brakeman	While coupling cars	Slightly injured.	
Roy Johnson	"	While unloading freight	Foot injured	
A. Rockwell	Car inspector	While working under cars	Leg injured	
E. B. McAnn	Brakeman	While walking past tender struck by falling coal.	Head cut	
Miss McNaughton	Passenger	Jumped from train while in motion.	Arm broken	
Boy named Ratigan	Intending passenger	Fell while landing from steamer at wharf.	Head cut	
E. Beaulieu (boy)	Neither	While crossing track	Fatal	Accidental.
Jos. Levesque	Brakeman	While shunting	Hips injured	
D. Jamieson	"	"	Foot injured	
Mrs. G. Brinton	Passenger	Jumped from train while in motion.	Slightly injured	
Geo. Topping	Yardman	Fell while in act of jumping on van.	Arm bruised and finger cut off.	
J. E. Trites	Brakeman	While coupling cars	Hand crushed	
Geo. Stewart (boy)	Neither	While crossing track struck by engine.	Head bruised	
R. Stewart	Shunter	Engine colliding with gangway	Foot injured	
D. C. Johnson	Brakeman	While coupling engine to cars	Slightly injured.	
McCanty	"	While coupling cars	Fingers injured.	
Jos. Baïl	Neither	While stealing ride fell between cars.	Fatal	Accidental.
H. W. Jones	Asst. Agent	While checking train caught between cars.	Slightly injured.	
Mr. Leitch	Neither	While walking in depot struck by brick.	Slight scalp wound.	
B. Gilchrist (boy)	Passenger	While standing in vestibule train parted.	Foot slightly injured.	
Frank LeBlanc	Brakeman	While shunting	Hand crushed.	
C. Henderson	"	While coupling cars	Two fingers injured.	
Neil Dwyer	Neither	Found on track	Fatal	Accidental.
Emanuel Pettinco	"	While crossing track struck by train	Injured slightly.	
Isaac Byers	"	" " " "	Fatal	No inquest.
H. Atkinson	Driver	Collision between trains	"	That G. D. Stinson, train despatcher, was responsible.
A. Huard	Fireman .....	.....	" .....
A. Bernier	Brakeman .....	.....	Slightly injured.	
J. Dussault	Driver .....	.....	" .....
J. Taylor	Brakeman	While shunting	Hand injured	
Jas. Earle	"	While getting on car struck a switch.	One rib broken	
Les Mullins	"	While stepping off engine struck switch.	Leg slightly injured.	

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INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1903.							
Oct. 7.	.....	133	Express	W. Morgan	T. Wilkins	63	Petitcodiac
" 9.	12.00	.....	Shunter	.....	S. Watson	123	Moncton yard
" 12.	19.30	.....	Special	Jas. Card	G. DeMill	253	Beresford
" 15.	6.30	.....	Special	Geo. M. Armstrong	H. Snider	17	Amherst
" 22.	10.20	33	Express	B. Walker	O. Brock	76	L'Islet
Oct. 24.	12.28	1	Express	T. Guinan	J. Hunter	162	1 mile West Athol
" 29.	8.45	.....	Shunter	.....	J. Johnson	30	Truro
" 30.	7.20	.....	Special	A. Vachon	Geo. Roberge	115	St. Charles
Nov. 2.	.....	.....	Shunter	R. Hunter	N. Sinclair	17	Amherst
" 5.	19.08	26	Express	W. J. Ellis	E. White	73	Belmont
" 5.	14.00	.....	Shunter	.....	G. Conway	185	Carson's Siding
" 7.	14.00	.....	Shunter	F. O. Moffatt	W. Meach	109	North Sydney
" 7.	.....	.....	.....	.....	.....	.....	Between St. Hyacinthe and Ste. Rosalie
" 9.	14.00	.....	Special	J. E. McLellan	A. Johnston	174	Jefferson's Siding
" 11.	7.00	.....	Special	S. G. Nickerson	J. Oakleaf	9	Dalhousie Wharf
" 12.	16.15	23	Freight	H. B. Gordon	W. Gross	242	Amherst
" 13.	11.30	.....	Special	A. Gamache	W. Duncan	213	Amqui
" 25.	19.30	.....	Shunter	.....	M. O'Brien	127	Moncton
" 26.	13.40	33	Express	W. A. Mitchell	H. C. Goddard	172	DeLotbinière
" 27.	9.45	.....	Shunter	D. Laplante	J. Scott	117	Riv. du Loup
" 30.	23.00	.....	Shunter	.....	B. Lutz	122	Campbellton
Dec. 7.	16.00	.....	.....	R. D. Sharp	A. H. Fryers	53	Moncton
" 9.	16.45	.....	Shunter	.....	D. McGuigan	118	"
" 24.	20.30	19	Express	J. Martin	N. McMullin	161	North Sydney Junction
" 25.	9.00	.....	Shunter	.....	W. Savidant	120	Ste. Flavie
" 28.	18.30	.....	.....	.....	J. Kelly	127	Truro
" 29.	14.30	4	Mixed	W. L. Broad	W. J. Coffey	184	Hampton
" 31.	21.35	37	Freight	W. F. Ferguson	J. Smith	31	Charlo
1904.							
Jan. 1.	8.05	.....	Special	R. H. Hunter	N. Sinclair	17	Amherst
" 2.	15.21	148	Freight	L. Gingras	G. Cloutier	180	St. Apollinaire
" 6.	5.00	.....	Shunter	.....	G. De Mill	127	Moncton
" 6.	18.25	33	Express	C. A. Johnston	B. Mitchell	199	} St. Eugene
					H. Gingras	82	
" 13.	6.30	.....	Special	F. Cote	J. Collet	208	Hadlow
" 14.	10.30	.....	Working	C. B. Clarke	J. Gilfillin	53	Moncton Yard
" 18.	10.30	.....	Special	S. Parent	P. Michaud	.....	Gravel Siding
" 21.	11.00	147	Freight	L. N. Letarte	A. Guemette	83	Aston Junction
" 27.	10.49	.....	.....	M. Dussault	L. Lenahan	282	} West of Hadlow
					F. Hall	310	
" 29.	12.05	.....	Working	Nap. Lavesque	E. Henderson	234	½ mile West Amqui
" 28.	14.45	Pilot	F. Laliberta	O. Rossignol	182	St. Charles Yard
" 25.	Shunter	Stellarton
Feb. 1.	16.00	J. Johnston	30	Truro

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RAILWAY.

line of the Intercolonial Railway during the year ended June 30, 1904—*Continued.*

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
T. Wilkins	Driver	Engine derailed	Hips injured	
J. Tweedie	Fireman		Ankle sprained	
W. O. Lutes	Brakeman	While making up train struck switch.	Hip injured	
Jas. Card	Conductor	Chocking wheel	Finger injured	
W. D. Graves	Brakeman	While shunting	Two fingers injured.	
Adelard Guimond	Neither	Struck by train while crossing track in team.	Fatal	Accidental.
Ferd. Guimond	"		Leg cut off	
David Pettigrew	"	Struck by train while crossing track.	Fatal	Accidental.
Thos. Kennedy	" (boy)	Missed footing getting on car	Foot injured	
M. Samson	Brakeman	While shunting	Hand injured	
W. J. Rogerson	"	"	"	
E. Dryden	Fireman	Jumped from engine	Leg broken	
W. Heighton	Yardmaster	Fell from tender of engine	Thumb dislocated.	
Malcolm McNeil	Brakeman	While coupling cars	Finger injured	
Mr. Nichols	Joint Agent— G.T.R. & I. C. R., St. Hyacinthe.	Found dead on track	Fatal	Accidental death.
S. N. McKinnon	Brakeman	While coupling cars	Broke his thumb	
F. Steeves	"	Struck by car while shunting	Head injured	
A. Berry and wife	Neither	Struck by train while crossing track in team.	Slightly injured.	
W. Duncan	Driver	While stepping from engine	Sprained ankle	
F. A. Murray	Brakeman	While shunting	Finger injured	
H. C. Goddard	Driver	Engine derailed	Fatal	Accidental.
R. Ruel	Fireman	"	Shoulder injured	
J. Lalonde	"	Putting waste under cylinder	Arm injured	
F. Steeves	Brakeman	Slipped while getting on engine	Hip injured	
J. T. Coates	Brakeman	While coupling cars	Finger injured	
L. Black	Foreman shunter.	"	Ankle injured	
Mrs. Martin	Passenger	Missed her footing in getting off train.	Leg broken	
M. Cote	Yardman	While coupling cars	Finger bruised	
J. H. Blair	Brakeman	"	Head injured	
Mrs. Kilpatrick	Passenger	Jumped from train while in motion.	"	
A. Arseneau	In charge of horse.	Passing between cars, foot caught between drawbars.	Foot injured	
Miner Purdy	Brakeman	While uncoupling engine from cars.	Hand injured	
Jos. Lamontagne	Neither	While walking on track struck by train.	Fatal	Accidental.
C. B. Scurr	Shunter	While uncoupling cars	Hand injured	
Honore Lapierre	Neither	Team struck while crossing track	Fatal	Accidental.
A. England	Brakeman	Collision between trains	Right leg injured	
Christopher Kennan	Employee	Foot caught between drawbars	Slightly injured	
J. Proulx	Brakeman	While shunting	Back sprained	
Alp. Demaise	"	While unloading freight	Finger crushed	
Jos. Gagné	Neither	While walking on track struck by train.	Fatal	Accidental.
J. A. Côté	"	"	Slightly injured	
Eug. Gosselin	"	"	Fatal	No inquest.
D. S. Halliday	Yardman	Caught between engine and cars	Slightly injured	
W. C. Layton	Foreman shunter.	While coupling cars	Finger injured	

SESSIONAL PAPER No. 20

RAILWAY.

line of the Intercolonial Railway during the year ended June 30, 1904 *Continued.*

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
John Palmer.....	Brakeman....	Jumped from engine.....	Leg broken and otherwise injured.	
A. Delaney.....	Yardmaster....	While uncoupling cars.....	Head injured....	
Mrs. Morrison.....	Passenger....	Train derailed.....	Shock to system.	
Miss Morrison.....	".....	".....	Hand and face injured.	
Mrs. Pyche.....	".....	".....	Spine and back injured.	
J. S. McDonald.....	".....	".....	Scalp wound, shoulder and back injured.	
W. L. Haldimand.....	".....	".....	Face cut and shoulder injured.	
Miss F. Bentley.....	".....	".....	Leg injured and eye bruised.	
Mrs. J. Glassey.....	".....	".....	Fatal.....	Accidental.
W. A. Campbell and wife.....	".....	".....	Slightly injured.	
S. Ridout.....	".....	".....	Back, arm and hip injured.	
J. E. Blair.....	Baggagemaster	".....	Cut about head, face and back injured.	
Wm. Hillehey.....	Passenger.....	".....	Scalp wound, face cut, nose broken.	
E. J. Hudd.....	".....	".....	Shoulder and ribs injured.	
W. K. Wickwire.....	".....	".....	Face bruised, hand and arm injured.	
F. W. Demille.....	".....	".....	Head cut.....	
M. B. Keith.....	".....	".....	Hurt in groin, back and leg.	
J. Redford.....	".....	".....	Head cut, back and arm bruised.	
D. C. Crowley.....	Brakeman....	".....	Scalp wound and breast injured.	
C. Biswanger.....	Baggagemaster	".....	Back and right leg injured.	
R. G. Duncan.....	Conductor....	".....	Fatal.....	Accidental.
G. F. Bissett.....	Passenger....	Train derailed.....	Scalp wound, hand and hip injured.	
H. R. Trotter.....	".....	".....	Face slightly cut.	
G. W. Marsh.....	".....	".....	Face cut, arm and leg injured.	
Matti Aradpikkarainen.	".....	".....	Slightly injured.	
Mrs. A. B. Vance.....	Passenger....	".....	Head and back injured.	
Mrs. A. T. Vance.....	".....	".....	Face cut and eye injured.	
W. A. Olmstead.....	".....	".....	Slightly injured.	
D. D. Rutherford.....	".....	".....	Back injured.....	
P. Kelly.....	Brakeman....	".....	Face bruised and leg injured.	
Herbert Uttley.....	Passenger....	".....	Head cut and arm injured.	
F. A. Bustin.....	Express Agent	".....	Leg broken.....	
Thos. Appleby.....	News Agent..	".....	Face and head injured.	
J. Simmonds.....	Porter.....	".....	Slightly injured.	
M. Savatorie.....	Passenger....	".....	Head and back injured.	

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INTERCOLONIAL

RETURN of Accidents and Casualties which have occurred in Canada on the

Date.	Time of Day.	No. of Train.	Description of Train.	Name of Conductor.	Name of Driver.	No. of Engine.	Place of Accident.
1904.							
Feb. 3.	9.30	25	Express	R. G. Duncan	John Ross	"	Milford
" 3.	"	"	"	"	"	"	"
" 3.	"	"	"	"	"	"	"
" 3.	"	"	"	"	"	"	"
" 3.	"	"	"	"	"	"	"
" 4.	15.45	20	"	Geo. C. Keys	H. McCaulay	237	Hopewell
" 6.	12.15		Pilot	J. A. Beaulieu	G. Roberge	182	Gravel siding
" 8.							St. Romuald
" 10.	7.00	89	Freight	J. Mahoney	F. Gratton	26	Meadowville
" 15.	11.55	28	Mixed	R. A. McDonald	H. Stewart	13	2 miles east of Sylvester's
" 16.	8.00						1/2 mile west of St. Cyrille
" 26.	14.38	23	Express	Geo. Johnston	R. Mitchell	173	Aston Junction
" 26.	24.54	26	"	W. J. Dickson			Stewiacke
" 27.	17.40	33	"	W. A. Mitchell	Louis Dutil	98	St. Lambert
Mar. 1.	16.30	26	"	W. J. Dickson	Theo. Wilkins	238	Penobscuis
" 10.	8.45		Special	D. J. McDonald	A. B. Purdy	222	Pirate Harbour
" 11.	5.00		"	A. A. McNeil	D. Matheson	177	Orangedale
" 11.	19.10		"	J. E. Fleming	J. C. McKay	263	2 miles east of Ferrona
" 12.	23.25	69	Express	C. J. Rhodes	W. Lovett	56	Rockingham
" 21.	13.00		Special	A. Gauvreau	Emile Roy	204	St. Hyacinthe
" 24.	9.15		Pilot	A. Arcand	Geo. Roberge	182	Fitch's Siding
April 1.	21.30	33	Express	A. McLellan	R. Bulmer	235	Moncton yard
" 1.	6.57	33	"	E. McKenna	G. Topping	74	St. Fabien
" 5.	9.30	7	"	J. H. Sproul	C. F. Whitney	55	St. John
" 5.	19.30		Special	R. Doyle	A. Robbins	142	Milford
" 8.	12.50		"	A. Philips	H. McDonald	79	Rockingham
" 10.	11.00		"	W. A. Warman	D. Cool		5 mls. west Berry's Mills
" 15.	7.45	152	Express	A. Bouchard	Geo. Fendlay	198	Montreal
" 16.	8.50	152	"	J. Bouthillette	G. Goddard	197	St. Madeline
" 18.	16.25		Shunter		John Hessian	95	Richmond
" 28.	2.15		"	R. Redmond	C. Coleman	190	"
" 29.	21.15	75	Freight	A. Dumas	N. Henry	249	Chaudiere Junction
" 30.	20.00		Special	M. McGillivray	J. H. Shaw	218	New Glasgow
" 30.	20.45		"	P. Dumas	F. Berube	269	St. Fabien
May 1.	5.25		"	Geo. Armstrong	H. Cameron	234	Sussex
" 1.	7.00	40	Freight	Jas. Swetman	W. F. Smallwood	298	Herbert's Siding
" 2.	18.05	24	"	L. Hicks	W. Gross	284	Thomson
" 3.	15.15		Special	Geo. Armstrong	L. Bradshaw	266	Springhill Junction
" 7.	6.15		"	J. S. Nickerson	H. Cameron	119	Palmer's Pond
" 9.	12.20		"	D. J. McDonald	Harry Thompson	221	New Glasgow
" 28.	21.30	40	Freight	J. C. Ayer	J. Williamson	298	Jacquet River
June 1.	5.55	75	"	V. Camuel	A. Matthews		St. Octave
" 4.	5.00		Special	G. A. McKay	A. Henderson	221	New Glasgow
" 5.	17.30		"	A. Bonneau	F. Goddard	207	1 mile west of St. Bazile
" 10.	21.00		Shunter		C. Skinner	189	Richmond yard
" 17.	13.15	57	Freight	Thos. Guinan	T. W. Hennessy	275	1 mile west of Richmond
" 23.	10.00		Shunter		Geo. Spear	105	St. John yard
" 27.	14.15		Special	R. H. Wilkins	H. McDonald	210	Grand Narrows

SESSIONAL PAPER No. 20

RAILWAY.

line of the Intercolonial Railway during the year ended June 30, 1904—Continued.

Name of Person Injured.	Whether Passenger or Employee.	Particulars of Accident.	Extent of Injury.	Verdict of Coroner's Jury.
G. Papaluce	Passenger.	Train derailed	Face and hand slightly injured	
G. Catalano	"	"	Slightly injured.	
P. Aditka	"	"	Chest and head injured.	
Matti Aroid	"	"	Slightly injured.	
G. Sisti	"	"	Head cut	
G. Marensi	"	"	Head injured.	
Robt. Williams	Brakeman	While tightening steam coupling	Thumb crushed.	
Odilon Filion	"	While shunting.	Hand injured.	
F. White	"	While coupling cars	Hand bruised.	
S. L. Briggs	"	Fell from train.	Fatal	Accidental.
Jas. McDonald	Passenger	Jumped from train while in motion.	"	That death resulted from pneumonia.
Jos. Fortier	Neither	Found dead on track.	"	Accidental.
Z. Martel	"	Train struck team while crossing track.	Hip injured.	
B. Anthony	Passenger	Fell from train.	Slightly injured.	
G. McDonald	Brakeman	While in act of getting on train.	Head cut.	
Geo. Brown	Fireman	While taking side rod off engine.	Thumb cut.	
W. Leithhead	Brakeman	Slipped from top of box car.	Ankle injured	
John A. McLean	Neither	Found on track.	Fatal	Accidental.
Jos. Solon	"	"	"	"
C. Steele	Brakeman	Fell from car	Ankle injured	
A. Gauvreau	Conductor	"	Feet and hip injured.	
F. Nolin	Brakeman	While shunting.	Thigh crushed; died April 1, 1904.	No inquest.
W. F. Daley	Neither	Fell while getting off train in motion.	Fatal	Accidental.
Rev. M. Audit	"	"	Leg broken.	
Bernard Callaghan	"	While walking on track, struck by engine.	Fatal	
Roland Ross	"	While walking on track, struck by train.	"	"
F. Boomer	Brakeman	While uncoupling cars.	Finger injured.	
A. Laviolette	"	Fell between cars.	Fatal	
Vital Magrau	Neither	Struck by train.	Face bruised.	
A. Maconrelle	Passenger	Jumped off train in motion.	Face and hands scratched.	
H. Osbrune	Shunter	While coupling cars.	Finger crushed.	
Geo. McDonald	Switchman	Struck by cars.	Fatal	No inquest.
Jos. Lemieux	Brakeman	While coupling cars.	Arm injured.	
A. Costa	"	Walked over end of box car.	Leg injured.	
Philippe Boulet	Fireman	While placing engine at water tank.	"	
Titus Eagles	"	While cleaning fire box.	Finger injured.	
John Stephenson	Brakeman	While shunting	"	
Roland H. Clark	"	Fell while shunting	Chin injured.	
J. D. Elliott	"	While standing on steps of engine came in contact with van on siding.	Head cut.	
J. E. Moore	"	While coupling cars	Hand injured.	
H. Sullivan	Neither	While walking on track, struck by train.	Foot cut off.	
Alex. Burns	Passenger	Fell off train in motion.	Hand cut off.	
Antoine Ouellet	Neither	While crossing track, struck by train.	Fatal	Accidental.
B. Dempsey	Brakeman	While riding on side of car, struck by switch.	Arm injured.	
W. Walling	Fireman	Fell from engine.	Badly injured.	
W. McNeil	Shunter	While coupling cars.	Hand injured.	
Jas. Jamp	Neither	Struck by train while crossing track.	Head injured.	
Beverley Hines	"	Fell while getting on car.	Two toes cut off.	
A. H. McDonald	Brakeman	While shunting	Finger injured.	

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WINDSOR BRANCH RAILWAY.

OFFICE OF THE GENERAL MANAGER OF GOVERNMENT RAILWAYS,
 MONCTON, N.B., September 15, 1904.

SIR,—I have the honour to submit the following statements showing the results of the working of the Windsor Branch Railway for the year ended June 30, 1904.

No. 1.—Revenue Account.

No. 2.—Maintenance of way and works.

No. 3.—General balance.

No. 4.—Statements of earnings.

I also send you the report of the engineer of maintenance on the condition of the permanent ways and works.

This line, 32 miles in length, was operated during the year by the Dominion Atlantic Railway Company on the same terms as last year, the company being allowed to retain two-thirds of the gross earnings, the balance, one-third, being paid over to the government, the latter maintaining the line.

The gross earnings show a considerable increase, as follows:—

Earnings, 1903-04..	\$53,634 05
Earnings, 1902-03..	42,560 81
	<hr/>
Increase..	<u>\$11,073 24</u>

The increase was in freight traffic. There was a slight decrease in passenger traffic.

The net earnings for the year were \$29,352.96.

The permanent way and works received necessary repairs and are in good order.

I have the honour to be, sir,

Your obedient servant,

D. POTTINGER,
General Manager, Government Railways.

Collingwood Schreiber, Esq., C.M.G.,
 Deputy Minister and Chief Engineer,
 Department Railways and Canals,
 Ottawa, Ont.

SESSIONAL PAPER No. 20

No. 1.—WINDSOR BRANCH RAILWAY.

REVENUE ACCOUNT, year ended June 30, 1904.

Previous Year.	Expenditure.	Year ended June 30, 1904.	Previous Year.	Earnings.	Year ended June 30, 1904.
§ cts.		§ cts.	§ cts.		§ cts.
17,843 19	Main. of way and works	24,281 09	14,747 39	Passenger traffic	14,527 58
24,717 62	Balance	29,352 96	26,661 58	Freight traffic	37,950 95
			1,151 84	Mails	1,155 52
42,560 81		53,634 05	42,560 81		53,634 05

T. WILLIAMS,
Chief Acct. and Treasurer

E. & O. E.,
MONCTON, N.B., June 30, 1904.

No. 2.—WINDSOR BRANCH RAILWAY.

MAINTENANCE of Way and Works, year ended June 30, 1904.

Previous Year.		Year ended June 30, 1904.
§ cts.		§ cts.
11,427 84	Repairs of track	10,117 96
372 96	Rails and fastenings	5,050 13
1,972 67	Ties	2,724 27
584 36	Bridges	1,587 51
22 14	Signals	46 80
544 66	Culverts, cattle guards, &c	1,999 03
617 80	Wharf at Windsor	7 50
477 36	Buildings and platforms	604 65
14 63	Hand-cars and trollies	7 10
337 54	Removing snow and ice	541 23
170 20	Tools and repairs of same	191 90
617 65	Fencing	216 29
637 11	Accountant's office and expenses	1,078 69
46 27	Miscellaneous	108 03
17,843 19		24,281 09

T. WILLIAMS,
Chief Acct. and Treasurer.

E. & O. E.,
MONCTON, N.B., June 30, 1904.

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No. 3.—WINDSOR BRANCH RAILWAY.

DR.		GENERAL BALANCE, year ended June 30, 1904.		CR.			
1904.		\$	cts.	1904.	\$	cts.	
June 30.	To Stores.....	5,898	64	June 30.	By Dominion account.	6,051	85
	Old rails		45				
	D. A. Ry.....		108				
			6,051				85
			85				85

E. & O. E.,
 MONCTON, N.B., June 30, 1904.

T. WILLIAMS,
Chief Acct. and Treasurer.

No. 4.—WINDSOR BRANCH RAILWAY.

MONTHLY Statement of Receipts One-third Earnings.

Month.	Passenger Traffic.	Freight Traffic.	Mails.	Totals.
	\$	\$	\$	\$
July, 1903	1,672	2,055	96	3,824
August "	1,912	2,152	96	4,161
September "	2,561	4,337	96	6,998
October "	1,427	5,521	96	7,046
November "	852	5,007	96	5,956
December "	1,015	3,032	96	4,145
January, 1904	678	2,861	95	3,635
February "	643	3,000	95	3,739
March "	743	3,565	95	4,404
April "	785	2,489	95	3,370
May "	927	2,638	95	3,062
June "	1,302	1,889	95	3,287
	14,527	37,950	1,155	53,634
	58	95	52	05

E. & O. E.,
 MONCTON, N.B., June 30, 1904.

T. WILLIAMS,
Chief Acct. and Treasurer.

WINDSOR BRANCH RAILWAY.

OFFICE OF THE ENGINEER OF MAINTENANCE,
MONCTON, N.B., September 10, 1904.

SIR,—I have the honour to submit herewith the report of the maintenance of the Windsor Branch for the year ending June 30, 1904.

TRACK.

During the past year 5,357 feet of 4-inch and 2,527 feet of $4\frac{1}{4}$ -inch rails were taken up, and 5,117 feet of 4-inch, 1,617 feet of $4\frac{1}{4}$ -inch, and 1,150 feet of $4\frac{1}{2}$ -inch rails were cut and relaid.

TIES.

Ten thousand two hundred and ten ordinary ties, and three sets of switch ties were renewed during the year.

BALLASTING.

Two hundred cubic yards of ballast were distributed and put under during the year.

SEMAPHORES AND SWITCHES.

During the year necessary repairs were made to existing switches and semaphores throughout the line where required.

FENCING.

Forty rods of new page wire fence were built during the year, and repairs made to existing fences where necessary.

BUILDINGS AND PLATFORMS.

Repairs.

Windsor, passenger elevators.
Windsor, station.
Windsor, track scales.
Windsor, freight shed.
Hartville, freight platform.
Newport, freight shed.
Newport, station.
Beaver Bank, freight platform.

New Work.

Beaver Bank, cattle pen.
Ellershouse, cattle pen.
Windsor, hardwood floor in freight offices.
20—i—9½

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MASONRY.

Repairs.

Beaver Bank station, cellar wall.

WHARFS AND TRESTLES.

*Repairs.*Windsor, wharf.
Ellershouse, cribwork.

BRIDGES AND CULVERTS.

Repairs.

Beaver Bank, culvert.

*New Work.*Stillwater, culvert, wooden.
Garlands, culvert, wooden.

MASONRY.

Repairs.

Three and one-half miles Windsor station, Daley's bridge.
 One-half mile east Beaver Bank station, small bridge.
 East Beaver Bank station, small bridge.
 One-half mile west Beaver Bank station, Feely's culvert.
 Two miles west Beaver Bank station, Fenerty's culvert.
 One-quarter mile east South Uniacke station, culvert.
 One and one-half miles west Newport, Daley's bridge.
 Two miles east Windsor, Wilkin's bridge.
 Garland's Crossing, culverts.
 Three miles east Windsor, Seivright's culvert.
 Three Mile Plains, small bridge.
 Ponkook Crossing, culvert.
 Three miles east Windsor station, Sharpe's bridge.

General.

Repairs were made to cattle-guards and crossings where required.
 New glass put in and necessary glazing done to windows where needed.

I have the honour to be, sir,

Your obedient servant,

T. C. BURPEE,

Engineer of Maintenance of Ways and Works.

J. E. PRICE, Esq.,
 General Superintendent,
 Moncton, N.B.

PRINCE EDWARD ISLAND RAILWAY.

OFFICE OF THE GENERAL MANAGER OF GOVERNMENT RAILWAYS,
MONCTON, N.B., September 19, 1904.

SIR,—I have the honour to submit the following reports on the working of the Prince Edward Island Railway for the fiscal year ended June 30, 1904.

I inclose the report of the superintendent, including statements of the various accounts; also the report of the chief engineer on the works charged to capital account.

The mileage of the railway was the same as last year—209 miles.

The expenditure on capital account during the year was \$698,877.47. This makes the total cost of the railway on June 30, 1904, \$6,128,116.80.

Of the expenditure during the year \$226,248.22 was on account of the Murray Harbour branch, and \$418,982.76 for the Hillsborough bridge, which is a part of that branch.

The results of operating the railway are much less favourable than last year, the working expenses being \$335,695.44, and the gross earnings \$234,390.03, a loss of \$101,305.41 as compared with the previous year, when the loss was \$41,923.58.

The gross earnings increased \$16,675.79 over last year, \$7,141.37 in passenger traffic, \$7,541.87 in freight traffic, and \$1,992.55 in mail and sundries.

There was an increase of \$76,057.62 in the working expenses compared with last year.

The permanent way and works and the rolling stock are in a state of efficiency.

I have the honour to be, sir,

Your obedient servant,

D. POTTINGER,
General Manager, Government Railways.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals,
Ottawa, Ont.

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PRINCE EDWARD ISLAND RAILWAY.

SUPERINTENDENT'S OFFICE,
CHARLOTTETOWN, P.E.I., Sept. 14, 1904.

SIR,—I have the honour to submit the following report on the working of the Prince Edward Island Railway for the fiscal year ended June 30, 1904.

I also inclose the report of the Mechanical Superintendent, and the following statements prepared by the accountant and auditor and the mechanical accountant and storekeeper :—

- No. 1. Capital account.
2. Revenue account.
3. Locomotive power (abstract No. 1).
4. Car expenses (abstract No. 2).
5. Maintenance of ways and works (abstract No. 3).
6. Station expenses (abstract No. 4).
7. General charges (abstract No. 5).
8. General store account.
9. General balance.
10. Comparative statement of averages.
 - A. Monthly statement of the cost of locomotive power.
 - B. Statement of performance and consumption of locomotives.
 - C. Monthly statement of car mileage.
 - D. Statement showing the number of locomotives, cars, snow ploughs and flangers.
 - E. Comparative statement of the expenses of the mechanical department.

The mileage of the railway in operation is the same as last year, 209 miles.

CAPITAL ACCOUNT.

The total expenditure to June 30, 1903, was. \$5,429,239 33

The additions during the year were as follows :—

Station at Alberton.	24 00
Baggage room at Souris.	399 82
Station at Fredericton.	619 76
Station and land at Albany.	808 74
Station and additional accommodation at Kinkora.	949 45
Addition to freight shed and grading Hunter river.	997 75
Stations at Northam and Richmond.	1,338 84
Survey to Montague Bridge.	1,942 54
Coal shed and widening wharf at Summerside.	1,997 86
Increased accommodation at Charlottetown.	3,291 69
Straightening line, Blue Shank.	3,995 93
Improvement to water service.	4,804 07
Straightening line at Curtis creek.	10,895 74
Applying air brakes and signals.	21,530 30
Murray Harbour branch.	226,248 22
Hillsborough Bridge.	418,982 76

Making the total cost on June 30, 1904. \$6,128,116 80

SESSIONAL PAPER No. 20

Alberton station.—Tenders were called for a new building, and a contract let for the work to be done during the current year.

Baggage room, Souris.—A new building was erected adjoining the station building.

Station at Fredericton.—A new standard caretaker's building with a waiting-room and a room for freight was provided on the location of the old building; the latter was only a shelter.

Station at Albany.—Additional land was purchased, and a standard caretaker's station was erected with separate rooms for freight and passengers.

Station at Kinkora.—A standard caretaker's station was erected, with accommodation for both freight and passengers, and the grounds about the station were graded as required.

At Hunter River.—The freight shed was enlarged, and the station grounds were graded.

At Northam and Richmond.—Caretakers' stations were built, providing accommodation for both passengers and freight.

Survey at Montague bridge.—See the chief engineer's report.

Coal shed at Summerside.—An addition to the present building was provided, sufficient to store about seven hundred tons of coal, and the wharf was widened for the building.

At Charlottetown.—A fill has been commenced on the property purchased from the provincial government, and sidings have been erected thereon to provide needed increased accommodation.

Straightening line at Blue Shank.—This work was carried over from last year, and is now completed and in operation.

Water service.—Overhead tanks for watering locomotives, and for carrying water into stations, are being provided where needed and where practicable. The work is continued into the current year.

Straightening line at Curtis Creek.—This work consists of grading 4,000 feet, and of building a stone culvert to take the place of an iron bridge. The improvement consists of saving 3,090 feet of track, of cutting out two 9 degree curves, one 6 degree and one 5 degree. The new line will be practically straight. The works extends into the current year for completion.

Air brakes and signals.—The latest improved Westinghouse air brakes and signals are being applied to all the rolling stock.

Murray Harbour Branch.—The line has been extended to Murray Harbour, the rails are all laid except one mile, and the ballasting nearly all done.

Hillsborough bridge.—The work of erecting the iron spans and of making the earth approaches is progressing favourably. Details are furnished by the chief engineer of this, as well as the Murray Harbour Branch.

REVENUE ACCOUNT.

The earnings continued to increase. Trade in general throughout the province was good, and the crops above the average. The crops for the current year are below the average and a decline in revenue as a result is anticipated.

The gross earnings and working expenses for the year compare as follows :—

Gross earnings.	\$234,390 03
Working expenses.	335,695 44
	\$101,305 41

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The gross earnings compare with the previous year as follows :—

In 1902-1903.	\$217,714 24
1903-1904.	234,390 03
	<hr/>
Increase.	\$ 16,675 79

The earnings from passenger traffic compare as follows :—

In 1902-1903.	\$ 95,237 12
1903-1904.	102,378 49
	<hr/>
Increase.	\$ 7,141 37

The earnings from freight traffic compare as follows :—

In 1902-1903.	\$106,519 72
1903-1904.	114,061 59
	<hr/>
Increase.	\$ 7,541 87

The earnings from mails and sundries compare as follows :—

In 1902-1903.	\$ 15,957 40
1903-1904.	17,949 95
	<hr/>
Increase.	1,992 55

The number of passengers carried compare as follows :—

In 1902-1903.	205,265
In 1903-1904.	224,567
	<hr/>
Increased.	19,302

The weight of freight carried compares as follows :—

	Tons.
In 1902.	80,582
In 1903-1904.	86,286
	<hr/>
Increase.	5,704

WORKING EXPENSES.

The working expenses compare with the previous year as follows :—

In 1902-1903.	\$259,637 82
In 1903-1904.	335,695 44
	<hr/>
Increase.	\$ 76,057 62

This increase is principally the result of two large locomotives purchased and charged to revenue \$19,600, removing snow and ice in consequence of a severe winter, \$7,300, increased consumption of fuel \$16,000, increase in wages during the year \$24,100, and an increase in the renewal of ties to the extent of \$12,000.

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The averages compare with the previous year as follows :—

Per mile run by engines.	
	Cents.
In 1902-1903.	66'58
In 1903-1904.	82'68
Per mile run by trains.	
In 1902-1903.	59'14
In 1903-1904.	108'01
Expenditure per mile of railway.	
In 1902-1903.	\$1,242 29
In 1903-1904.	1,606 09

TRACK.

Sixty thousand railway ties, 30 sets of switch ties, and 40 switch headblocks with frames were renewed, and 1,700 cull ties were used in yards and sidings. Three and one-half miles of 56 lb. steel rails were laid to replace 50 lb. steel rails, and 140 feet of 56 lb. steel rails were laid in scale track siding at Summerside. One steel frog and 144 feet of 56 lb. steel rails were laid in track at Cardigan ballast pit. One thousand, four hundred and forty feet 50 lb. steel rails were relaid in yard at Georgetown. The curves on three sections were recentered with transit, and where possible easements were put in at the ends. During the year repairs were made to ten hand cars ; eight new lorry tops were built ; 6 new track levels and 4 new straight edges made.

SIDINGS.

At Smallman's Mill, near Conway, a newsiding of 150 feet was put in.
 At Kensington a siding, 525 feet long, was rebuilt.
 At Kelvin, siding 300 feet long was rebuilt.
 At Kinkora, siding was extended 275 feet.
 At Albany, siding was extended 342 feet.
 At Morell, siding was extended 120 feet.

FENCING.

There were 74,347 feet of page wire erected on cedar posts : 3,365 feet barbed and web wire fence, and 6,443 feet snow fence rebuilt, and temporary snow fences erected during the winter where most needed.

All other fences received necessary repairs.
 One hundred farm gates were renewed.

BALLASTING.

1,237 cars ballast were distributed in places where most needed, and 237 cars clay used in grading station yards and widening embankments.

BRIDGES AND CULVERTS.

At Tignish, Pig Brook bridge had top painted and ten hard pine ties renewed.
 At Bloomfield, Trout Brook bridge had top painted, and 10 hard pine ties renewed.

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At Alberton, Huntley river bridge had top painted.

At Kelvin, top of bridge painted, and 20 hard pine ties put in.

Johnson's bridge, near Kelvin, had top painted.

Near Cardigan, bridge had new abutments built, and 4 hard pine ties renewed.

All bridges that required repairs were attended to.

Near Cardigan, one iron pipe culvert, 60 feet long, and 2 feet in diameter was put in to replace old culvert which was worn out.

Twenty-eight wooden culverts were rebuilt with cedar.

Eighteen culverts were repaired by the use of 25 barrels of cement, and six cars hard stone.

Twenty-six cattle-guards were rebuilt.

WHARFS AND BREASTWORKS.

At Summerside, the following material was used in making a temporary slip for ss 'Stanley': 100 cubic feet 12-inch x 12-inch hemlock timber, 600 B.M. spruce deals, and one keg of nails.

At Charlottetown, the following material was used in repairing the wharf:—2,850 cubic feet 12-inch x 12-inch hemlock timber, 500 butt bolts 20 inches long, 8 cars clay, and 2 cars brush. Two hundred cubic feet 12-inch x 12-inch hemlock timber, and 30 butt bolts 20 inches long were used for breastworks.

BUILDINGS AND PLATFORMS.

Tignish.—An addition of 20 feet was built to coal lift. A new fence was erected in front of agent's dwelling. Station platform received necessary repairs.

Alberton.—Agent's dwelling was painted, and received necessary repairs.

Ellesslie.—Roof of station was reshingled, and inside of station sheathed. New sills were placed under building, and necessary repairs made.

Northam.—A new caretaker's station, 40 feet by 20 feet, was built. Material used for foundation: 5 pieces 12-inch by 12-inch hemlock, 20 feet long.

Richmond.—A new caretaker's station, 40 feet by 20 feet, was built. Material used in foundation: five pieces hemlock 12 inches by 12 inches, 20 feet long. A great deal of grading had to be done at both Northam and Richmond.

Wellington.—A new water closet was furnished.

Miscouche.—Roof of station was reshingled, and a new water closet furnished.

Summerside.—The following material was used in foundation for extension to coal shed: 48 creosoted piles, 24 feet long, 225 cubic feet 12-inch by 12-inch hard pine, 500 cubic feet 12-inch by 12-inch hemlock timber, 13 hardwood piles 30 feet long, 500 B.M. feet hemlock plank, 200 butt bolts 22 inches long, 60 screw bolts 15 inches long, and 32 iron plates 3 feet long.

Kensington.—Agent's dwelling received necessary repairs, and a new cattle pen was erected.

Barbara West.—Flag station was rebuilt, and a new platform built.

Kelvin.—Station was moved from old track to new one and rebuilt.

Emerald.—Agent's dwelling received necessary repairs.

Kinkora.—New caretaker's station, 40 feet by 20 feet, was built, and six pieces 12-inch by 12-inch cedar, 20 feet long, were used in foundation.

Albany.—A new caretaker's station, 40 feet by 20 feet, was built. Material used in foundation of same: 6 pieces, 12-inch by 12-inch cedar, 20 feet long. Considerable grading had to be done at both Kinkora and Albany.

Cape Traverse.—Roof and front of station was reshingled, and necessary repairs made.

Fredericton.—A new caretaker's station, 40 feet by 20 feet, was built. Material used in foundation of same: 6 pieces cedar 12 inches by 12 inches, 20 feet long.

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Hunter River.—An extension of 35 feet was built to freight house, and building raised ten inches. Station was painted. Agent's dwelling received necessary repairs.

North Wiltshire.—A new gravel roof was put on freight house, and necessary repairs made to station.

Charlottetown.—The following material was used in making repairs to coal shed: 425 cubic feet 12-inch by 12-inch hemlock, 20 pieces 10-inch by 12-inch cedar, 12 feet long, 1,500 B.M. feet hemlock plank, two kegs nails, 25 pounds nails, 20 screw bolts 15 inches long, and 8 iron plates 3 feet long. In making repairs to station platform, 1,500 B.M. feet hemlock plank, and one keg nails were used.

Morell.—New doors and windows were placed in baggage room.

Souris.—A new office was built in warehouse on wharf. Two pits were rebuilt in engine house. A new baggage room, 40 feet by 20 feet, was built on foundation of concrete piers. Agent's office was sheathed. Second-hand turntable was placed in engine house to replace wooden one, and roof of engine house reshingled.

Georgetown.—New pit was built. Roof of engine house was reshingled, and necessary repairs made to freight house and office on wharf.

STORES.

The value of stores purchased, including rails, was.	\$213,181 13
The value of stores used was.	252,737 23
The value of old material sold was.	25,327 83
	<hr/>

The value of stores on hand at the end of the year was:

Ordinary stores.	\$27,357 97
Fuel.	20,020 97
Steel rails and fastenings.	12,732 63
Old material for sale.	39,698 20
	<hr/>
	\$99,809 77
	<hr/> <hr/>

GENERAL.

The rolling stock, roadbed and buildings have all received necessary attention, and have been maintained in a proper state of efficiency.

I inclose a return of minor casualties which occurred during the year.

I have the honour to be, sir,

Your obedient servant,

G. A. SHARP,
Superintendent.

D. Pottinger, Esq., C.I.S.O.,
General Manager, Canadian Government Railways,
Moncton, N.B.

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PRINCE EDWARD ISLAND RAILWAY.

ACCIDENTS during the year ended June 30, 1904.

Cause of Accident.	PASSENGERS.		EMPLOYEES.		OTHERS.		TOTAL.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1. Fell from cars or engine				2				2
2. Jumping on or off trains or engines when in motion.....								
3. At work on or near the track making up trains.....								
4. Putting arms or heads out of windows.....								
5. Coupling cars.....				2				2
6. Collision, or by trains thrown from track.....								
7. Struck by engines or cars on highway crossing.....								
8. Walking, standing, lying, sitting or being on track.....								
9. Explosions.....								
10. Striking bridges.....								
11. Other causes.....				13				13
Total.....				17				17

SESSIONAL PAPER No. 20

No. 1.—PRINCE EDWARD ISLAND RAILWAY.

DR.		CAPITAL ACCOUNT.		CR.	
		\$ cts.	1903 June 30.	By Dominion of Canada.	\$ cts.
1903.	To cost of road and equipment to date.....		5,429,239 33	June 30.	5,429,239 33
1904.				1904.	
June 30.	To expenditure, year ended June 30, as follows :			June 30.	698,877 47
	Station at Alberton.....	21 00			
	Baggage room at Souris.....	399 82			
	Station at Fredericton.....	619 76			
	Station and land at Albany.....	808 71			
	Additional accommodation, Kinkora.....	949 45			
	Increased accommodation, Hunter River	997 75			
	Stations at Northam and Richmond.....	1,338 84			
	Survey to Montague bridge.....	1,942 51			
	Coal shed and widening wharf, Summer-				
	side.....	1,997 86			
	Increased accommodation, Charlottetown	3,291 69			
	Straightening line, Blueshank.....	3,995 93			
	Improvements in water service.....	4,804 67			
	Straightening line, Curtis Creek.....	10,895 74			
	Westinghouse air brakes and signals.....	21,580 30			
	Murray harbour branch.....	226,248 22			
	Hillsborough bridge.....	118,982 76			
			698,877 47		
			6,128,116 80		6,128,116 80

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P. E. I., June 30, 1904.

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No. 2.—PRINCE EDWARD ISLAND RAILWAY.

DR. REVENUE ACCOUNT for Year ended June 30, 1904. CR.

Previous Year.	Expenditure.	Year ended June 30, 1904.	Previous Year.	Receipts.	Year ended June 30, 1904.
§ cts.		§ cts.	§ cts.		§ cts.
73,052 05	Locomotive power, per Abstract No. 1	115,474 46	95,237 12	Passenger traffic	102,378 49
49,948 05	Car expenses, per Abstract No. 2	54,345 93	106,519 72	Freight traffic	114,061 59
81,352 13	Maintenance of ways and works, per Abstract No. 3	103,826 40	15,957 40	Mails and sundries	17,942 95
42,304 07	Station expenses, per Abstract No. 4	46,455 93	217,714 24	..... Total receipts	234,390 03
12,981 52	General charges, per Abstract No. 5	15,592 72	41,923 58	Balance	101,305 41
259,637 82	..... Totals	335,695 44	259,637 82	..... Totals	335,695 44

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1904.

No. 3.—PRINCE EDWARD ISLAND RAILWAY.

LOCOMOTIVE POWER.—(Abstract No. 1.)

Previous Year.	Details.	Year ended June 30, 1904.
§ cts.		§ cts.
2,406 38	Mechanical superintendent's salary, clerks, office and travelling expenses	2,447 04
24,033 50	Wages of drivers, firemen and cleaners	30,951 53
23,082 65	Fuel	39,067 03
1,913 55	Oil, tallow, waste and small stores	2,080 29
18,486 21	Repairs to engines, tenders and engine tools	37,843 48
951 16	Water, including pump and tank repairs	554 62
2,178 60	Miscellaneous	2,530 47
73,052 05 Totals	115,474 46

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1904.

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No. 4.—PRINCE EDWARD ISLAND RAILWAY.

CAR EXPENSES.—(Abstract No. 2.)

Previous Year.	Details.	Year ended June 30, 1904.
§ cts.		§ cts.
6,354 23	Repairs to passenger cars.....	6,156 88
5,822 78	" postal, express and baggage cars.....	1,469 61
9,858 09	" freight cars and vans.....	7,808 32
611 90	" snow ploughs and flangers.....	1,540 00
21,743 64	Wages of conductors, train baggage masters and brakemen.....	30,738 30
594 79	Oil and waste for packing.....	660 90
3,548 04	Small stores and fuel.....	4,432 35
1,414 58	Miscellaneous.....	1,539 57
49,948 05	Totals.....	54,345 93

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1904.

No. 5.—PRINCE EDWARD ISLAND RAILWAY.

MAINTENANCE OF WAY AND WORKS.—(Abstract No. 3).

Previous Year.	Details.	Year ended June 30, 1904.
§ cts.		§ cts.
334 91	Engineer's salary, clerks, office and travelling expenses.....	331 42
45,095 35	Wages in repairing roadway, fences and semaphores.....	49,047 56
5,070 20	Rails, chains and spikes.....	2,624 10
12,200 15	Ties.....	25,083 29
3,378 92	Timber and lumber for repairs to bridges, cattle guards, &c.....	4,834 88
2,851 39	Repairs to wharfs.....	2,618 43
6,285 96	Repairs to buildings and platforms.....	5,976 55
1,654 38	Repairs to tools.....	1,520 05
4,480 87	Clearing ice and snow.....	11,790 12
81,352 13	Totals.....	103,826 40

W. T. HUGGAN,
Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1904.

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No. 6.—PRINCE EDWARD ISLAND RAILWAY.

STATION EXPENSES—(Abstract No. 4).

Previous Year.	Details.	Year ended June 30, 1904.
\$ cts.		\$ cts.
33,771 43	Salaries and wages of stationmasters, agents, clerks, telegraph operators, station baggagemasters, yardmasters, switchmen, watchmen and labourers.	37,461 34
8,532 64	Fuel, oil, light stationery and other incidental expenses.	8,994 59
42,304 07	.....Totals.....	46,455 93

CHARLOTTETOWN, P.E.I., June 30, 1904.

W. T. HUGGAN,

Accountant and Auditor.

No. 7.—PRINCE EDWARD ISLAND RAILWAY.

GENERAL CHARGES—(Abstract No. 5).

Previous Year.	Details.	Year ended June 30, 1904.
\$ cts,		\$ cts.
6,774 85	Superintendent's and train despatchers' salaries, clerks, office and travelling expenses.	7,804 84
5,180 57	Accountant and auditors', paymasters' and cashiers' salaries, office and travelling expenses.	5,558 51
296 90	Advertising.	377 40
337 55	Damages to men, animals and goods.	1,419 23
309 40	Telegraph expenses (not including pay to operators).	359 99
82 25	Miscellaneous	72 75
12,981 52	.....Totals.....	15,592 72

CHARLOTTETOWN, P.E.I., June 30, 1904.

W. T. HUGGAN,

Accountant and Auditor.

SESSIONAL PAPER No. 20

No. 8.—PRINCE EDWARD ISLAND RAILWAY.

STATEMENT OF GENERAL STORES ACCOUNT, year ended June 30, 1904.

1904.	DR.	\$	cts.	\$	cts.
June 30...	To Balance brought forward.....			107,999	15
1904.					
June 30...	Purchases during the year including rails.....	213,181	13		
	Charges from other departments.....	29,836	72		
	Pay rolls.....	1,530	00		
				241,547	85
	CR.			352,547	00
June 30...	By Issues during the year.....			252,737	23
	Balance.				
	(Ordinary stores.....	\$ 26,905	47		
	Fuel.....	20,020	97		
	Rails and fastenings on hand.....	52,430	83		
	Old material service-able.....	452	50		
				99,809	77

CHARLOTTETOWN, P.E.I., June 30, 1904. W. T. HUGGAN,
Accountant and Auditor

No. 9.—PRINCE EDWARD ISLAND RAILWAY.

DR.	GENERAL BALANCE.	CR.			
	\$	cts.	\$	cts.	
General stores.....	99,809	77	Dominion account.....	8,917	50
Cash.....	8,189	48	Intercolonial Railway.....	105,712	59
Stations.....	2,152	59	John McDougall & Co.....	718	75
Post Office Department.....	9,060	70	L. C. Coal Mining Co.....	16,159	05
Militia Department.....	306	75	Through ticket ledger.....	509	54
Anglo-American Telegraph Company..	46	43			
Judge Weatherbie.....	30	00			
Sidney Grey.....	39	00			
Railway Extension, Charlottetown....	812	83			
Accident Insurance.....	1,825	42			
M. J. Haney.....	6,586	35			
W. Kitchen.....	2,738	04			
Rhodes, Currie & Co.....	428	87			
	132,017	23		132,017	23

CHARLOTTETOWN, P.E.I., June 30, 1904. W. T. HUGGAN,
Accountant and Auditor

No. 10.—PRINCE EDWARD ISLAND RAILWAY.

COMPARATIVE STATEMENT of Averages for Years ended June 30, 1904 and 1903.

Details.	1904.	1903.
Mileage of railway open.....	209	209
Engine mileage.....	406,007	389,953
Train mileage.....	310,785	291,263
Car mileage.....	1,822,737	1,745,365
Receipts per engine mile.....Cents.	57.75	55.83
" mile of railway.....Dollars.	1,121.48	1,041.69
Percentage of passenger earnings to gross receipts.....	43.68	43.74
" freight " " 	48.66	48.93
" other " " 	7.66	7.33
Expenses per engine mile :—		
Drivers, firemen and cleaners' wages.....	7.63	6.16
Fuel.....	9.62	5.92
Oil, tallow, waste and small stores.....	.51	.49
Repairs to engines.....	9.32	4.74
Water and tank repairs.....	.14	.24
Miscellaneous.....	.62	.56
Mechanical superintendent's salary, office and travelling expenses.....	27.84	18.11
Total.....Cents.	6.60	.62
Total.....Cents.	28.44	18.73
Locomotive power, per engine mile.....	28.44	18.73
Car expenses.....	13.39	12.81
Maintenance of way and works, per engine mile.....	25.57	20.86
Station expenses.....	11.44	10.85
General charges.....	3.84	3.33
Total per engine mile.....Cents.	82.68	66.58
Locomotive power, per train mile.....	37.15	25.08
Car expenses.....	17.49	17.15
Maintenance of way and works.....	33.41	27.93
Station expenses.....	14.94	14.52
General charges.....	5.02	4.46
Total per train mile.....Cents.	108.01	89.14
Working expenses, per mile of railway.....Dollars.	1,606.09	1,242.29

W. T. HUGGAN,

Accountant and Auditor.

CHARLOTTETOWN, P.E.I., June 30, 1904.

PRINCE EDWARD ISLAND RAILWAY.

OFFICE OF THE CHIEF ENGINEER,

MONCTON, N.B., September 13, 1904.

SIR,—I have the honour to submit the following report on capital account expenditures for the fiscal year ending June 30, 1904:—

MURRAY HARBOUR BRANCH.

The grading, structures, &c., between Mutch's Point and Murray river have been completed and all track laid and the line ballasted, with the exception of a short portion at Mutch's Point end. The contract has been let for the buildings and platforms, and the work is well under way. The portion of the line between Murray river and Murray harbour is being graded and the work is well advanced.

HILLSBOROUGH RIVER BRIDGE.

Superstructure.

North approach.—During the year 83 cribs have been placed along the toe of the slope, making the total number 151. There remain about 25 more to be built and placed to complete this work. A steam shovel has arrived, and will in a few days be placed at work in a borrow pit situated on the main line about $1\frac{1}{2}$ miles from Charlottetown. The material will be transported by locomotives and cars to complete the embankment. A trestle has been built by the contractor extending from the shore to the north abutment for the purpose of doing this work.

Abutment A.—The foundation of this abutment was prepared by the pneumatic process. After the site had been bored and blasted, the material down to an elevation of 54.5 was removed by the dredge. The caisson was towed to the site September 12, 1903, and the timber work completed there. It was finally placed in its position on October 12. Concreting was begun September 23, and completed on October 17. Air was put on November 6, and the excavation completed on the 16th, when filling the pneumatic chamber with concrete began. This was completed on the 19th. The shoe finally resting at an elevation of 42.92. Stone masonry was begun November 22, and completed on December 9, the space outside the caisson due to dredging has been partly filled with mud. The completing of the mud protection, the riprapping and some pointing remain to be done.

Pier 3.—The stone masonry on this pier was completed July 14.

Pier 5.—Stone masonry was completed on this pier July 18.

Pier 6.—The foundation for this pier was prepared by the pneumatic process. The site was first bored and blasted and the material removed by the dredge to an elevation of 14.00. The caisson was towed to the site on August 24 and grounded in position on August 29. The concrete in the body of the pier was completed on September 10. Air was put on September 18, and the pneumatic excavation completed October 6, the shoe resting at an elevation of 7.37. The concrete in the air chamber was completed on October 11. The stone masonry pier was begun October 15, and completed on the 28th. The space outside the caisson in consequence of the dredging has been filled with mud to the original bed of the river. The riprapping yet remains to be done.

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Pier 7.—The foundation for this pier was prepared by the pneumatic process. The site being bored and blasted, the material was removed by dredging down to an elevation of 7'20. The caisson was moved to its site July 31, and was grounded and placed in position August 6. The concrete in the body of the pier was completed on August 19. Air was put on October 12, and the excavation completed October 28. Filling the air chamber with concrete began October 29 and was completed on November 4. Stone masonry was begun on November 5 and completed November 14, when a portion of the riprapping was done. The space around the caisson due to the dredging has been filled with mud to the original bottom. There remains the riprapping to complete.

Pier 8.—Stone masonry on this pier was completed July 18. Nearly all the riprapping required was done September 11 and 12.

Pier 11.—Nothing was done to this pier during the year; it was previously completed to the top of the cutwater. The stone masonry and the riprapping will be completed in a short time.

Abutment B.—The caisson was finally placed in its position July 3 and the stone masonry completed August 22. It has been protected with mud and the riprap completed.

South approach.—Nothing done.

General.—There remains yet some mud protection and riprapping of slack spots around nearly all the piers to be done. During the year 575,948 feet B.M. of timber and 204,964 pounds of iron have been placed in the work. 2,384 cubic yards of material have been excavated in pneumatic foundations. 8,412 cubic yards of concrete and 2,279 cubic yards of stone masonry were laid. 71 cribs have been built, 7,130 cubic yards of mud placed around pile foundations for protection, 10,575 cubic yards of riprap were placed around the piers and in the cribs. The contractor stopped work on December 15, 1903, and recommenced on May 18, 1904.

Superstructure.

A contract has been let for transporting and erecting the superstructure and putting on the floor and sidewalks of the bridge. Part of the metal work of the spans has been shipped from the Miramichi bridges and is partly delivered at Charlottetown. Part of the additional parts for floor and sidewalk brackets have also been shipped from the maker's works at Montreal, and the erecting stages and storing wharf is built at Charlottetown. A quantity of plant, scows, &c., are on the ground. The new swing span has been manufactured, but is not yet in place.

Connection between the Main Line of the P.E.I. Railway and the Hillsborough Bridge.

Grading was begun on June 1, and is now in progress. The embankments are being made up from materials borrowed near Curtis creek on the main line and transported by locomotive and cars. About 3,000 yards have been placed in the work, and all the track amounting to 0:44 miles laid.

To straighten line at Curtis' Creek.

The work of grading and building the structures on this division has been let by contract, and the grading is partly done, and a quantity of materials for the work delivered on the ground.

I have the honour to be, sir,

Your obedient servant.

D. POTTINGER, Esq.,

General Manager, Government Railways,
Moncton, N.B.

WM. B. MACKENZIE.

Chief Engineer.

SESSIONAL PAPER No. 20

PRINCE EDWARD ISLAND RAILWAY.

OFFICE OF THE MECHANICAL SUPERINTENDENT,
CHARLOTTETOWN, P.E.I., September 1, 1904.

G. A. SHARP, Esq.,
Superintendent.

DEAR SIR,—I beg to submit for your information the following statement of the operation of the Mechanical department for the year ended Jun. 30, 1904.
The following is a summary of the principal work performed :—

LOCOMOTIVES

Four locomotives were purchased from the Canadian Locomotive Company, Kingston, Ontario, which are giving good satisfaction, and are a great addition to our rolling stock.

Eight engines received heavy repairs, and 12 engines specific repairs. Three engines on the Murray harbour branch received specific repairs.

One engine received new fire box, crossheads, motion, driving and truck boxes, and had all running gear renewed. Ten locomotive smoke stacks were built. Two thousand tubes were pieced and put into locomotives. Four tenders, 12 injectors, and 6 monitors were largely rebuilt. Four pop valves, 6 whistles, and 130 sets of steam packing were made. Four hundred and fifty wheels were bored and pressed on axles. One hundred and fifty standard axles, 20 sets of driving wheels, and 12 sets of engine truck wheels were turned. Sixty sets of new truck boxes were fitted up, and their spring covers adjusted. 5,270 lbs. of nuts were tapped. 115,976 lbs. of iron, and 1,800 lbs. of steel were forged. One hundred and sixty driving and truck springs were repaired, and 50 new driving and truck springs made. The Westinghouse air brake was applied to 14 passenger cars and two locomotives.

CAR DEPARTMENT

Two first-class cars, 2 second-class cars, 1 conductor's van, 1 snow plough, 2 refrigerator cars, 4 stock cars, 7 box cars, and 2 coal cars were built and charged to Murray harbour branch capital account. Three flanger cars, 1 platform car, 34 box cars, 15 flat cars, and 3 snow ploughs received heavy repairs. Six first-class cars, 2 second-class cars, 20 box cars, 15 flat cars, 2 snow ploughs, and 2 flangers received light repairs. Forty drop spindles were put in flat cars used for work on Hillsborough bridge. A great many running repairs were also made in this department, which are too numerous to mention.

BRASS FOUNDRY.

Output : Brass castings 3,767 lbs., car bushings 4,346 lbs., and 368 lbs. of battery zincs, making in all 8,981 lbs. of castings.

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PAINT SHOP.

Four first-class cars, 2 second-class cars, 4 postal and baggage cars, 18 box cars, 150 box car roofs, and 9 engines were painted. Ten first-class cars, 5 second-class cars, and 5 postal and baggage cars were cleaned and varnished. Engineer's office was papered and painted. Six hundred panes of glass were put in.

ROAD AND TRAFFIC DEPARTMENTS.

Nine new frogs were made, and 8 frogs repaired. Ten sets of switch gear were made and several sets repaired, and various other ordinary repairs made. Four track levels, 39 loading platforms, 1 lorry, 4 doors and frames, 3 gates, 4 cattle stages, 8 boxes, 6 freight trucks, 3 baggage trucks, and 12 smoke stacks for engine houses were made. Fifteen switch frames were made and mounted. 10,304 lbs. of iron, and 612 lbs. of steel were forged. Six freight trucks, 2 hand cars, 1 lorry and 6 track jacks were repaired. Forty barrels of plugs were cut.

I am pleased to report that we are in a better position for handling traffic than ever before.

Yours truly,

W. S. POOLE,

Mechanical Superintendent.

A. PRINCE EDWARD ISLAND RAILWAY.
MECHANICAL DEPARTMENT.

STATEMENT of Cost of Locomotive Power for the Year ended June 30, 1904.

MONTHS.	Cost of										AVERAGE PER 100 MILES.									
	Miles run by Engines, less Ballasting.	Mechanical Superintendents' Salary, Clerks and Office Expenses.	Enginemen's Wages.	Fuel.	Oil, Waste, &c.	Repairs.	Engine Houses and Turntables.	Water.	Total.	Mechanical Superintendents' Salary, &c.	Enginemen's Wages.	Fuel.	Oil, Waste, &c.	Repairs.	Engine Houses and Turntables.	Water.	Total.			
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.			
1903--July	34,460	198 36	1,853 78	2,393 87	117 81	1,504 65	170 27	4 08	6,242 82	0 57	5 38	6 95	0 35	4 36	0 49	0 01	18 41			
August,	32,066	189 75	1,879 33	2,312 84	144 77	1,267 95	162 42	5 12	5,962 18	0 59	5 86	7 21	0 45	3 95	0 51	0 02	18 59			
September	33,736	190 35	2,207 81	2,533 38	170 46	1,231 07	139 74	151 45	6,618 86	0 57	6 54	7 51	0 50	3 66	0 39	0 45	19 62			
October	34,222	249 04	1,891 49	2,284 66	99 39	546 46	208 55	2 20	5,261 79	0 73	5 54	6 62	0 28	1 60	0 60	0 01	15 38			
November	32,121	193 08	1,953 16	2,698 60	178 90	1,739 68	190 11	.....	7,913 53	0 60	6 08	8 40	0 56	5 60	0 59	.....	21 83	
December	32,589	267 62	2,613 43	3,197 25	193 57	2,151 53	240 72	2 93	8,439 75	0 64	8 11	9 81	0 59	6 61	0 74	0 01	26 51			
1904--January	32,869	199 77	5,270 18	3,000 44	212 66	4,932 56	300 30	192 94	11,109 15	0 60	16 04	9 13	0 65	5 88	0 91	0 59	33 80			
February	40,897	199 15	2,893 26	3,832 85	228 13	1,866 71	339 72	14 18	9,433 97	0 49	7 08	9 52	0 56	4 57	0 83	0 03	23 08			
March,	36,074	196 67	2,439 70	3,691 36	219 42	2,009 97	286 47	158 73	9,487 32	0 55	8 13	10 24	0 61	5 54	0 79	0 44	26 30			
April	31,275	195 72	2,452 63	4,157 63	152 95	1,709 25	158 32	18 15	8,844 65	0 63	7 84	13 29	0 49	5 47	0 50	0 06	28 28			
May	33,070	219 18	2,497 40	4,419 29	172 76	1,117 72	157 50	1 30	8,585 15	0 66	7 56	13 36	0 52	3 38	0 47	0 01	25 96			
June	32,658	267 75	2,475 42	4,501 86	189 17	2,076 90	185 35	3 54	28,272 29	0 63	7 58	13 79	0 58	63 11	0 57	0 01	36 57			
Totals	496,067	2,447 04	30,351 53	39,067 03	2,080 29	37,843 48	2,530 47	554 62	115,474 46	0 60	7 62	9 62	0 52	9 33	0 62	0 13	28 41			

NOTE.—In repairs for June is included the cost of two new engines, Nos. 1 and 11.

S. F. HODGSON,
Mechanical Accountant.

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B.—PRINCE EDWARD

MECHANICAL

STATEMENT of the Performance and Consumption

Months.	Hours in Steam.	TRAIN MILEAGE.				MILEAGE BY ENGINES.			
		Passenger.	Freight and Mixed	Ballasting.	Piloting.	With Train.	Light.	Shunting.	Total.
1903—July	3,626	12,669	14,534	358	96	27,657	123	7,088	34,868
August	3,654	11,336	13,546	2,940	.....	27,822	101	7,358	35,281
September	4,120	11,255	14,592	3,528	165	29,540	148	8,216	37,904
October.	4,257	13,580	12,511	5,108	.....	31,199	66	8,438	39,703
November	3,438	8,794	16,082	952	.....	25,828	48	7,271	33,147
December.	3,436	9,106	16,148	.....	.....	25,254	49	7,286	32,589
1904—January	3,781	11,741	12,581	.....	404	24,726	142	8,001	32,869
February	4,992	13,116	11,334	.....	5,731	30,181	314	10,372	40,867
March.	4,323	11,197	11,850	.....	4,135	27,182	237	8,635	36,074
April	3,511	10,651	13,790	.....	34	24,475	12	6,788	31,275
May	3,936	10,455	14,393	1,458	70	26,376	378	7,959	34,713
June.	3,875	10,786	14,059	2,596	44	27,485	186	8,043	35,714
Totals.	46,949	134,686	165,429	16,940	10,679	327,725	1,804	95,475	425,004

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ISLAND RAILWAY.

DEPARTMENT.

of Locomotives for the year ended June 30, 1904.

TOTAL MILEAGE.		Average of Cars per Mile run with train.	AVERAGE MILEAGE.		CONSUMPTION.				CONSUMPTION PER 100 MILES RUN BY ENGINES.			
Cars.	Snow Ploughs.		Miles to one hour in steam.	Of Cars to one of Engines.	Tons of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.	Pounds of Coal.	Pints of Oil.	Pints of Valve Oil.	Pounds of Waste.
182,577	.....	6.62	9.61	5.24	858	1,486	324	563	4,921	4.26	0.93	1.61
190,658	.....	6.85	9.65	5.40	741	1,716	416	609	4,200	4.86	1.17	1.72
192,691	.....	6.56	9.20	5.08	794	1,866	400	597	4,189	4.92	1.05	1.57
208,257	.....	6.67	9.32	5.24	875	2,064	444	699	4,458	5.20	1.12	1.76
168,058	.....	6.50	9.64	5.07	792	1,742	459	615	4,778	5.25	1.38	1.85
160,405	470	6.35	9.49	4.92	969	2,096	460	676	5,946	6.43	1.41	2.07
130,285	8,038	5.35	8.69	3.96	860	1,984	468	716	5,233	6.03	1.42	2.18
109,505	15,252	4.48	8.20	2.68	812	2,296	558	580	3,973	5.61	1.36	1.41
129,127	12,428	5.60	8.32	3.58	947	2,260	404	719	5,250	6.26	1.28	1.99
142,747	33	5.84	8.90	4.56	963	1,556	356	517	6,158	4.97	1.13	1.65
167,596	.....	6.37	8.82	4.82	952	1,868	548	641	5,485	5.38	1.57	1.84
178,976	.....	6.52	9.21	5.01	974	2,063	580	687	5,454	5.77	1.62	1.92
1,960,882	36,221	6.18	9.05	4.61	10,537	22,997	5,477	7,619	4,958	5.41	1.28	1.79

S. F. HODGSON,
Mechanical Accountant.

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C.—PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

MONTHLY STATEMENT of Car Mileage for Year ended June 30, 1904.

Months.	First Class.	Second Class and Baggage.	Postal and Smoking.	Box and Stock.	Platform.	Total.
1903.—July.....	43,248	24,832	32,037	67,596	14,864	182,577
August.....	35,259	21,698	31,829	59,344	42,528	190,658
September.....	37,198	23,456	33,175	64,091	34,771	192,691
October.....	28,137	22,254	33,926	74,445	49,495	208,257
November.....	24,849	20,005	28,599	81,502	13,103	168,058
December.....	28,788	20,793	27,790	73,161	9,873	160,405
1904.—January.....	23,412	21,788	22,211	50,864	12,010	130,285
February.....	23,265	17,931	22,499	37,470	8,340	109,505
March.....	21,910	19,241	21,095	49,278	17,603	129,127
April.....	24,889	22,778	23,690	56,079	15,311	142,747
May.....	24,741	22,742	30,587	74,628	14,898	167,596
June.....	27,197	21,887	31,481	62,747	35,664	178,976
Total.....	342,893	259,405	338,919	751,205	268,460	1,960,882
LESS—Ballasting..	.....	.....	17,668	15	120,462	138,145
	342,893	259,405	321,251	751,190	147,998	1,822,737

S. F. HODGSON,

Mechanical Accountant.

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D.—PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

STATEMENT showing the number of Locomotives and of the various classes of Cars and other Rolling Stock on July, 1903, and on June 30, 1904.

	CLASSIFICATION OF CARS.																	
	Locomotives.	1st Class.	2nd Class.	Combined 2nd and Baggage.	Postal and Smoking.	Combined Postal and Baggage.	Baggage.	Pay Car.	Vans.	Box Freight.	Refrigerator Cars.	Stock.	Coal.	Platform.	Total.	Snow Ploughs.	Flangers.	Total.
On hand serviceable, June 30, 1903.	22	21	8	6	3	4	3	1	2	213	1	17	18	147	444	8	7	15
Condemned, July 1, 1903.	3	..	..	..	..	..	1	..	1	..	..	..	..	..	2	..	..	..
Total.	25	21	8	6	3	4	4	1	3	213	1	17	18	147	446	8	7	15
Purchased during the year on capital account	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Built during the year on capital account . . . . .	..	2	2	..	..	..	..	1	7	..	2	4	2	..	20	1	..	1
Total	27	23	10	6	3	4	4	1	4	220	3	21	20	147	466	9	7	16
Condemned, July 1, 1903.	3	..	..	..	..	..	1	..	1	..	..	..	..	..	2	..	..	..
" during the year. . . . .	..	..	..	..	..	1	..	..	..	..	..	..	1	..	2	1	..	1
Total condemned.	3	..	..	..	..	1	1	..	1	..	..	..	1	..	4	1	..	1
Less rebuilt . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1
" purchased and charged to working expenses.	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
To be rebuilt.	1	..	..	..	..	1	1	..	1	..	..	..	..	..	3	..	..	..
Add serviceable and repairing.	26	23	10	6	3	3	3	1	3	220	3	21	20	147	463	9	7	16
Total.	27	23	10	6	3	4	4	1	4	220	3	21	20	147	466	9	7	16

S. F. HODGSON,
Mechanical Accountant.

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E.—PRINCE EDWARD ISLAND RAILWAY.

MECHANICAL DEPARTMENT.

COMPARATIVE STATEMENT of the Expenses of the Mechanical Department for the years ended June 30, 1903 and 1904.

	1903.	1904.
The miles run by trains were.....	291,263	310,785
" engines were.....	389,953	406,007
" cars were.....	1,745,365	1,822,737
" snow ploughs were.....	14,026	36,221
	\$ cts.	\$ cts.
The cost of locomotive power was.....	73,052 05	115,474 46
" repairs to cars was.....	22,935 10	15,434 81
" " passenger cars was.....	6,354 23	6,156 88
" " postal and smoking cars was.....	5,822 78	1,469 61
" " freight cars and vans was.....	9,858 09	7,808 32
" labour, oils and waste was.....	594 79	660 90
" repairs to snow ploughs and flangers was.....	611 90	1,540 00
The cost of locomotive power per 100 miles run by trains was.....	25 08	37 16
" " " engines was.....	18 73	28 44
" " " cars was.....	4 18	6 33
The cost of repairs to cars per 100 miles run by trains was.....	7 56	4 97
" " " engines was.....	5 65	3 89
" " " cars was.....	1 26	0 84
The cost of labour, oil and waste for packing per 100 miles run by trains was...	0 20	0 21
" " " " engines was.....	0 15	0 16
" " " " cars was.....	0 03	0 03
The repairs to passenger cars per 100 miles run by trains were.....	2 18	1 98
" postal and smoking cars were.....	1 99	0 47
" freight cars and vans were.....	3 38	2 51

S. F. HODGSON,
Mechanical Accountant.

QUEBEC CANALS.

OFFICE OF THE SUPERINTENDING ENGINEER,
MONTREAL, July, 1904.

C. SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa.

SIR.—I have the honour to submit herewith my annual report on the works under my charge for the fiscal year ended June 30, 1904.

This division comprises the Lachine, the Soulanges and the Beauharnois canals on the St. Lawrence route ; the Ste. Annes, the Carillon and the Grenville canals, on the Ottawa river, and the St. Ours and the Chambly canals on the Richelieu river.

Of these the Lachine canal is by far the most important on account of its immediate connection with the harbour of Montreal. The traffic through it during the year just ended showed an increase of about 20 per cent over 1902-1903.

Navigation was carried on uninterruptedly on all the canals in this division except in the case of the Soulanges canal, where it had to be stopped for 24 hours on August 15, 1903, one of the upper gates in the guard lock having been thrown off its pivot by the rush of water in a gale and also in the case of the Chambly canal where boats had to be detained some 36 hours, from May 29 to 31 last in order to allow some repair work to be done at the Rivière des Iroquois culvert.

The Chambly canal could only be opened for traffic on May 20 last, the work at River des Iroquois culvert which had been taken off the hands of the contractors, not being far enough advanced to permit of the admission of water in the reach before the above date.

LACHINE CANAL.

Length. $5\frac{1}{2}$ miles ; 5 locks, 270 x 45 feet ; 14 feet of water on sills ; total rise, 45 feet.

Old locks, 200 x 45 feet, still available with 9 feet of water on sills.

REPAIRS AND RENEWALS.

The principal repairs and renewals performed during the year were as follows :—
Rebuilding one pair of spare gates for old lock No. 3 and one pair for old lock No. 5.

Replacing cast iron by cast steel racks on Wellington bridge.

Replacing cast iron rollers and tread by steel ones on the Seigneurs Street bridge.

Rebuilding bridge across the tail-race of waste weir No. 2. The old wooden stringers being replaced by iron beams.

Laying a concrete floor in regulating weir at Côte St. Paul.

Renewing valves in the regulating weirs, at Côte St. Paul and St. Gabriel.

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Replacing 22 wooden mooring posts on the locks by cast iron posts laid in concrete.

Placing life protection ladders, 35 feet apart, along the sides of St. Gabriel basins Nos. 1, 2 and 3, and also around Wellington basin.

Rebuilding nine cribs, from low water to the top, in the timber basins at Lachine and providing two new ones.

Building a new boom 3 feet wide and 300 feet long and placing it below the lower approach to lock No. 5, on the south side.

Building a temporary boom to be placed along the face of the south wall of basin No. 2, to keep vessels off the concrete toe of the new wall being built there.

Grading Oak street and covering it with iron dross and cinders.

Installing timber planer alongside of the machine shop. This planer was brought down from the Beauharnois canal where there was no more use for it.

Transferring the canal telephone line from the north to the south side of the canal, the new wires being strung on the poles, already carrying the current for the electric lighting and for the operating of the lock gates.

In addition to the above a considerable amount of work was done in keeping the canal structures such as locks bridges, fences, buildings, roads, drains, tools, &c., in a good state of repairs.

INCOME.

Repairing old Locks Nos. 1 and 2.

A contract for this work was signed by Messrs. Coulson, Quinlan and Robertson on October 29, 1902, and operations were commenced in November, 1902. The contractors have carried on the work in an energetic manner during the past year and there now only remains to be done a portion of the chamber wall and upper recess on the south side and the breast wall to complete lock No. 2. Lock No. 1 was completed last fall. The gates are nearly completed and will be put in position as soon as possible.

Some necessary repairs to the south wall of basin No. 1, immediately below lock No. 2 are in progress and will be completed in July or early in August.

Rebuilding wall on south side of basin No. 2.

This work is being done by day's labour. As stated in previous reports the foundations of the new wall can only be laid while the canal is unwatered in the spring. The wall which is about 1,450 feet in length, consists of concrete laid to a depth of 22 feet below canal level, a portion of this being built in under the present masonry wall.

There still remains some 600 lineal feet of the foundations to be laid.

Only 178 lineal feet could be built in April last, the unusually high state of the St. Lawrence allowing work to be performed during a couple of weeks only. Some underpinning had also to be done in the small side basin on the north side of basin No. 2, where the side wall had been undermined.

Repairing slope walls.

Owing to the lateness of the season the contractor, Mr. J. B. de Lorimer, did not resume work till the middle of April, and could only build about 170 cubic yards of wall. He also supplied 4,000 cubic yards of stone for future operations.

A final estimate of his work is now being prepared.

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Paving Mill Street.

The western section of this street was paved during April, May and June last, the work being done under contract by the Sicily Asphaltum Paving Co.

The paving consists of granite blocks laid on concrete foundations.

The whole of the street is now paved and the heavy traffic going through it will derive great benefit from the work.

Raising St. Gabriel Shed No. 1.

This shed is 750 feet long, 400 feet of it, at the south end, have been raised about 9 feet in order to allow freight to be handled directly from the shed into the steamers or from the steamers into the shed. The height of the roof is such that teams can drive up into the shed with or for freight.

The work was performed in a very satisfactory manner by the contractors, Messrs. Quinlan & Robertson.

CAPITAL.

Dredging.

The dredging done in the Lachine canal during the year consisted of 11,000 cubic yards of shale and boulders at the upper entrance, and about 500 cubic yards in the small basins off basin No. 1. This work was done during the fall and summer of 1903.

In May and June of this year the dredge was employed cleaning the channel at the sites of the new bridge at Côte St. Paul and Napoleon street, the work being paid for by the contractors for the superstructure of the bridges.

Mr. H. R. Lordly is in charge of the above works.

Lake St. Louis survey.

The field work during the former part of the year consisted of finishing the survey of the north side of the lake from Lakeside to Lachine. The whole of the north side, with topographical work on the shore, is now completed.

The survey was transferred to the Marine and Fisheries Department in April last.

Electric installations.

Owing to unexpected delays in procuring some of the appliances for the operation of lock gates and sluices here, it was found impossible to have the system completed for the opening of navigation this spring. A generator ordered early last winter was not yet delivered at the end of the year. Tests were made, however, of the machinery to be used and gave very satisfactory results. It is expected that most of the gates will be equipped during the present season.

Repairs to vessels.

There is nothing to record under this head except the ordinary maintenance of the fleet.

Côte St. Paul and Brewster Bridges.

Contracts were awarded to Messrs. Quinlan & Robertson and to Mr. John Quinlan respectively for the substructures of the Côte St. Paul and Brewster bridges.

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Both structures are exactly similar in design and dimensions. The old wooden bridges and their abutments were removed but the centre pier was preserved in both cases. The former bridges consisted of a swing span with fixed spans at each end. The new bridges are formed of single swing spanning the whole width of the canal (205 feet), with channels 75 feet wide on each side of the centre pier.

The old centre pier at Côte St. Paul was widened and lengthened by means of solid cribwork built down to the present bottom of the canal and brought up to three feet below the level of the water. On top of this a concrete wall, 6 feet base, 4 feet at the top and 5 feet high, was laid skirting the pier except on the sides of the pivot pier. The latter and both abutments which are also of concrete, being carried down to 22 feet below water level.

The mode of building around the centre pier at Brewster's is somewhat different from that at Côte St. Paul. The rock level here being much lower, piles were used along both sides, they being driven down 30 feet below water level and a strong platform laid on top of them to receive a concrete wall similar in dimensions as the one laid at Côte St. Paul. The ends of this pier are composed of solid cribwork started at 17 feet below water level and brought up to the level of the platform just described, a concrete wall encircling the whole of the centre pier as in the case of the Côte St. Paul bridge.

The superstructure of both bridges was supplied and erected by the Dominion Bridge Co.

The space available for approaches at both points being limited it was found necessary in order to provide sufficient clearance from the top of the pivot pier to the floor of the bridge, without making the approaches too steep, to give a 6 inch camber to the lower chord.

Both bridges are to be operated by electric power, the motors being supplied by the bridge company.

The electric installation and the erection of the two above mentioned bridges are under the supervision of Mr. L. S. Pariseau.

SOULANGES CANAL.

Length 14 miles ; 5 locks, 270 x 45 feet, 15 feet of water on sills ; total rise, 84 feet.

REPAIRS AND RENEWALS

During the year just ended the worn out cast-iron rollers in the lock sluices have been replaced by cast-steel ones and the working of the sluices thus rendered much smoother and easier.

In July, 1904, the water was drawn off the reaches between locks 1 and 3, for the purpose of repairing the lower sills of locks 2 and 3. The covering plates on the top of the oak sills were found to have been broken and partly torn away by vessels dragging upon them. Although the ordinary depth of water here is 15 feet it is observed that, owing to the drawing of water by lockage, a surging motion is given the mass of water in the reaches which, at times, reduces the depth on the sills from 12 to 18 inches. The men operating the locks were consequently warned against allowing vessels to move in or out of the locks when the level is thus reduced. No further damage has been done to the sills since.

Last fall a very serious slide occurred in the eastern embankment of regulating basin No. 2. Some 150 feet in length of this bank which is 35 feet in height settled down about 5 feet and were pushed out towards the basin below about 3 feet, half the thickness of the bank moving out bodily.

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In order to perform the necessary repairs it was decided to unwater the basin, which was done by means of a rough coffer dam thrown across the head race opposite lock No. 2. A strong crib was then built into the toe of the bank, well anchored to the rock and heavily loaded with stone. As other parts of the embankment showed signs of weakening, it was thought best to run this crib along the whole length of the bank and leave the cofferdam across the tail-race in position, the top of the latter being removed to a depth of 3 feet under water so as to allow of the feeding of the reach below in the regular way.

No further slides have taken place in the eastern embankment, but in May last, both the north and south banks began to move out. Cracks developed in them which were at once filled with good clay to prevent rainwater from getting into them, but the banks have been leaking since and permanent repairs will have to be done during the present summer.

A considerable quantity of stone lining was done during last year. The whole of the banks between the lower entrance and St. Ferreol bridge is now in a perfect stage of repair. The stone used for this purpose, as well as for filling the toe crib just described, was taken out of the quarry at the lower entrance and partly out of the bottom of regulating basin No. 2, which had been unwatered to repair the eastern bank as stated before.

The serious leak which existed at the foot of lock 2 on the river side was completely stopped during last winter. The bank was removed on about half its width for 150 feet, concrete was laid on top of the rock for a certain height and the bank reformed with good clay well protected with stone.

CAPITAL.

Shops.

Mr. T. Préfontaine, Jr., was awarded a contract for the building of shops, stores and lodgings for this canal.

These consist of four buildings, viz.: a store-house and stable at the power-house, a blacksmith and machinery shop, a store-house for timber, lumber and other goods, with lodgings on the second story for the storekeeper and an oil and paint store. The last three buildings are located between the canal embankment and the Ottawa river, opposite lock No. 2, near the protection dock. All of them are of solid brick, with iron frames in the roofs. Machinery for the shops will be provided during the coming year.

Mr. L. S. Pariseau is in charge of construction on this canal.

LEAUHARNOIS CANAL.

Length $11\frac{1}{2}$ miles; 9 locks, 200 x 45 feet; 9 feet of water on sills; total rise $82\frac{1}{2}$ feet.

This canal is only being used by a few market boats and stray barges. The staff has been reduced to one man at each lock and isolated bridge, and three men in charge of ferries.

The work of repairs done here during the year consists of the maintenance of buildings, roads, bridges, fences and ditches.

Considerable work was done on the repairing of the Hungray Bay dyke and road which had been damaged by ice during last spring floods.

The bottoms and lower sills of locks Nos. 11 and 13 had also to be specially attended to in the spring.

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At lock 11 a leak had developed in the lower sill which necessitated the filling of a large hole with concrete.

Most of the lower sills of the locks on this canal were treated in the same manner within the last few years.

CHAMBLY CANAL.

Length 12 miles; 9 locks, 118 x 22½ feet; 6½ feet of water on the sills; total rise 74 feet.

As stated above, this canal was only reopened to navigation on May 20 this spring on account of some pressing work which had to be accomplished at the Little Rivière des Iroquois culvert.

REPAIRS AND RENEWALS.

The main items of repairs performed during the year were as follows:—

Laying 900 tons of gravel on the towing path. Building two pair of lock gates and rebuilding two sills, the voids between the timbers being filled with concrete. Rebuilding approaches to lock No. 1. Rebuilding three piers in the harbour entrance at St. Johns, from the top to the water line.

Besides the above all the structures on the canal, the roads, ditches, fences, &c., were kept in proper repair throughout the year.

During last spring's floods the power-house supplying electric current for the lighting of the canal as well as for the working of the shops was displaced and considerably damaged by moving ice. This is due to the permanent raising of the Richeliéu river by the Montreal Light, Heat and Power Company's dam at Chambly, and the damage sustained will be made good by the company. In the meantime the electric machinery, which luckily was only slightly injured, was transferred to a temporary building, the electric current necessary to run it being supplied by the Montreal Light, Heat and Power Company.

It is expected that a permanent building will be put up by them to replace the old one, in the course of the present year.

INCOME.

Culvert at Little River des Iroquois.

The contractor for this work is Mr. W. J. Finn. He resumed operations early in December, 1903, and owing to the unusual severe winter and the difficulty he experienced in procuring men, the beginning of April found him so backward in the execution of his contract that the work had to be taken off his hands.

He agreed to allow the department to finish the work on its own account, which is now being done under the supervision of Mr. L. S. Pariseau.

Waste-weirs at Ste. Therese Island and at the Electric Power-house.

The old wooden weirs which were in a very dilapidated condition were removed and rebuilt in concrete.

All the waste-weirs on this canal, except one at Fryer's farm, are now formed of concrete and will necessitate very little repair for a number of years to come.

Bridges at Chambly Basin and Chambly Canton.

The old wooden swing bridges at both these points have been replaced by steel structures which were erected under contract by the Phoenix Bridge and Iron Works.

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The pivot piers and abutments had to be rebuilt and extended to suit the new bridges which are wider than the old ones. Concrete was used for the purpose.

ST. OURS LOCK.

Length of canal, $\frac{1}{3}$ mile; one lock, 200 x 45 feet; 7 feet of water on sills; total rise, 5 feet.

Repairs and Renewals.

Besides the ordinary maintenance of the grounds, lock-walls, lock-gates, buildings, fences, scows, &c., the following works were performed during the year.

Landing wharf below lock.—The old landing wharf which consisted of a wooden platform about 400 feet long, resting on the top of two rows of piles driven twelve feet apart, was removed and concrete piers 22 feet x 8 feet at the base and 18 feet x 5 feet at the top and 20 feet apart were substituted. The new platform, 5 feet wide, will consist of iron I beams spanning the spaces between the piers, and covered with 4-inch pine plank. The work is now completed save the platform, which will be laid during the coming summer.

The lower entrance was also cleaned, widened and deepened, and is thus considerably improved.

The old wharf above the lock will be rebuilt during the fiscal year 1904-5.

The above work was done under the direct supervision of Mr. L. S. Pariseau.

STÉ. ANNE'S LOCK.

Length, $\frac{1}{3}$ mile; one lock, 200 x 45 feet; 9 feet of water on sills; total rise, 3 feet.

Old lock still available; 200 x 45 feet; 6 feet of water on sills; total rise, 3 feet.

Mr. S. D. Hamilton, overseer of this canal, died on January 13, 1904, and Mr. Napoleon Lague appointed in his stead on March 5, 1904.

There is nothing to mention here except the ordinary maintenance of the canal buildings and structures.

A pair of spare gates were placed in position, and the old gates, which were in a pretty shaky condition, were hauled on to the beach above the lock for repairs during the present season.

CARILLON AND GRENVILLE CANALS.

Carillon Canal.—Length, $\frac{3}{4}$ miles; two locks, 200 x 45 feet; 9 feet of water on sills; total rise, 16 feet.

Grenville Canal.—Length, $5\frac{3}{4}$ miles; five locks, 200 x 45 feet; 9 feet of water on sills; total rise 43 $\frac{3}{4}$ feet.

Both these canals are under one overseer. They are separated by a stretch of navigable river about five miles long, and between them is to be found the old Chute à Blondeau lock, which was abandoned at the completion of the dam at the head of the new Carillon canal in 1883, the rise at the old lock having been practically obliterated.

I have to report the death on October 22 last of Mr. James B. Cushing, late overseer of these canals. His son, Mr. F. M. H. Cushing, was appointed acting overseer, and is still acting pending a permanent appointment to the vacant position.

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Repairs and Renewals.

The principal items of repairs performed during the year were as follows:—

Rebuilding the mooring pier at Bradford's bay, a short distance above the upper entrance to the old canal.

Rebuilding the wing walls below the waste-weirs at lock 5 and 6. They consist of heavy masonry laid in cement mortar.

Renewing the swing bridge at Stonefield. The new structure is of steel and its pivot piers and abutments of stone masonry in cement mortar. The superstructure was supplied and erected under contract by the Phoenix Bridge and Iron Works.

INCOME.

Guide Piers at Upper Entrance to Carillon Canal.

The contract work on the guide pier was practically completed last fall, there remaining nothing to be done except the top finishing of the concrete walls and some filling between them. This work was completed before July 1 except the rolling of the stone filling on top of the pier.

Mr. F. J. Lynch is in charge of construction work on these canals.

Annexed to this report are tabular statements showing highest and lowest water on the mitre sills of the locks at the upper and lower entrances of each canal, statements of fines and damages collected during the fiscal year 1903-04; also statement giving dates of closing and opening each canal.

I have the honour to be, sir,

Your obedient servant,

ERNEST MARCEAU,

Superintending Engineer, Quebec Canals.

QUEBEC CANALS.

STATEMENT of the opening and closing of navigation.

Name of Canals.	Closing.	Opening.
Lachine Canal.....	3rd December, 1903.	2nd May, 1904.
Soulanges Canal.....	2nd " 1903.	1st " 1904.
Beauharnois Canal.....	30th November, 1903.	9th " 1904.
Chambly Canal.....	30th " 1903.	20th " 1904.
St. Ours Lock.....	26th " 1903.	26th April, 1904.
St. Anne Lock.....	30th " 1903.	22nd " 1904.
Carillon and Grenville Canals.....	30th " 1903.	2nd May, 1904.

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LACHINE CANAL.

STATEMENT showing the depth of the river water on the mitre sills of new Lock No. 1, at lower entrance, and new Lock No. 5, at upper entrance, during the fiscal year ended June 30, 1904.

MONTHS.	NEW LOCK NO. 1, LOWER SILL.				NEW LOCK NO. 5, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1903.								
July.....	19	1	17	3	18	1	16	4
August.....	17	9	16	1	16	8	15	7
September.....	16	4	15	8	15	9	15	5
October.....	17	2	15	8	16	1	15	4
November.....	15	9	14	1	15	6	14	4
December.....	33	0	14	2	15	5	14	0
1904.								
January.....	30	10	25	5	15	6	13	5
February.....	27	11	25	0	15	9	13	8
March.....	30	7	25	0	18	0	14	4
April.....	40	7	21	3	19	11	17	2
May.....	23	9	22	0	20	5	19	4
June.....	23	11	19	9	20	5	18	5

Mitre sill of old Lock No. 1, 2' 2" above sill of new Lock No. 1
 " " " 5, 5' 0" " " " 5

BEAUHARNOIS CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Lock No. 6, at lower entrance, and Lock No. 4, at upper entrance, during the fiscal year ended June 30, 1904.

MONTHS.	LOCK NO. 1, LOWER SILL.				LOCK NO. 4, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1903.								
July.....	12	1	11	6	11	11	11	8
August.....	11	5	10	3	11	11	11	4
September.....	10	6	10	1	11	6	11	3
October.....	10	7	10	1	11	4	11	1
November.....	10	1	9	3	11	2	10	6
December.....	11	3	9	3	11	11	10	5
1904.								
January.....	19	6	11	4	12	0	10	7
February.....	24	6	15	6	11	5	10	9
March.....	20	0	14	6	12	8	10	8
April.....	14	6	12	8	12	11	11	9
May.....	14	10	14	0	12	4	12	0
June.....	14	8	12	6	12	5	1	1

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CHAMBLY CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Lock No. 9, at lower entrance, and Lock No. 1, at upper entrance, during the fiscal year ended June 30, 1904.

MONTHS	LOCK NO. 9, LOWER SILL.				LOCK NO. 1, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1903.								
July.....	11	0	9	11	8	11	8	2
August.....	10	5	9	9	8	11	8	1
September.....	9	9	8	3	8	8	7	3
October.....	8	9	8	3	8	7	7	0
November.....	8	10	8	1	8	1	6	9
December.....	8	10	7	10	7	9	7	3
1904.								
January.....	8	6	8	1	7	10	7	7
February.....	8	10	8	6	8	3	7	9
March.....	18	2	8	10	10	8	8	2
April.....	21	5	14	10	11	4	10	10
May.....	15	10	13	9	11	6	10	2
June.....	13	11	10	11	10	3	8	8

ST. OURS LOCK.

STATEMENT showing the depth of the river water on the mitre sills of St. Ours lock, during the fiscal year ended June 30, 1904.

MONTHS.	LOCK NO. 1, LOWER SILL.				LOCK NO. 1, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1903.								
July.....	10	10	9	5	9	7	9	0
August.....	9	5	8	4	9	3	9	10
September.....	8	3	7	5	8	11	8	4
October.....	8	10	8	0	9	6	7	4
November.....	8	1	6	1	8	9	8	0
December.....	10	6	6	6	8	2	7	6
1904.								
January.....	10	6	8	10	8	0	7	8
February.....	9	10	8	11	8	2	8	0
March.....	18	1	9	6	13	10	8	0
April.....	21	6	15	8	16	11	12	0
May.....	17	4	15	3	13	4	11	5
June.....	15	10	11	8	11	7	9	10

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STE. ANNE'S LOCK.

STATEMENT showing the depth of the river water on the mitre sills of Ste. Anne's Lock, during the fiscal year ended June 30, 1904.

MONTHS.	LOCK NO. 1, LOWER SILL.				LOCK NO. 1, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1903.								
July.....	13	0	11	7	14	8	12	4
August.....	11	8	10	11	12	4	11	4
September.....	11	1	10	9	11	8	11	0
October.....	11	4	10	9	12	5	11	5
November.....	10	9	9	9	11	11	11	0
December.....	11	1	9	1	13	8	10	0
1904.								
January.....	11	1	10	1	13	0	10	5
February.....	11	8	10	3	14	5	11	0
March.....	13	4	10	1	13	11	11	0
April.....	15	0	13	2	17	6	14	2
May.....	15	7	14	3	18	6	16	2
June.....	15	7	13	9	18	2	14	7

CARILLON CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Locks Nos. 1 and 2, Carillon canal, during the fiscal year ended June 30, 1904.

MONTHS.	LOCK NO. 1, LOWER SILL.				LOCK NO. 2, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1903.								
July.....	16	2	13	6	16	7	13	2
August.....	13	6	12	0	13	2	11	11
September.....	12	10	12	1	12	6	11	6
October.....	13	8	12	2	13	6	12	1
November.....	12	11	11	10	12	8	11	7
December.....	12	10	11	11	14	10	11	3
1904.								
January.....	12	11	12	0	11	9	11	0
February.....	14	8	12	0	11	7	10	7
March.....	15	4	12	0	13	5	10	4
April.....	20	0	15	5	18	8	14	0
May.....	20	10	19	3	21	8	18	6
June.....	20	4	16	4	21	0	16	6

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GRENVILLE CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Locks Nos. 3 and 7, Grenville canal, for the fiscal year ended June 30, 1904.

MONTHS.	LOCK NO. 3, LOWER SILL.				LOCK NO. 7, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
1903.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July.....	21	1	16	1	17	4	13	6
August.....	16	0	14	5	13	4	12	0
September.....	15	2	13	11	12	6	11	4
October.....	16	6	15	9	14	0	12	1
November.....	15	5	13	11	13	0	11	6
December.....	17	10	13	9	11	6	9	9
1904.								
January.....	20	7	16	1	10	6	9	7
February.....	23	10	20	9	9	7	9	3
March.....	24	9	19	1	14	0	9	7
April.....	24	6	19	3	20	0	16	5
May.....	26	8	22	10	23	0	19	9
June.....	25	11	20	3	22	4	17	3

SOULANGES CANAL.

STATEMENT showing the depth of the river water on the mitre sills of Lock No. 1 at lower entrance, and Lock No. 6, at upper entrance, during the fiscal year ended June 30, 1904.

MONTHS.	LOCK NO. 1, LOWER SILL.				LOCK NO. 6, UPPER SILL.			
	Highest.		Lowest.		Highest.		Lowest.	
1903.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July.....	19	4	18	3	17	3	17	0
August.....	18	9	18	0	17	3	16	7
September.....	17	9	17	4	17	0	16	8
October.....	18	0	17	3	16	9	16	6
November.....	17	6	16	5	16	7	16	3
December.....	18	2	16	3	17	0	15	9
1904.								
January.....	20	8	17	6	17	3	17	0
February.....	31	8	20	5	17	2	16	8
March.....	23	3	21	1	18	3	17	1
April.....	24	8	20	0	18	0	17	4
May.....	22	0	20	5	17	9	17	5
June.....	22	0	19	8	17	9	17	7

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LACHINE CANAL.

STATEMENT of Fines and Damages collected during the fiscal year ending June 30, 1904.

Date.	Names of Vessels.	Names of Owners.	Fines.	Damages.	Remarks.
1903.			\$ cts.	\$ cts.	
July 13.	Yacht 'Satanella'...	Unknown.....	.....	10 00	Damages to St. Gabriel Shed No. 1.
1904.					
June 8.	Str. 'Sharples'.....	Great Lakes Trans. Co. ....	.....	60 00	Damages to lock wall, Lock No. 4.
		Total.....	.....	70 00	

CHAMBLY CANAL.

STATEMENT of Fines and Damages collected during the fiscal year ending June 30, 1904.

Date.	Names of Vessels.	Names of Owners.	Fines.	Damages.	Remarks.
1903.			\$ cts.	\$ cts.	
July 30.	B. 'I. S. Ethier'....	L. C. Hebert.....	.....	5 00	Damages to canal dredge.
1904.					
June 16.	B. 'Marie Stella'....	F. Demarais.....	.....	10 00	Damages to floating bridge, C. Canton.
" 28.	B. 'B. Huber'.....	Capt. R. Winne.....	20 00	Damages to swing bridge, head of Ste. Thérèse Island.
		Total.....	35 00	

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SOULANGES CANAL.

STATEMENT of Fines and Damages collected during the fiscal year ending June 30, 1904.

Date.	Names of Vessel.	Names of Owner.	Fines.	Damages.	Remarks.
1903.			§ cts.	§ cts.	
July 16	Str. Waconda.....	Ont. and Great Lakes Nav. Co.	.....	40 00	Damages to coping, lock No.1.
" 11	" Fairmont.....	Mont. Transp. Co.....	.....	40 00	" " 4.
" 31	" Filgate.....	Cornwall Nav. Co.....	20 00	.....	Excess of speed and obstruction.
Aug. 1	Barge Nadine.....	Quebec Route.....	.....	70 00	Damages to coping, lock No.2.
" 11	Str. Geo. C. Howe..	Ont. and Great Lakes Nav. Co.	.....	100 00	" " 1.
Oct. 29	" Davidson.....	St. Lawrence Trans.Co.	.....	20 00	" " 1.
Nov. 4	" Arabian.....	J. B. Fairgrieve.....	.....	20 00	Damages to railing, lock No.1.
" 4	" Hubert Larkin.	W. J. Poupore & Bros.	20 00	.....	Excess of speed and offensive language.
" 6	" Iona.....	Messrs. Hall & Co.....	20 00	.....	Disobedience and offensive language.
" 10	" Wahconda.....	Ont. and Great Lakes Nav. Co.	.....	20 00	Damages to coping, lock No.2.
1904.					
June 4	Str. Arabian.....	J. B. Fairgrieve.....	.....	20 00	" " 6.
" 9	" Avon.....	Ogdensburg Coal and Towing Co.	25 00	.....	Excess of speed and disobedience.
" 27	" Tunet Cape....	Can. Lakes and Ont. Nav. Co.	20 00	Damages to coping, lock No.3.
		Totals.....	85 00	340 00	

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ST. LAWRENCE DISTRICT.

SUPERINTENDING ENGINEER'S OFFICE,
CORNWALL, July 1, 1904.

SIR,—I beg to submit my annual report upon works of construction and survey, in connection with the enlargement of the St. Lawrence canals, for the year ending June 30, 1904.

CORNWALL CANAL

(Opened for traffic, 1843.)

This canal was originally designed and constructed to allow vessels of not over nine feet draught to surmount the Long Sault rapids, from Cornwall to Dickenson's Landing, a distance of $11\frac{1}{2}$ miles, with a rise of 48 feet, originally made in six locks, but since reduced to five.

The canal is situated on the north side of the St. Lawrence river on ground sloping rapidly towards the river, and generally about 30 feet above it. The high embankments thus rendered necessary when not perfectly constructed, or when resting on treacherous foundations, which are common along this section of the river, have given rise to frequent landslides, entailing, as in 1888, very serious consequences.

In order to make the St. Lawrence navigable by vessels of the same class that pass through the Welland canal, and to carry out the general scheme of enlargement adopted by the government, work was commenced on the Cornwall canal division in 1876.

The work consisted in deepening, widening and straightening the original channel, strengthening and protecting the embankments, and in building enlarged locks 270 feet long by 45 feet wide, with not less than 14 feet of water on the mitre-sill, when the river is at its lowest stage; supply weirs, bridges, &c., also in addition to the above, and not included in the original contracts, the repair or renewal of the foundations and general restoration of the damaged masonry of the old locks 15, 16, 17, 18, 19 and 20, and the adaptation of the basin between old locks 16 and 17 to the purpose of a dry dock. Also dams, weirs and the guard-gates, and automatic dam above lock 20, rendered necessary by the adoption of the Sheik's island channel, and the masonry superstructure with ice-breaker on the old pier at the upper entrance.

The Sheik's island channel does away with the imperfectly constructed embankments west of Mille Roches, embraced in the contracts for sections Nos. 6 and 7 and parts of 5 and 8, which were abandoned when the decision to construct the channel had been arrived at. This diversion from the line of the old canal does away with three and a half miles of very tortuous canal navigation, unfit for the class of vessels for which the enlarged canal system was intended, and substitutes two and three-quarter miles of what can be classed as lake navigation, thus dividing the canal into two sections, the lower or eastern section, six miles long; upper or western section, two and a quarter miles, with two and three-quarter miles of lake navigation between, and saving about half a mile in distance.

The guard-gates and automatic dam at lock 20 were constructed to protect the lower reaches from the large body of water impounded by the construction of the Sheik's Island dams, in case of accident to the locks or other structures.

For the purpose of construction, the canal was divided into nine sections, commencing with No. 1, at the lower or eastern entrance. The work of enlargement was commenced on this section in 1876 and was finished in 1882, except some work on old lock

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17, and the weir and head-race to the mills, which were afterwards completed under the contract for section No. 2.

The next section to be let was No. 10, to Messrs. Jocks, Delorimier & Broder, who commenced work in 1884, and, with the exception of the upper entrance, completed it in 1895.

LIST OF CONTRACTORS.

Locality.	Section.	Contractors.	Date of Contract.
Cornwall.	2	Wm. Davis & Sons	Nov. 5, 1888.
Lock No. 19	3	"	"
Maple Grove.	4	"	"
Sheik's Island Dams.	5, 6, 7, 8	"	June 19, 1893.
Mille Roches	5	The Gilbert Blasting and Dredging Co.	Nov. 2, 1888.
Moulinette.	6	"	"
Sand Bridge.	7	"	"
Long Sault	8	"	"
Dickson's Landing.	10	Jocks, Delorimier & Broder.	April 7, 1884.
Upper Entrance.	10	Weddell & McAuliffe.	Sept. 28, 1899.
Strengthening bank east of Pitt Street.			
Cornwall.	1	J. J. Fallon	Feb. 8, 1902.
" "	1	Bellhouse, Dillon & Co	Sept. 16, 1903.
Cornwall Canal.	1 to 10	Michael P. Davis.	May 20, 1902.
" "	1 to 10	"	Nov. 6, 1901.
" "	1 to 10	"	April 25, 1903.

NOTE.—Section No. 8 adjoins No. 10.

The work to complete the upper entrance was let to Messrs. Weddell & McAuliffe, under contract entered into on September 28, 1899, to be completed by November 13, 1900.

It consisted in the extension, straightening and widening of the channel on the north or landward side of the present entrance, from deep water, which commences 900 feet west of the upper gates of guard lock No. 21, and extends to a point about 1,100 feet west of the lighthouse on the south entrance pier, a distance of about 3,500 feet.

This contract was wholly completed on June 5, 1902, and the final estimate returned to the department on February 7, 1903.

On February 8, 1902, a contract was entered into with Mr. J. J. Fallon for widening and strengthening the north bank east of Pitt street, at Cornwall. This consists in the widening of the north bank of the canal and the building of a revetment wall for a distance of 1,000 feet from the east end of the present steamboat wharf at foot of Pitt street.

The work done during the past year was as follows :—

During the fall of 1902 and the following winter, stone was prepared at the contractor's quarry at Cambridge and shipped to Cornwall.

In April, 1903, dams were constructed to permit of the work being completed after the water was let into the canal on May 1.

Excavation was resumed on April 1 and was completed last month.

Laying the foundation for and the building of the revetment wall was resumed on April 9, and was completed in September.

Stone has been placed in rear of the completed wall.

This work was wholly completed in June last.

New wharf.—Owing to the defectiveness of the old steamboat wharf at the foot of Pitt St., immediately west of the above mentioned contract, on February 6, 1904, an

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agreement was made with Mr. J. J. Fallon for the construction of a new wharf. This consisted in raising both the north and south revetment walls to two feet in height, and between them a timber and plank superstructure of pine was erected for a distance of 170 feet.

This wharf was completed on June 18 last.

In connection with these works a contract was entered into with Messrs. Bellhouse, Dillon & Co., of Montreal, for the supply of cement to be used in construction of the revetment wall.

On May 20, 1902, a contract was entered into with Mr. M. P. Davis for the mechanism for operating the locks, guard gates, weirs and bridges of the Cornwall canal, to be completed August 15, 1903.

This contract was wholly completed and the final estimate forwarded to the department on March 28, 1903.

A contract was entered into with Mr. M. P. Davis, on November 6, 1901, for the erection of switch houses required in connection with the installation of the electric lighting plant. This contract was completed and the final estimate sent to the department on November 5, 1902.

On April 25, 1903, a contract was entered into with Mr. M. P. Davis for the installation of the machinery for operating the locks of the old Cornwall canal, and also for motors to be installed in the workshops of the Cornwall canal, to be completed August 1, 1903. This work is complete with the exception of installing the motors which will be done as soon as the workshops are erected.

In connection with the additional water power granted at lock 18 to the Paper Mill Company, attention is again directed to the necessity for rebuilding and enlarging the regulating weir at old lock 17.

It may be well to draw your attention to the fact that a portion of the south bank of this canal, situated immediately west of lock 17, opposite the town of Cornwall, has a curvature altogether inadequate to the present requirements.

This canal, when enlarged, was intended for barges of increased dimensions and draught.

For the past few years the shipping has made such rapid strides, that to-day, not only barges of increased dimensions but ocean steamers also pass through this canal, and during high winds it is with great difficulty that they get around this particular sharp curve, without having sometimes to run into the slope of this bank.

Since the upper reaches of this canal were completed, an additional depth of two feet of water has been added, thereby increasing materially the pressure against the bank, which is by no means counterbalanced by that on the river side.

At this point the surface of the canal water is 24 feet higher than that of the river water and indications of great strain are now visible, which may, in the near future cause some serious trouble. I would therefore direct your attention to the necessity of rebuilding this portion of the south bank, with such an alignment and strength suited to the present as well as the future requirements.

I may also add that a sharp point on the south bank of the canal, immediately opposite the upper dam of the Sheik's Island channel could be reduced to the great advantage of the large vessels.

FARRAN'S POINT CANAL.

(Opened for traffic, 1847.)

This canal is situated about five miles west of the village of Dickenson's Landing, the head of the Cornwall canal. It was built to overcome a short, swift rapid above the village of Farran's Point, and was about three-quarters of a mile long, with a lockage of $3\frac{1}{2}$ feet.

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In the year 1847, the original canal for nine feet navigation was opened for traffic. The present enlarged canal has been extended to Empey's Bay, thus increasing the length to $1\frac{1}{2}$ miles and the lockage to 4 feet.

The enlargement having been authorized, tenders were advertised for, and on June 1, 1897, a contract was entered into with the Canadian Construction Company to undertake the necessary work, and to have it completed by January 31, 1899.

The time for completion has since been extended.

This work was wholly completed on October 11, 1902, and the final estimate was completed October, 1903.

WILLIAMSBURG CANALS.

RAPIDE PLAT CANAL.

(Opened for traffic, 1847.)

The lower entrance of the Rapide Plat or Morrisburg canal is situated about $9\frac{1}{2}$ miles west of the Farran's Point canal. It was designed to overcome the rapids of Rapide Plat by a lock of $11\frac{1}{2}$ feet lift, and extends from the village of Morrisburg to Flagg's Bay, a distance of $3\frac{3}{4}$ miles.

The original canal, intended for vessels of 9 feet draught, was opened for traffic in 1847.

The work of enlarging for the 14 feet draught vessels was commenced in 1884, and consisted in the deepening and widening of the old channel, the building of a new lift and a guard lock of 270 feet by 45 feet, supply weirs, regulating weirs, &c., and the construction of a new road to replace the highway destroyed by the canal improvements.

The old lift lock was put in thorough repair, and the sill lowered so as to admit of 9 feet navigation through it at lowest water.

LIST OF CONTRACTORS.

Locality.	Section.	Contractors.	Date of Contract.
Morrisburg	1	Poupore & Fraser	Jan. 26, 1891.
Mariatown	2	Weddell Dredging Co.	Jan. 12, 1891.
New Road	3	Poupore & Fraser	Jan. 26, 1891.
Flagg's Bay	4	William Broder	April 2, 1884.
Upper Entrance		P. H. Gilbert	April 17, 1901.

The work on all sections except at upper entrance has been completed and the final estimates completed.

Upper entrance.—This work consists in the straightening, deepening and widening of the channel, the removal of the old north and south piers, and the construction of a new and more extensive pier, with stone superstructure and ice-breaker on the south side.

The contract for this work was awarded to Mr. P. H. Gilbert, and was commenced on April 17, 1901.

The work done during the fiscal year is as follows:—

Dredging operations were continued until December 14, 1903, resumed on May 14, 1904, and will be completed in a few weeks.

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The masonry of the stone superstructure of south pier was resumed on October 5, 1903, and discontinued on January 2, 1904, and nothing further has been done this year, owing to the prevailing high water, cut stone for masonry has been prepared. It is the intention to complete this contract by the end of present season.

I have also to draw your attention to the advantage of affording a better alignment for the benefit of large vessels, at a point opposite the Farlinger property, situated about half a mile east of guard lock No. 24, on the north side of this canal and where a curve could be materially reduced.

This improvement was contemplated some seven or eight years ago, but afterwards abandoned.

GALOPS CANAL.

(Opened for traffic, 1847.)

Between the head of the Rapide Plat canal and the foot of the Galops, at the village of Iroquois, there is a $4\frac{1}{2}$ -mile stretch of river navigation. What is now known as the Galops canal was originally built as two separate canals, with a short stretch of river navigation between.

These were opened for 9 feet navigation in 1847, the lower or eastern section called the Point Iroquois canal, commenced at the village of Iroquois and extended to Presqu'île. It was 3 miles long, and had a lockage of 5 feet 7 inches, which overcame the rapid of Point aux Iroquois.

The upper or western section, known as the Galops canal, commenced at the village of Cardinal and extended up stream to the head of the Galops rapids; it had a lockage of 6 feet 8 inches, and surmounted the Cardinal and Galops rapids called by the early forwarders 'the Upper Galoo's or Chain of Rocks.'

About ten years after the completion of these canals, they were connected by an embankment, otherwise the 'Junction canal,' built in the river, and other improvements made increasing the total length of canal to $7\frac{1}{2}$ miles, and the lockage to 14 feet 10 inches, thus avoiding the rapid current of the short stretch of river navigation.

In 1888, Messrs. Murray & Cleveland entered into a contract with the government to enlarge the upper entrance; the work consisting of the building of a new lift-lock in Round bay, connecting directly with the river immediately below the Galops rapids, and a new guard lock, each 270 feet long by 45 feet wide, and a supply weir. The removal of the old guard lock, and also the deepening, widening and straightening of the channel from the upper entrance past McLaughlin's Point to the new locks at Round bay, a distance of about 1 mile.

The lift-lock at Cardinal is now cut off from the canal and connected directly with the river by means of a large opening which has been made through the old canal bank below, thus rendering free access from the river to the wharf at the foot of old lock 26, for the accommodation of the village of Cardinal.

The improvement of the channel at McLaughlin's Point by widening it towards the north, as authorized was commenced with steam shovel in September, 1900, and completed with a dredge in October, 1903.

Earth excavation.—The work of excavation in prism of canal west of Nine-mile road was commenced on July 5, 1902, and continued until October 6, when all excavation which could be done by means of steam shovel was completed. The excavation remaining was dredged out and completed in October, 1903.

The improvement to give a line of sight from the lift-lock to the head of the canal, which necessitated the removal of that portion of McLaughlin's hill above a plane 12 feet above normal water in canal, having been authorized, arrangements were made for

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the necessary right of way, and excavation was commenced in October, 1902, continued during the season of 1903, and resumed on May 28, 1904, and is still in progress.

Total amount of earth excavation for the year was about 43,042 cubic yards.

Rock excavation.—Rock excavation below water at the site of old lock 27 was resumed May 4, 1904, and continued until June 30, when this work was practically completed, except a narrow portion in front of old lockhouse.

The total amount of excavation for the year was about 5,418 cubic yards.

The cribwork extension of the southeast pier below lift-lock No. 28, which was completed to the level of high water last year, has been protected by a stone talus. To complete this work a masonry wall four feet above the normal water in the river will be constructed. This work, however, will not be attempted during the prevailing high water.

The stone protection to banks is practically completed; only a small portion is now undergoing repairs and will be completed next month.

Waling pieces for the protection of the mooring pier east of the guard lock were placed during April, 1903.

In the year 1897 the government advertised for tenders for the enlargement of the other portions of the canal, dividing it into two sections of about three miles each—Iroquois and Cardinal. Messrs. Larkin & Sangster obtained the first named, and Messrs. Wm. Davis & Sons the latter. In each case the work was to be completed by January 31, 1899, but the time for completion has since been extended.

The scheme for enlargement contemplated the raising of the level of the reach between Iroquois and Cardinal six feet, that is, to the height of the lowest known level of the river at the head of the Galops rapid, and overcoming the whole rise with one lift-lock at Iroquois.

IROQUOIS SECTION.

Work on the enlargement of this section was commenced in May, 1897. It consisted of excavating a new entrance channel, the building of two entrance piers, a 'flotilla lock,' 800 feet long by 50 feet wide, weirs, bridges, retaining walls, &c., and the straightening, deepening and widening of the canal for about three miles; also the reconstruction of the highway north of the old canal, &c.

The work of building masonry foundation walls for the Iroquois water works, the renewal and repair of the government wharf at the village of Iroquois, and the widening and deepening of the government ditch on the north side of the canal have all been completed under this contract.

An electric light cable has been placed under the canal.

This work was entirely completed in November, 1902.

The final estimate of this work is being prepared.

CARDINAL SECTION.

Commencing at the western end of the Iroquois section at Presqu'île, it extends west through the rear of the village of Cardinal to Gates' Point, the eastern end of the upper entrance contract, a distance of about three miles.

The work consists in widening, deepening and straightening of the old canal at each end of the section, and construction of an entirely new piece of canal through and on either side of the village of Cardinal, requiring the excavation of the prism, the building of banks and their protection, and the construction of cribwork and masonry revetments through the 'deep cut'; also the building of bridge piers and abutments, &c.

The chief feature is the 'deep cut,' in rear of the village of Cardinal, 5,900 feet long and 68 feet at the highest point, requiring the excavation of about 2,000,000 cubic yards of material.

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Earth excavation.—The total quantity of earth excavation on this section is about 2,600,000 cubic yards. Of this quantity there remains to be done but a small amount of trimming up on the canal prism, and removing of boulders found to be above grade. A dredge and derrick with diver were employed at this work, which was completed this season.

Rock excavation.—The total quantity of rock excavation on this section has proved to be about 19,000 cubic yards, of which about 10,000 cubic yards was contained in rock 'in situ' in bottom of 'deep cut.' The excavation of rock 'in situ' was completed November 13, 1902.

The cribwork revetment, which extends through a portion of the 'deep cut' was completed in 1902. The total length of this cribwork revetment is 5,258 lineal feet, and contains about 317,000 cubic feet of timber, 293,000 pounds of iron in bolts, and 45,000 cubic yards of stone filling, both inside and in rear.

The masonry revetment walls, laid in Portland cement, which rests on top of this cribwork, were completed October 4, 1902. Some pointing remaining to be done was completed this season.

Embankments.—All embankments have been made to their required height and width; repairs to those portions destroyed by slides which occurred during April last were completed in August, 1903.

The work of protecting the slopes of the 'deep cut' by the placing on them of pitched stone facing was completed December 22, 1902. Some repairs to this pitched stone facing, which have been found necessary are nearing completion.

The sodding throughout the section is in progress and was finished in August, 1903.

The stone protection to slopes of banks (where not affected by slides), was completed May 20, 1903.

The fencing throughout the section was completed last season.

The placing of gravel on new public road constructed on north side of 'deep cut' was completed in October, 1903.

The forming of ditches has been completed.

The masonry culvert at Nine Mile Road was completed November 13, 1902.

The necessary mooring posts in 'deep cut' were placed in position in August, 1903, and iron handrails were also at that time provided for each of the three flights of stone steps on upper slopes of 'deep cut.'

A timber culvert was also placed under the highway along north side of 'deep cut' west of the Nine Mile Road, in August, 1903.

During the month of April, 1903, owing to the water in this level having been lowered, several large slides occurred in the 'green' embankments both east and west of 'deep cut'. The embankment at the slides east of 'deep cut' has already been repaired, and that west of 'deep cut' was repaired in August, 1903.

Not only were the slides removed but cutting bays into the face of the banks to form a proper seat for stone filling for the protection to the lower portion of the bank and to form a foundation for the usual stone protection to be placed at water line.

The work of filling the bays and protecting the lower portion of the slope was completed in December, 1903, and was allowed to settle and consolidate throughout the winter.

In April, 1904, the water in the canal was lowered and the placing of ordinary stone protection on face of bank, as well as filling in rear of same with sodding on top was proceeded with and completed on May 25, 1904.

Repairs to bermes and upper slopes in the 'deep cut' rendered necessary by the action of the heavy spring rains were commenced May 26, and completed June 30, 1904.

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GALOPS RAPID IMPROVEMENT.

This work comprises the excavation of a straight channel 200 feet wide and 17 feet deep through the shoals of the rapids which are known by the following names : Upper Bar, North and Caledonia shoals, Island shoal and Lower Bar. The whole of these shallow places are included in a distance of 3,300 feet.

The work is sub-aqueous and consists in blasting and dredging the rock in the rapid.

The work as originally designed for the 200-foot channel was finished in November, 1888, but in view of the apparent lowering of the water surface of the River St. Lawrence, and for the purpose of making a satisfactory test and survey of its bottom, and at the same time to be prepared for the removal of any material above the original contract grade, an agreement was entered into in the year 1897 with the Gilbert Bros. Engineering Company, Limited, to perform the necessary work. Operations were commenced the same year. In the year 1898 it was decided to widen the entrance to the existing channel south or towards Adam's island, with a view to eventually increase the width of the channel as originally excavated to 300 feet.

The plant employed consists of a dredge, drill scow, tugs, scows, &c., all adapted to the special work in hand.

As there was no appropriation for continuing the work in 1902-03, no work of any kind was done, but the plant was maintained in good working order.

For 1903-04, an appropriation was granted and the work was resumed in May, 1904.

During the past two months the drilling and blasting has been confined to the lowering of the grade on the Island Shoal, and the work of drilling at the Lower Bar is now in progress.

To complete the channel and render it safe in all stages of the river, Lower Bar should be widened to 300 feet at bottom and some detached rock outlying North Shoal either taken out or rolled into the adjacent deep water. With this done and the dam closing the gut completed, the new channel, which is the main channel of the river, will be brought into general use by all classes of vessels, except probably the old time 9 foot draught barges, which are now towed in batches of four or six.

NORTH CHANNEL.

This channel commences about one mile west of the Upper Entrance of the Galops canal and extends in a straight line to deep water off Chimney Point, a distance of $2\frac{1}{2}$ miles.

It was constructed to avoid the sinuous natural channel passing through American waters, which is about three-quarters of a mile longer, and could not be navigated with safety by the class of vessels for which the present enlarged canals were designed.

The work consists in the excavation of a channel originally 200 feet wide, which was subsequently increased to 300 feet, through the bed of the St. Lawrence river and Drummond and Spencer islands, the construction of embankments on either side of the channel, and of piers and of cribs at its eastern and western entrances.

The work having been authorized and tenders advertised for, it was let to Mr. M. A. Cleveland, May 14, 1897, the work to be finished on January 31, 1899.

The time has since been extended.

The chief reason for urging the construction of this channel was to complete the deep or 14-foot navigation from the Prescott reach to the head of the Galops canal and rapids, instead of following the old and circuitous American channel across the flat-rock shoals, over which navigation is limited to nine feet, besides involving a distance of three-quarters of a mile in excess of the North Channel route, practically the shortest obtainable between Prescott and the head of the Galops canal.

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Since the construction of the north channel from its earliest unfinished stage, when less than 200 feet was the available width, it has become the principal navigable channel for vessels of all draughts, and will so continue in any stages of the river.

In its present condition it is full 300 feet wide on the bottom, except at the head of Spencer island, where for a short distance it is only 200 feet in the clear, and will remain at that width until next season, when the material which is being reserved for backing the breakwater will be removed and full width of 300 feet obtained.

The depth of water in the channel at its present high stage is 17 feet. The channel is temporarily lighted by one gas buoy at the head of the breakwater, and by a lamp at the lower entrance pier.

The stone revetment and slope walls within the prism are finished, except the proposed continuous line of coping which has proved to be necessary and has been provided for in estimate.

The work done during the past year is as follows :—

Earth excavation.—Dredging operations were carried on, at south side of channel at Drummond's island, and cleaning up bottom up to September 23, 1903, when the entire width of prism was completed and the channel at this point finished, thus completing channel from head of Drummond island to east dam. Dredging was resumed at Spencer's island on April 13, 1904.

Rock excavation.—The dredging of excavated rock in prism east of lower entrance began September 23, 1903, and continued during the season. Dredging at this point resumed June 28, 1904, and continued to June 30. Only a small portion remains to complete channel at this point.

Cribwork at upper entrance, consisting of a continuous breakwater on the north side of the channel from Spencer's island to the lighthouse, was completed to the level of normal water in October, 1902. The placing of footing course to superstructure on cribwork above Spencer's island was begun December 1, 1903, and continued to December 12, 1903, when 1,200 lineal feet of footing had been placed. Owing to the extreme high water prevailing it has not been possible to continue this work the present season, but stone is being prepared for this purpose.

'GUT DAM.'

This dam is being built in what is known as 'The Gut' channel between Adams island, a Canadian island, and Les Galops island, a United States island. This necessitated procuring the consent of the United States government thereto, which was formally obtained.

The extreme length of the structure is about 900 feet, and its maximum depth, when completed, will be 17 feet. At this point where the dam is situated, the current had a velocity of 3.70 miles per hour, which increased greatly as the work progressed.

The primary object of the dam is to shut off a side or cross current in the Galops rapid (which crossed that channel at a maximum angle of 20° 40'), and thereby render that channel safer for the passage of vessels. A secondary object is to raise the water in the upper entrance of the Galops canal, by lessening the cross-sectional area of discharge of the river. The depth of water on the sill of lock 27, at its lowest known stage, was but 13 feet.

The objects of the dam seem to have been attained with the structure in its present state.

The current crossing the Galops rapid channel has been overcome. The water in the upper entrance of the Galops canal has been raised.

If the crest of the dam is to be built only to the height of the level of ordinary water, viz., 9 feet on the sill of old lock No. 27, the currents in the Galops rapid channel will vary at periods of high and low water, placing vessels using that channel at a disadvantage. By raising the crest of the dam to at least the level of high water, these currents will be made constant.

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The authority for proceeding with the work was received on September 10, 1903. Work was commenced on the following day, and on November 11, 'the Gut' was completely closed by the rock dump which forms in part the rock talus on the lower side of the cribwork core of the dam.

The seats for the cribs were dredged to such a depth as to insure a good foundation, bed rock being reached in several places. Dredging for the seats of cribs was commenced on November 14, 1903, and discontinued for that season on the 21st of the same month. Dredging was resumed on April 19, 1904, and discontinued on May 4. Only a small amount of dredging remains to be done.

The first crib for the core of the dam was placed on November 21, 1903, and on December 2, when this work was discontinued for the season, 13 cribs had been sunk in place. Five anchor cribs, which also served as guard cribs, were also sunk. Placing cribs was resumed on April 29, 1904, and up to June 30, 29 cribs had been sunk in place and filled.

The aprons of rock fill at either end of the dam were partially placed in May, 1904. The indurated clay talus is being placed.

The space between the cribs and the rock dump is being filled with material obtained from reducing the top of the rock dump.

With the water at its present stage—11'60 feet on the sill of old lock 27, it will not be practicable to complete the dam this season.

RIVER REACHES.

From the head of the Soulanges canal to the foot of the Cornwall canal, the length of the navigable channel is about $32\frac{3}{4}$ miles; of this distance, 30 miles is through Lake St. Francis.

A channel has been buoyed between the above mentioned points, with a minimum depth of 16 feet at lowest water, and has been brought into general use.

St. Regis section, $2\frac{1}{2}$ miles east of Cornwall, is situated about mid-way between the foot of Cornwall island and First Crab island. The work here consists in the dredging of a channel 1,100 feet long and 300 feet wide through what is known as the St. Regis shoals, and protecting it with a dyke terminating with crib piers. This work was let to Messrs. Manning & Macdonald, May 24, 1898, to be completed November 30, 1898.

This work, however, was not completed until the fall of 1900, but has since been generally used by all classes of vessels, and is an important link in the 14-foot or deep water channel.

Hamilton island section, between the seventh and eleventh mile east of the Cornwall canal.

This work consists in the dredging of a channel through or of widening and straightening it through the undermentioned shoals, and the construction of a lighthouse crib on the Middle Ground, viz.:—

The Clark's island shoal, $7\frac{1}{2}$ miles east of Cornwall; the dredging at this point was substituted for that proposed to be done at Horseback.

The Middle Ground, 10 miles east of Cornwall.

The Highlander shoal, $10\frac{1}{2}$ miles east of Cornwall.

A contract was entered into with Messrs. Manning & Macdonald, May 24, 1898, to be completed November 30, 1898.

The time stated for completion has necessarily been extended, but all the works embraced in the Manning & Macdonald contracts are now finished.

The final estimates were sent to the department on August 8, 1903.

By way of improving the river channel, so as to afford a more direct course to vessels, I beg to submit that several salient points and shoals should, in course of time, be removed.

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For the present I will confine myself to draw your attention to the improvements which could be made at the following places, viz.:—

Immediately east of lower entrance of the Farran's Point canal, Baker's Point could be reduced.

Between Aultsville and Morrisburg, a shoal known as 'Jack Ass Shoal' could be removed. Upon this shoal, through some mishap, vessels have frequently been aground or entirely wrecked.

Immediately below the lower entrance of the Rapide Plat canal, the reducing of Rose's Point would materially improve the channel.

At the head of the Rapide Plat canal, immediately west of the present Gilbert contract, on the north side of the river, a salient point, known as Robertson's Point, could also be reduced.

Iroquois, on the north side of the river the channel opposite Pine Tree Point could be materially improved.

In view of these improvements I would suggest that a careful examination and surveys be made as soon as convenient.

I have the honour to be, sir,

Your obedient servant,

L. N. RHEAUME.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa, Ont.

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ST. LAWRENCE CANALS.

OFFICE OF THE SUPERINTENDENT OF OPERATION,
MORRISBURG, ONT., June 30, 1904.

SIR,—I have the honour to submit herewith the Annual Report on the maintenance and operation of the St. Lawrence canals for the fiscal year ending June 30, 1904.

THE CORNWALL CANAL.

This canal was closed to navigation on December 3, 1903, and opened on May 1, 1904.

During the season navigation was uninterrupted.

The electric light and power service during the year has been most satisfactory; the number of lights out at any one time on the line of over 17 miles not averaging 3 per cent of the total number installed. During the winter season there are only 100 lights burning, which allows of lighting each lock and weir and lock-house, and the full stretch of canal in the neighbourhood of the town of Cornwall. Lights are necessary on the locks during the winter, as a man is on duty all the time to regulate the water levels.

During the season of 1903 the equipment of the old locks with electrical machinery was completed, and is in good working order.

All the work of installing the electric light and machinery was done by Mr. M. P. Davis, who selected Messrs. T. Pringle & Son, electrical and mill engineers, Montreal, to design and superintend the work of installation.

I have secured from Messrs. Pringle & Son a short technical description of the work, which is presented herewith in the hope that it may prove interesting:—

‘The electrical equipment of the Cornwall canal is supplied with current from the power house of Mr. M. P. Davis, near Mille Roches, on the Cornwall canal. Messrs. T. Pringle & Son were the engineers, and the electrical equipment was installed under the personal supervision of Mr. F. H. Leonard, jr.

‘The plant is situated just below the lower dam on the Cornwall canal, near the village of Mille Roches, and takes water from the upper level. There is obtained a head under ordinary circumstances of about 30 feet; but on account of high back-water the plant was designed for operation temporarily on a minimum head of 18 feet.

‘The power house foundation rests on the solid rock, the wheel pits being excavated to a depth of about 10 feet below the surface of the bed rock. The arches over the wheel-pit are of concrete, but faced on the outside with rough picked masonry of large dimensions, which gives to the entire structure a very substantial appearance. The power house is constructed on a steel frame having brick walls and heavy plank roof.

‘Provision was made for four hydraulic units, giving an ultimate capacity of approximately 6,000 h.p. Each unit consists of 5—35 inch new Sampson wheels by Wm. Hamilton & Company, with horizontal shafts directly coupled to a 1,000 K.W. Bullock generator, operating at 2,200 volts at 180 r.p.m. at 60 cycles.

‘The switchboard gallery is about 19 feet above the main floor of the power house, and accessible by means of a flight of iron steps in the centre and two iron ladders at either end of the power house.

‘At present but one unit is installed, with 2—50 k.w. exciters, 285 r.p.m. Switchboard panels are provided for the control of the generators, the exciters and the various feeders.

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The arc lights, of which 230 are located along the bank of the canal, were furnished by the G. I. Company of New York. A three-panel switchboard controls the operation of these lamps, and each circuit is regulated by a 100 light G.I. regulator capable of maintaining practically constant current with any number of lamps in circuit from 1—100, its full capacity.

The current for these circuits is stepped up from 2,200 volts by means of transformers of 60 k.w. each, the transformers being provided with intermediate taps, so that besides the full voltage of 11,000 v, if a smaller number of lamps are required either 4,400 or 6,600 volts can be used, thus reducing the reactance necessary to maintain a proper voltage and permitting of a higher power factor under the conditions of partial load.

Current for the power circuit (three in number) is obtained by stepping up from the generating voltage of 11,000 volts by means of 3-150 k.w. transformers which supply the 3-pole transmission lines reaching various locks along the eleven miles of canal.

The primaries of both arc lighting and power transformers are controlled by oil switches connected to the bus bars on the main switchboard, a separate panel being provided for each class of service. The power circuits are passed through a separate high potential switchboard which connects the transformers to the three separate 3-phase power lines.

Lightning arresters and choke coils are provided for the various circuits. The wiring of the station between generator and switchboards to the wire tower, from which the circuits are fanned out to the different pole lines, is all carried in 3-conductor lead encased cable, allowing ample space for additional cables.

The pole lines for the lighting and power circuits are of substantial construction, an exceedingly straight lot of cedar poles being used. These range from 30 to 50 feet in height, none having less than 7-inch tops, on which are mounted special cross arms provided with hickory pins which were boiled in stearic acid. Five and one-half inch triple petticoat glass insulators have been used with satisfactory results with the 11,000 volt circuits. Bare copper conductor is used, spaced 16-inch on centres, and on account of the low current per line no attempt was made to use the triangular arrangement of conductor, the three wires of each circuit being arranged side by side without transposition.

The 3-phase power circuits occupy the upper arms and on the lower arms are located the single-phase arc circuits. The main lines occupy the south bank of the canal.

Crossings are made at the Mille Roches bridge in armoured paper cables, one for 3-phase, 2,200 volts power and lighting circuits, and another for the single-phase, 11,000 volts arc circuit. Another crossing is made at lock 18, which provides for 3-phase power circuit, as well as another 11,000 volts arc circuit to provide for power and lighting on the north bank below this point.

At the Stormont bridge near Cornwall, another 11,000 volts arc cable provides for lighting the two piers at the bridge, and an emergency cable is laid just above lock 17, so that in case of accident to any of the other crossings, or a break in the line, emergency connection can be made in the houses covering the cable heads on the bank of the canal.

Extreme care has been taken in locating and setting out the line, a transit being used for this work, making the alignment and location almost perfect.

The line is well guyed on the curves with galvanized signal strand well anchored, or in some cases tied to a heavy guy stub. On the sharp curves, poles are double armed to provide for the severe strain.

The lamps are hung from short iron pipe brackets which pass through the pole and are held in place by a collar at the front side and a lock nut at the back, and braced on the under side by an iron pipe strut fastened to the face of the pole by two lag screws. An insulated hanger is used at the outer end of the bracket (2 feet 6 inches from the pole) which, together with the insulators on the lamps, renders danger

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from grounding in the lamp frame and bracket extremely remote. The lamps are trimmed from the pole without lowering lamp.

‘Loops are cut in from transposition insulators by means of No. 8 flexible, rubber covered conductor, soldered to the bare copper line conductors.’

‘The lighting of the canal is carried out by an arc lamp located on every fourth pole with poles averaging about 100 feet apart.

‘A light is located at the piers as the lock is approached from below, and an arc lamp is also located at each side of the lock just below the gate. Two more lamps are located at the middle of each lock and two at the upper end of the lock just at the lock gates. There are also two more at the upper piers.

‘Below lock 18 both banks are illuminated all the way by lamps located 400 feet apart. Above lock 18 the lamps are located on the south side of the canal only, with the exception of prominent points, bridges, &c., where lamps are provided on both sides.

‘The upper level broadens into a lake of considerable proportions, about 30 feet deep near the lower end. The lamps are here less frequently located on the prominent points on the south side until the upper dam is reached, where the canal again narrows to the usual dimensions.

‘The lamps are again located about 400 feet apart on the south bank up to lock 21, which is a guard lock. On the long pier on the south side protecting the canal entrance, lamps are placed, as well as on the north bank as far up as Dickenson’s Landing.

‘An illumination so perfect as above described, you can readily imagine, makes navigation at night as easy as in daylight, and lockages are performed as easily and as rapidly as they could be in daytime.

‘At the upper end of each lock on the south bank there is located a small switchboard cabin, 7’ 0” x 9’ 0”. On the little island between the two locks is located another switchboard cabin, and at the upper end of the lock on the north side of the second lock is another cabin.

‘In the first of those above mentioned are placed three transformers, and connecting to the 11,000 v. mains which step voltage from the line pressure to 550 v., and it is at this pressure that the motors operate. A high tension fuse board is provided to take care of the primary connections to the transformers. The long inclosed fuse has friction contracts at either end, and by pulling these fuses out of the end clips by means of a wooden stick with a hook at the end, the circuit can be opened in case of temporary trouble, or for any purpose whatever when it becomes necessary to disconnect the transformers. The secondary of the transformers passes through the switch on the switchboard which distributes the secondary current to the motors, two of which are located on each side of the lock. Armoured cables with paper insulation is used to conduct the current from the switch cabin to the motors located on the same side of the lock.

The connection for motors on the opposite side is carried through armoured cable which leads down through the floor of the switch cabin and passes through a hole drilled in the stone coping of the lock to the upper stop-log check. The cable turns over a radius of 16 inches at the top and passes down the check.

‘Where the cable crosses on the lock bottom a timber is held on top grooved on the bottom side to receive the cable, and as the top of this timber is well below the breast wall at the entrance of the lock, there is no danger of the cable ever being disturbed.

‘Rising on the opposite side of the lock in the stop-log check, the cable again passes through a hole drilled in the stone coping until it comes out of the earth back of the masonry under the next switch cabin, from this switch cabin the cable is carried into the third switch cabin on the north side of the old locks.

‘On the switchboards in each of the cabins are placed the motor starting switches connected to auto-starters, which control the motors on one side of each lock. From the switch cabin on the south side are operated two motors, the first motor being connected by armoured cable—reaching from the switch cabin under ground to the first motor. The second motor is reached by conductors running from the switch cabin over-

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head to a pole very near the motor at the lower end of the lock, armoured cable connecting from the pole underground as far as the masonry and checked into the masonry where it passes over to the motor.

‘The switch cabin on the little island between the two locks controls the two motors on the north side of the new locks and two motors on the south side of the old locks. The third switch cabin controls the motors on the north side of the old locks, as well as the motor operating the weir gate mechanism.

‘The arrangement is identical in all the locks, with the exception of new lock 15 and old locks 15, 16 and 17 which are not provided with weir gates.

‘The equipment for operating the lock gates and weirs was adapted for use in connection with the winches and weir gate mechanism already installed, without disturbing their capability for hand operation should occasion require.

‘Four winches are located at each end of the lock, two on each side, one of which handles the chain to close the opposite gate, and the other handles the chain to open the gate on the side at which these winches are located.

‘Across the top of each gate is a bridge on which is mounted the worms and rods for opening the two valves in each of the gates when required to fill or empty the lock.

‘The electrical equipment utilized practically all of this machinery as it stood, with only the necessary changes to make the mechanical connections with the electrical drive.

·The motors selected are all of 5 h.p. for both the lock gate and weir mechanism.

‘To operate the two winding winches which control the chains for opening and closing the gates, one motor is located near the hollow quoin at the heel of the lock gate—which is coupled by means of short length of shafting and friction clutch coupling to the winch near this point, and by means of another friction clutch and length of shaft sufficient to reach the other winch, supported at intermediate points by pedestals carrying journal boxes mounted on cut stone foundation for the mechanism.

‘As there is a reduction of about 42 to 1, which gives a speed of about 26 rev. for the operating shaft, we concluded to use the worm gear rather than a more complicated triple reduction by means of spur gears. A sub-base extends under the motor and also carries the casing for the worm and worm gear. The worm runs in oil, the thrust being taken up by alternate steel and bronze collars and thrust discs, adjustable at one end by means of set screws and check nut to compensate for wear.

The motor, which runs at 1,200 r.p.m., is coupled directly to the worm shaft, the worm being cut out of solid steel and meshing into a hobbled bronze worm wheel turning on a shaft mounted on babbitted bearings. The projection at one end of this shaft having mounted upon it the friction coupling controlling the working shafts, the opposite end being coupled to a short length of shaft which carries the chain wheel similar to a sheave in a chain hoist, and from this point by means of a welded link chain made endless is turned at an angle to the main working shaft, the supplementary shaft for operating the valves in the lock gates. This shaft is supported on bearings secured to the coping of the lock and placed about $\frac{1}{2}$ -inch above its surface and continued under the bridge on the lock gate, a universal coupling being utilized at a point near the gate pivot so that the travel of this joint is minimized.

The arc of the circle through which this coupling passes is provided for by a swivel box carrying the end of the driven shaft, and the travel in and out is allowed for by having the chain sheave run free on the shaft except when engaged by a jaw clutch keyed to the shaft so as to allow the shaft to run in and out as it passes through this arc and engage or disengage the clutch at the proper time for controlling the valve mechanism. The clutch being disengaged allows the driving sheave to run loose on the shaft, the shaft itself remaining idle during the time the gate is open, and is only put into operation when the gate is swung to the closed position.

The valves are operated by bevel gear reversing mechanism, which allows the operator to either close or open the valves in the gates by throwing the shipping lever which engages a jaw clutch with one of the bevels required to operate the valve stem

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in the desired direction. The travel of this stem, however, is limited by an automatic stop consisting of a loop and bell crank, operated by a pin in the cross-head travelling with the valve stem so that at the lower or upper limit of travel, the pin trips the bell crank connecting with the shipping lever so as to throw the clutch out of engagement with the bevel gear which produces the motion.

The weir gates are operated by worm and segment, or in some cases by raising or lowering the valves in a manner similar to that on the lock gates, the operation of which is carried out in much the same way as described in connection with the gates.

As there are a number of weir gates or valves which must be capable of independent operation, provision is made by means of a double jaw clutch engaging with either one or the other of two bevelled gears on a horizontal shaft which meshes into a third bevelled gear on a shaft of the worm for operating the segment which drives the valve stems.

A friction clutch is placed between the shaft of the worm wheel driven by the motor, so that in case of accident resulting in jamming any of the parts, the friction clutch will slip before any serious breakage occurs.

The equipment for the bridges is operated by a motor driving the mechanism through worm gears, the same power unit being utilized as for the operation of the lock gates and weirs, an extension of the interchangeable idea. Aside from the first speed reduction, however, the gearing is quite different, though in the case of both the Mille Roches and Stormont bridges the arrangement is worked out on similar lines.

The bridge at Mille Roches has a motor swung under the bridge just outside of the turntable, being counter-balanced by weights at the opposite end of the bridge. I-beams support the motor and worm gear case, the shaft of which drives the gearing communicating the motion to a pinion meshing with the rack which turns the bridge.

A friction clutch communicates the power from the motor driven worm shaft to one or the other of a pair of bevels turning the bridge in whichever direction the operator desires. The clutches are operated by two removable levers coming up through the bridge floor.

The control of the Stormont bridge is very similar to that of the Mille Roches bridge, the only difference in the mechanism being that the power unit is mounted inside the drum of the turn-table on I-beam frame, which does not require to be balanced.

During the year a contract was entered into with Mr. M. P. Davis to complete the electrical working equipment of the canal by putting a winch at each lock for pulling vessels into the lock. The progress of the work under this contract has been delayed somewhat owing to the difficulty in securing the electric motors on time, but the work will be completed during the present season.

A contract was also entered into with Mr. J. C. Johnstone, Cornwall, for repairing the north bank from the east end of the revetment wall to old lock 17. During the two weeks that the water was out of this level in the spring the base of the wall for a distance of about 650 feet was put in and the wall built up from water level after May 1. There remains about 750 feet of this wall to build yet.

To prepare old locks 15, 16, 17, 18, 19 and 20 for the electric equipment it was necessary to lengthen the lifting rods, and widen the foot bridges. This was done and the machinery installed.

All the new locks were supplied with new chains for hauling the gates; and the old chains repaired were put on the old lock gates.

Another 500 feet was added to the new rip-rap on the north side of the canal on the high bank at Robertson's culvert, above lock 19. This was put in, using a heavier class of stone than had generally been adopted in the past. In many places along the south bank in short stretches of 50 to 100 feet the stone protection was renewed.

All gates, bridges and machinery were painted during the season.

The masonry on both sides at the west end of lock 17 was repaired, replacing seven stones in the coping, re-setting the others and putting in a concrete backing, finishing

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it off on the surface as a walk. This concrete backing at locks 15 and 17 has been found very effective in withstanding the impact of heavy vessels. In no case where it has been put in have the coping stones been shoved in. To prevent, as far as possible, chipping of the coping oak waling—strips were placed at each end of lock 15 on both sides, and at the upper end of lock 17 on both sides.

The slope on the high bank above lock 21 is in a condition requiring repairs every spring. It would appear as if it should be completely under-drained to prevent the slides that occur. Long stretches of it have had to be filled in during the present year; a similar slide occurred last year.

A beginning was made in putting in iron snubbing posts by placing two at lock 19 late in 1903. Others will be put in as the wooden posts now in position require to be replaced.

Two were also placed on the north side of lock 21.

In order to have a covering for the lock machinery that has to be taken off old locks 15 and 16 every winter to avoid damage by flood, an old building that stood near the upper dam was taken and repaired for a storehouse and placed on the north bank of the old canal at old lock 16.

This winter the heaviest ice jam occurred farther up the river than usual. The channel was filled with ice from about a mile below the foot of the canal to the head of Barnhart's island, raising the water so high that for a short time the Long Sault rapids were flowing level and the waters of the river running over the lock gates at the head of the canal.

While the canal was unwatered in the spring of 1904, all the stone protection was carefully gone over and repaired, in addition to the piece at Robertson's culvert that was renewed.

All the ditches along the south side of the canal have been carefully gone over and cleaned out.

The bridge across the Canadian Coloured Cotton Mill Company's flume, above lock 17, has been renewed, using timbers and plank.

Three anchor-bars on the gates of old lock 15 were broken by the ice during the winter. They have been replaced so that the lock is in condition for use, if the necessity arises.

The gate ponton has been thoroughly overhauled and strengthened; but it is in bad condition, nearly all the frame work being well rotted.

All the old gates and barges left lying in the upper reaches of the canal have now been cleaned out.

Considerable work was done in cleaning up the bank at Mille Roches and in trimming the point, just above the Mille Roches bridge.

About 100 trees, mostly maple, elm, birch and willow, were planted on the south side at the head of the canal. They are growing nicely.

Plans have been prepared for workshops and office, and tenders for their erection are being called for.

In addition, all the work of small repairs was carefully attended to as the occasion arose. Repairing broken chains, patching broken gate bridges, repairing a broken part of machinery are matters each one small in itself, but when they occur day by day and perhaps several times in one day at one point or another it becomes a matter of some moment in the amount of time occupied in making the repairs.

THE WILLIAMSBURG CANALS,

comprising the Farran's Point, Rapide Plat and Galops canals, were all closed on December 3, 1903, and opened to navigation on May 1, 1904.

The only interruptions to navigation were at Farran's Point from 6 a.m., August 22, to 6 a.m., August 25, caused by the steam barge *Erin* sinking in the lock, and at the Galops canal from 8.30 a.m., November 21, to 10.50 a.m., November 23, caused by having lowered the water in the canal owing to a leak discovered in the bank. At

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Farran's Point all vessels drawing 9 feet, or under, used the old lock, so that only two vessels suffered detention by the accident—*John Crerar* and *Geo. C. Howe*. At the Galops there were only three vessels detained.—*D. D. Calvin*, *S. N. Parent* and *Neepawa*.

To mark clearly the projecting point where the old outer pier formerly showed at the lower entrance to the Farran's Point canal a red light was placed upon it.

Considerable work was done in putting back into position riprap stones that had become displaced on the Iroquois section of the Galops canal.

A new flooring of white oak was put on both the stationary and the swing bridge at Iroquois.

One house at Iroquois was thoroughly overhauled and repaired, and the one used by the engineering staff for an office was shingled. There are now three government houses at this lock used for the residence of the lockmen.

For almost its full length the south bank of the Rapide Plat canal was gone over and the riprap repaired. This required a large quantity of new stone.

The work of putting in iron snubbing posts in concrete base at new lock 23 was completed, and two put in on the old lock. The concrete backing for the lock and wing walls was also completed, and now that lock is in such good condition that it should require no attention for many years outside of the little accidents that may happen any time, and keeping it painted and clean.

All the residences, lock-houses and other structures requiring it were painted during the year.

At Farran's Point there was over a mile of the canal reserve lands that had not been fenced in. This was inclosed by a heavy post and wire fence, with gates put in at such points as they were likely to be required.

The pier at the northeast entrance to the Farran's Point canal was extensively damaged by one of the large freight steamers running into it. This damage was repaired, and the pier is now in as good condition as formerly.

Very complete soundings and surveys of the river in the vicinity of the lower entrance of the Farran's Point canal were made during the latter part of the season of 1903. These were plotted and a chart prepared. Afterwards a model of the river was cut out in wood and the direction and effect of the currents carefully watched. Much valuable information was obtained, which, it is expected, will be useful in overcoming the difficulties of navigation at that point.

A rather heavy cave-in occurred in the south bank of the Galops canal near the west end of the Iroquois section late in November, 1903. The water was lowered and the cave-in filled up.

The cribs put into this bank during the construction of the Junction canal have been left there, and now, from the heavier head of water and from muskrat invasion, are a source of trouble. Considerable repairs had to be done again in the spring of 1904. Where the bank was widened and the crib taken out, then the bank built up again, in the spring of 1903, there has been no further difficulty. It would appear as if a similar method of handling would overcome the difficulty at all the points where it exists. It has been decided to adopt this method, and to make the needed repairs without interfering with navigation. A separate appropriation is asked, for an amount sufficient to cover this work.

An ice bridge was formed between Baker's Point and Croil's island, below Farran's Point canal, early in January; fortunately the water did not rise high enough to do any damage.

The mechanics and a few of the labourers on the repair staff were employed during part of the winter in building a new working scow and house boat for the repair staff. The scow is 24 ft. x 70 ft. x 7 ft., of British Columbia fir, and has been made exceedingly strong, as it is intended to put on a derrick operated by steam power. The living quarters is a very comfortable float 16 ft. x 34 ft., affording good sleeping and eating quarters for a dozen men.

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During the winter season about 100 cords of heavy boulders were placed as a talus on the outer side of the bank of the Galops canal, on the Iroquois section, between stations 80 and 90.

In the spring of 1904, 15 snubbing posts had to be renewed at the head of the Galops canal.

All the ditches on the Redmond and Hanes farms on the north side of the Galops canal were cleaned out, and both of them extended in a westerly and southerly direction. There should be no further complaints of water lying on their property from either of these men.

A very considerable portion of the stone protection that was put in on the back ditch runs through the village of Iroquois, fell in and will have to be renewed. This will be done with a larger stone laid with a greater slope.

Nearly two miles of wire fence were built along the north side of the Galops canal.

About 200 native trees were planted on the outer bank of the Farran's Point canal this spring. Most of them are growing well.

On all the canals the grass and weeds were kept cut and the banks in good condition.

A contract was entered into with the Acetylene Construction Company of St. Catharines for installing the complete plant for lighting Farran's Point canal by acetylene gas. The work is well under way and will be finished in a month or so.

THE MURRAY CANAL

was closed on November 30, 1903, and opened to navigation on April 25, 1904.

There was no interruption to navigation during the season.

All the ditches were cleaned, grass and weeds cut, and several rather heavy wash-outs repaired by filling in. In order to avoid these wash-outs in the spring several of the ditches have been deepened and carried into the canal through a large tile running under the tow path.

The house purchased from C. Goodrich was repaired at a rather considerable cost, though nothing more was done than was needed. It is used as a residence by the bridgmaster on the Smithfield bridge.

The wooden piers of the C. O. R. bridge were rebuilt from below the water line, so that now all the bridge piers are in good condition. As nothing had been done to them or to the end piers since they were first built, it has been a matter of considerable cost to rebuild them.

The land pier on the north side of the eastern entrance was built up of concrete, making a substantial structure that will not require repairs. An iron snubbing post was put in, and steel girders to carry the flooring across to the next crib. Owing to lack of appliances for making and handling concrete work the work took somewhat longer than it will to do the remaining piers with machinery.

The piers are all very far gone and must be replaced at as early a date as possible.

All along the line of canal on both sides the stone protection was kept in good condition by constant work.

Numerous complaints came in from the owners of side-wheel steamers that their paddles were being broken by striking on the floats placed along each side of the bridge pits. These floats were taken out and walings placed on the side of the masonry, which serve the purpose of the floats in protecting the piers and abutments, and do not injure the vessels.

Contracts were entered into with the McGregor-Banwell Fence Company for wire fencing; Mr. T. D. Sandford for cedar fence posts, and with Mr. Norman Button for erecting the fence along both sides of the canal. Good progress has been made with each contract, and the fence is completed except at a few points where the high water prevents access at this season of the year.

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The house owned by Mr. W. H. Johnston, near the C. O. R. bridge, has been purchased, and will be used as a residence by the bridgemanter at that bridge.

Statements are appended showing the water levels, traffic reports and fines and damages.

I have the honour, to be, sir,
Your obedient servant.

W. A. STEWART,
Superintendent of Operation.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa, Ont.

STATEMENT of fines and damages in connection with the St. Lawrence Canals during the year ending June 30, 1904.

CORNWALL CANAL.

Lock.	Date.	Name of Vessel.	Damage.	Fine.	Name of Owner.	Remarks.
	1901.		8 cts.	8 cts.		
17	July 31.	Hebron.	1,427 69	.....	Hall Forwarding Co.	Unpaid.
	1902.					
20	July 19.	.....		5 00	L. A. Ross.	Paid.
20	Aug. 12.	.....		20 00	"	"
	1903.					
18	June 18.	Bothnia	9 79	.....	Montreal Transportation Co.	"
18	" 18.	Bohemian	13 88	.....	R. & O. Navigation Co.	"
21	Oct. 17.	A. M. Marshall.	60 00	.....	Great Lakes and St. Lawrence Transportation Co.	"
17	" 11.	Geo. C. Howe.	45 00	.....	" " . . . . .	"
	1904.					
21	May 27.	J. H. Plummer.	12 00	.....	R. O. McKay.	"
19	June 13.	Turrett Chief.	20 00	.....	Peterson Co.	Unpaid.

WILLIAMSBURG CANALS.

	1903.					
22	July 16.	Barge, Doris	100 00	.....	Can. Towage and Transp. Co.	Paid.
22	Oct. 16.	H. B. Dalton.	40 00	G. L. and St. Lawrence Transportation Co.	"
22	" 31.	J. S. Keefe.	690 42	" "	"

MURRAY CANAL.

Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
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W. A. STEWART,
Superintendent of Operation.

MORRISBURG, Ont., June 30, 1904.

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Record of Highest and Lowest Levels of Water on the St. Lawrence Canals for the Year ending June 30th, 1903.

MONTH.	CORNWALL CANAL.						WILLIAMSBURG CANALS.						MURRAY CANAL.					
	Lock 15.		Lock 21.		Lock 22.		Lock 23.		Lock 24.		Lock 25.		Lock 27.		Lock 27.		Lock 27.	
	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.	Highest Ft. In.	Lowest Ft. In.
1903.																		
July.....	10 8	10 4	11 0	10 3	10 5	9 6	10 0	9 3	10 3	9 6	12 11	12 1	10 7	9 10	14 0	13 8		
August.....	20 7	10 2	10 9	9 10	10 3	9 1	9 9	8 8	10 4	9 0	12 9	11 3	10 4	9 3	11 0	13 5		
September.....	10 3	9 10	10 4	10 0	9 8	9 2	9 5	8 9	9 8	9 1	12 2	11 6	10 4	9 5	13 7	13 0		
October.....	10 5	9 6	10 1	9 1	9 4	8 5	9 1	7 10	9 6	8 0	11 10	10 3	9 10	8 9	13 4	12 5		
November.....	9 7	8 9	9 7	8 1	9 9	7 9	8 2	6 9	9 0	7 0	11 2	8 11	9 8	7 11	13 0	12 1		
December.....	18 11	8 7	9 9	8 1	9 5	7 8	8 5	6 4	8 9	6 9	11 1	8 6	9 6	8 0	12 8	12 3		
1904.																		
January.....	22 0	17 8	10 6	8 0	12 0	8 0	9 8	6 0	7 7	6 0	9 8	6 8	8 10	8 1	12 3	11 11		
February.....	26 0	21 2	13 2	9 0	13 3	10 0	9 8	7 2	7 7	6 3	9 10	8 2	8 8	7 11	12 5	12 1		
March.....	24 3	20 1	10 0	8 10	11 1	9 9	9 3	7 3	8 8	6 8	10 10	8 6	9 5	8 3	13 7	12 5		
April.....	22 0	10 7	11 2	9 5	10 6	9 7	10 0	8 6	10 1	8 7	12 11	11 0	11 2	9 5	14 9	13 10		
May.....	11 1	10 8	11 5	10 8	10 9	10 0	10 10	9 9	11 1	10 2	14 0	12 8	11 6	10 8	15 2	11 8		
June.....	11 4	10 10	11 7	11 0	11 11	10 4	10 9	10 1	11 5	10 3	13 11	12 11	11 8	10 11	15 5	11 11		

MORRISBURG, June 30, 1904.

W. A. STEWART,
Superintendent of Operation.

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SUMMARY of Traffic through the St. Lawrence Canals, during the Season of 1903.

REVENUE DIVISION.	Grain, &c., on which Tolls were paid here, transhipped at		Through Traffic to Quebec.				Number of Vessels passed through.						Registered Tonnage of Vessels passed through.										
	Passes seen and issued	Kings-ton.	Pres-cott.	Ogdons-burg.	Wheat.	Flour.	Coal.	Com-Farran's wall.	No.	No.	No.	No.	Galops.	Lift Lock.	No.	Com-wall.	Farran's Point.	Rapide Plat.	Galops.	Lift Rock.	Murray.	Tons.	
																							Tons.
Comwall	2,582			31,231	12,889	17,904	21,325	5,105	1,416	1,645	3,126	1,985				1,163,502	470,684	532,432	644,932	526,408			
Cardinal	763	2,910		9,893																			
Kingston	404																						
Brighton	742											742										242,485	

W. A. STEWART,
Superintendent of Operations.

Montreal, June 3, 1904.

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HARBOUR IMPROVEMENTS,

PORT COLBORNE, ONT.

August 4, 1904.

DEAR SIR,—I have the honour to submit my annual report on the progress of the works for the improvement of the Port Colborne entrance, Welland canal.

The contract for these works was let to Messrs. M. J. Hogan and Allan R. Macdonell, May 4, 1900. They comprise ; first, the dredging and cleaning up the bottom of the canal basin and entrance channel to a depth of 16 feet at low water, and the construction of docking along the sides of the basin. Second, the excavation in solid rock of a wide channel 22 feet in depth from deep water in the lake to the lighthouse situated 2,000 feet from the shore line, on the southern end of the west pier, and the construction at this point of two elevator docks. The total estimated cost of these improvements as provided for under this contract at schedule rates is \$1,031,189.

The present condition of the works may be briefly described as follows : First, the improvements of the canal basin and entrance channel, north of the lighthouse on the end of the west pier are approximately one half completed. The total value of this part of the improvements is about \$360,652. As directed by your letter of April 25, 1904, the 950 lineal feet of docking on the east side of the canal basin south of the Grand Trunk elevator is being sunk to 22 feet in depth, the building of the cribs for this section of docking is now in progress. Second, the excavation of a wide channel 22 feet in depth from deep water in the lake, necessitating the removal of over 200,000 cubic yards of rock and the construction of the elevator docks is well advanced towards completion. The value of this section of the improvements is about \$670,537. There yet remains about 80,000 cubic yards of rock to excavate of which quantity 50,000 cubic yards are drilled and blasted. The cribwork and concrete superstructure of the two elevator docks are completed, except one crib in each dock not yet sunk in place. The filling or hearting of these docks in rear of the lines of cribwork requires 180,000 cubic yards of loose rock, of which quantity 100,000 cubic yards have been put in place. This filling has been somewhat delayed pending the construction of elevator foundations.

The value of the work done and material delivered to July 31, 1904, is \$715,311.75, or about 70 p.c. of the estimated cost of the work at contract rates. The approximate quantities of the chief items of work done to the above date are as follows :

Item 1.	Excavation in canal basin (principally earth) to afford 16 feet of water.	C. yds.	69,960
" 2.	Excavation south of canal entrance (principally rock) to afford 22 feet of water.	C. yds.	132,500
" 2b.	Drilled and blasted but not dredged.	C. yds.	47,900
" 4.	White pine in cribs 12 x 12.	L. ft.	17,800
" 5.	Hemlock in cribs 12 x 12.	L. ft.	489,986
" 6.	White pine in cribs, 6 x 12.	L. ft.	4,900
" 7.	Hemlock in cribs 6 x 12.	L. ft.	39,846
" 11.	Iron in screw bolts of cribs.	Lbs.	377,500
" 12.	Iron in drift bolts of cribs.	Lbs.	687,000
" 13.	Spikes in cribs.	Lbs.	26,700
" 14.	Crib filling.	C. yds.	104,469
" 15.	Concrete in blocks.	C. yds.	5,814
" 16.	Concrete in mass form.	C. yds.	12,354
" 17.	Oak waling.	M. ft. B.M.	85
" 18.	Cast iron mooring posts.	Lbs.	34,400
" 19.	Wrought iron anchor rods of mooring posts.	Lbs.	13,440
	Special stone filling and ballast.	C. yds.	7,600
"	Macadam.	C. yds.	1,600
"	Stone filling behind cribs.	C. yds.	6,850

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During the past year the contractors have added to their plant, a large and powerful dredge with steel hull, which together with their other dredge, drill boat, tugs, &c., makes one of the best and most modern submarine excavation plants in Canadian waters. With the plant now on hand the completion next season of this contract is practically ensured.

The Department of Public Works, with a view of assisting in the development of trade through the canals and the formation of a well protected harbour here, have recently completed a breakwater across the southwest face of the harbour, this structure is 4,500 feet long and situated in the lake about 1,650 feet south of the new docks. In order to afford protection from easterly storms, the Public Works Department are now building a breakwater 2,400 feet long, and beginning 600 feet from the eastern end of the present breakwater. These structures when finally completed will fully protect the harbour and head of the canal from all storms.

The Royal Commission on transportation visited the works on May 3 last, and after a careful inspection of them, accompanied by Mr. J. L. Weller, suptg. engineer, Welland canal, Mr. Louis Coste, resident engineer, Department of Public Works, and myself, they held a meeting in this office to hear evidence in reference to the works now under contract and contemplated for the improvement of the Welland canal and Port Colborne harbour. The subject of putting in suitable foundations and constructing elevators of a most modern type and required capacity, on the new docks was discussed at some length, together with the question of rail connection out to the docks.

The rebuilding of the present west pier, an obvious necessity at an early date on account of its advanced stage of decay was also discussed on the lines of doing so to a depth of 22 feet. When this pier is rebuilt, I most strongly recommend that it be carried down to a depth of 22 feet, so that when the deep water channel at some future time is extended northward into the canal basin, the pier for a length of about 2,700 feet could then be used by vessels drawing 20 feet.

I am, sir, your obedient servant,

ALEX. J. GRANT.

Engineer in Charge.

COLLINGWOOD SCHREIBER, Esq., C. M. G.,
Chief Engineer Railways and Canals,
Ottawa, Ont.

SESSIONAL PAPER No. 20

WELLAND CANAL.

SUPERINTENDING ENGINEER'S OFFICE,
ST. CATHARINES, July 1, 1904

SIR,—I have the honour to report upon the maintenance and operation of the Welland canal and its branches for the fiscal year ending June 30, 1904.

The canal was closed December 12, 1903, and opened for navigation May 2, 1904. The different works which have been designed to facilitate navigation through the canal have been carried on satisfactorily during the past year.

Messrs. Magann & Phin, under contract for deepening portions of the Summit Level, have completed the deepening from Allanburg to Welland and are now working between Welland and Humberstone.

Messrs. Hogan & Macdonell, under contract for deepening the rock cut between Port Colborne and Humberstone, have done considerable work, but have not yet completed their contract.

The substructures for two new bridges, one at Welland and one at Port Robinson have been built, under contract, by Mr. Joseph Battle during the fall and winter. Steel superstructures for these have been erected by the Hamilton Bridge Works Company, the channel arms spanning the deep water in the canal and giving a clear channel 100 feet in width. The location of both of these bridges has been changed, the new bridges now being on the locations formerly occupied by the original bridges built about 1829, when the first Welland canal was put through. The change of location was much desired by the residents of Welland and Port Robinson and is greatly appreciated.

The substructures of the old bridges were removed by Messrs. Magann & Phin under contract. This contract also called for the entire removal of the 'Quaker bridge,' between Welland and Port Robinson. The removal of this bridge was made possible by the department buying all the land between the canal and Welland river from Port Robinson to Welland, about 180 acres. The navigation through the canal is very much improved by the removal of this bridge and the cost has been much less than if a new bridge had been built.

Before the opening of navigation this spring the mitre sills of the guard gate on the summit level above lock No. 25 were lowered two feet, the work being done by the canal staff at a cost of \$9,300.

The lock at Port Maitland, which has been leaking badly for some years, has been unwatered, two heavy dams being required, and the foundation is now being repaired.

Slow progress is being made on the installation of an electric light and power system along the canal. The poles are nearly all in position and considerable wire and other material is on hand, but it will be late in the season before the lights will be in use. Power is to be obtained from the Lincoln Electric Light & Power Company of St. Catharines, who have contracted to deliver power, from DeCew Falls into the distribution station, which is to be built on the canal bank at Thorold, the department distributing the power along the canal as they may require.

In my last report I stated that 'the canal was beginning to show signs of age, and from this on considerable trouble may be expected from leaks in banks, washing out of foundations, &c.' This prediction is unfortunately being fulfilled, as last fall a settlement in the bank in rear of the north wall of Lock No. 15 showed plainly that there was something wrong with the foundations, and preparations were made to repair them before the opening of navigation this spring. In the early spring a similar settlement occurred in rear of the wall of Lock No. 16. Upon unwatering this spring, it

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was found that the upper mitre sill of each lock was very badly undermined as well as portions of the walls near the Hollow Quoins. They were so serious that I was obliged to entirely replace the upper sill of Lock No. 15, and should have done the same to Lock No. 16, but the time at my disposal was too limited. Temporary repairs were made to lock No. 16, which it is hoped will carry over till next spring, when it is proposed to entirely renew the whole foundation of locks 15 and 16 and also No. 12, which is also considerably undermined. Several weir foundations are more or less undermined and will require attention.

Advantage was taken of the water being out of lock 16 to clean off the top of the road tunnel under the canal, and plaster it with mortar. This has stopped the leaks which have been a source of annoyance to parties using the tunnel.

OLD CANAL.

The water was not drawn off the canal this spring, as it was considered that the extensive repairs made last year put every thing below water in safe condition for the next two or three years.

There has always been trouble at lock No. 2 during the spring freshets, as the waste weirs had not sufficient capacity to pass the water and ice which came down. To relieve them a large concrete spillway was built in the canal bank during the fall of 1903. This answered every purpose intended during the freshets this spring and saved serious trouble, as the freshets were of unusual magnitude.

A large quantity of rip-rap has been placed along the canal banks during the year.

Several of the locks and a portion of No. 2 level has been cleaned out with a clam shell dredge worked by the canal staff.

GENERAL.

The gate yard at Port Dalhousie is being fitted up in a more modern way than formerly and work will now be done to much better advantage. A new roof has been placed on the main building.

The water in Lakes Erie and Ontario has been exceptionally high during the last half of the year.

The following employees have been superannuated during the year:—Mich. McCarthy, John Paxton, Edward McLaughlin, Bart. O'Leary.

The following superannuated employees died during the year:—John Corbett, at Thorold, December 27, 1903; James Foster, at Welland, February 26, 1904; James McCoppen, at Port Colborne, March 21, 1904; Samuel Duffin, at Port Dalhousie, April 23, 1904, and Henry Hare, at Merriton, May 20, 1904.

Attached is a statement of fines collected for breaches of canal rules and regulations. Also a statement showing the highest and lowest recorded depths of water on the mitre sills of the locks at Port Dalhousie and Port Colborne for each month of the year.

I have the honour to be, sir,

Your obedient servant.

J. L. WELLER,

Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Department of Railways and Canals,
Ottawa, Ont.

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STATEMENT of fines collected from steamers contravening canal rules and regulations, and locktenders for dereliction of duty during the fiscal year ending June 30, 1904.

Date of Fine.	Name of Steamer.	AMOUNT OF FINE.		Date paid.	WHERE PAID.		
		Paid.	Unpaid.		Collector's Office.		
1903.		\$	cts.	\$	cts.	1903.	
June 8.....	Str. 'Turret Cape'.....	5	00			July 9.....	Port Dalhousie.
July 3.....	" 'F. H. Prince'.....	2	00			" 24.....	"
1904.	<i>Locktenders.</i>					1904.	
Feb. 18....	J. M. Woodall.....	10	00			Feb. 18.....	St. Catharines.

STATEMENT showing the highest and lowest depths of water on the lower mitre sill, lock No. 1, New Welland canal, Port Dalhousie, for the fiscal year ending June 30, 1904.

MONTHS.	LOWER SILL.				MONTHS.	LOWER SILL.			
	Highest.		Lowest.			Highest.		Lowest.	
1903.	Ft.	In.	Ft.	In.	1904.	Ft.	In.	Ft.	In.
July.....	16	8	16	2	January.....	14	9	14	5
August.....	16	9	16	0	February.....	15	2	14	6
September.....	16	10	15	4	March.....	16	2	15	0
October.....	15	9	15	4	April.....	17	4	16	1
November.....	15	8	15	0	May.....	17	9	17	1
December.....	15	5	14	8	June.....	18	0	17	8

STATEMENT showing the highest and lowest depths of water on the upper mitre sill, lock No. 27, New Welland canal, Port Colborne, for the fiscal year ending June 30, 1904.

MONTHS.	UPPER SILL.				MONTHS.	UPPER SILL.			
	Highest.		Lowest.			Highest.		Lowest.	
1903.	Ft.	In.	Ft.	In.	1904.	Ft.	In.	Ft.	In.
July.....	15	7	15	0	January.....	14	7	12	5
August.....	15	8	14	3	February.....	13	10	12	8
September.....	15	8	14	4	March.....	14	11	13	4
October.....	15	6	14	1	April.....	16	9	15	1
November.....	15	5	13	11	May.....	15	11	15	3
December.....	15	10	13	7	June.....	16	2	15	7

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ENGINEER'S OFFICE,
SAULT STE. MARIE, ONT., August 3, 1904.

SIR,—I have the honour to submit my annual report on the improvements in progress to the entrances to the Sault Ste. Marie canal.

DREDGING UPPER ENTRANCE.

A contract for deepening and widening the most westerly section of the improvement work outlined to the upper channel way was entered into on November 17, 1903, with Mr. John Hickler and Mr. Henry Hickler.

The contract embraces the removal of six shoals, containing about 42,000 cubic yards, and the removal of all boulders, to a depth of 21 feet 5 inches below extreme low water mark, and lying within the limits laid down for the deepening and widening of the channel. The progress of the work was much retarded by the stormy weather of the autumn of 1903, and by the late opening of navigation in the spring of 1904. From these causes, the contractor was unable to complete his contract in the specified time; upon an application he secured an extension to September 30, 1904, which will provide ample time to complete the work.

These shoals have been a menace to navigation during the periods of the season when fog and snow flurries are prevalent, lying as they do between the turning buoy to the Canadian channel and the northern limit of the American canal approach.

The remaining sections comprise the deepening and widening of the present channelway from a width of 250 feet to a width of 500 feet through the Vidal shoals, narrowing down on the bend in the vicinity of the canal beacon to a width of 250 feet at the entrance piers, and securing a depth of 21 feet 5 inches below extreme low water mark. When this remaining work has been completed, a channel way will have been secured more in keeping with the large freighters now using it, which have more or less difficulty in passing each other at the present time with safety. The increased depth will provide the same depth of water as is secured on the upper mitre sill of the lock.

SURVEY OF DUMP GROUND.

During the winter season of 1903-4 a survey was made by sounding in the bay above Moore's Point at the upper entrance to provide sufficient dumping ground for the material to be removed in the deepening and widening. A good location was secured, which has since been buoyed out and is now in use.

EXTENSION TO THE SOUTH PIER, UPPER ENTRANCE.

An extension to the upper entrance pier has also been provided for in the improvement work outlined. It is proposed to extend the present pier 800 feet, which will provide better accommodation for vessels waiting for delayed orders, and seeking harbour protection in the fall of the year. It will also act as a protection in keeping vessels from being driven on the bank by the strong cross current found at the upper approach.

CHANNEL WAY AT LOWER ENTRANCE.

The channel way at the lower entrance, since being deepened and widened, has provided safe navigation to the vessels using it. No complaints have been made by the captains and owners of vessels of the depth of water provided.

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EXTENSION TO THE SOUTH PIER, LOWER ENTRANCE.

A contract for building an extension to the south pier at the lower entrance was entered into February 22 with William Birmingham.

The contract embraces the construction of a substructure of cribwork, 800 feet in length, to within 6 inches of extreme low water mark, and a concrete rear and front wall to the elevation of the coping at the lower level of the lock.

Owing to the late opening of navigation and the difficulty in getting shipment of timber, the contractor was unable to make a start before May 27. Since that date steady progress has been made in the construction of cribwork, and at the present date four cribs have been placed in position and one remains ready to sink. Nothing as yet has been done to the concrete wall, it being necessary first to allow a settlement in the cribwork, before concrete work can be proceeded with.

Stone filling behind the cribs, which has not been provided for, would greatly strengthen the substructure in event of a heavily laden barge striking it with force. The cribwork is sunk from 20 to 22 feet of water, and has only a width of 25 feet.

The extension of the pier will provide accommodation for vessels waiting for their turn for lockage, and also for laying up during the night, when it is dangerous to navigate the river.

I have the honour to be, sir,

Your obedient servant,

F. B. FRIPP.

COLLINGWOOD SCHREIBER, C.M.G.,
Deputy Minister and Chief Engineer,
Ottawa.

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SAULT ST. MARIE CANAL.

SUPERINTENDENT'S OFFICE, July 12, 1904.

SIR,—I submit herewith the annual report on the maintenance and operation of this canal for the fiscal year ending June 30, 1904.

The canal was closed for the season on the 13th day of December having been in operation for 256 days and was reopened for traffic on the 30th day of April this year being 28 days later than the season before.

During the fiscal year just ended there were made 2,674 lockages passing through, 3,344 registered craft and 194 unregistered vessels and scows, with a total tonnage of 3,731,320 tons, with an average time of 14'71 minutes to each lockage; of this tonnage 1,418,067 was of Canadian bottoms being a decrease of 57,962 tons under last year in this class of vessels. Owing to the lateness of the opening of the season and the troubles between the Masters and Pilots Association and the Vessel Owners Association of the United States not very many vessels were put into operation until about the first week in June, and it is to these facts that the tonnage of the fiscal year being so much smaller than last year there being a falling off of some 763,988 tons from last year.

The decrease of tonnage passing through the American canal for the same period is something like 9,497,463 tons. The work of extending the south pier at the lower entrance and the widening of the upper approach is now in the hands of the contractors and will be pushed along to an early completion no doubt and will be reported on by the engineer in charge, and when finished will add materially to the usefulness of the canal.

The daily exchange of vessel reports with the American canal officials is still carried on, as in former years thus keeping up the recording of the volume of the Lake Superior traffic which has now assumed tremendous proportions.

As in former years we are very much indebted to Mr. Joseph Ripley the general superintendent of the American canal and his officials for many courtesies shown to us.

The following table gives the traffic passing through the two canals at this point, during the season of navigation for the years mentioned, and shows the increase as being very marked in the last few years.

Year.	Number of Vessels passed.	Registered Tonnage of Vessels.	Total Freight Tonnage.	Cost of Carrying per mile Ton.	Estimated Value of Freight carried.	Percentage of Freight carried in Canadian Vessels.	Number of Passengers.
1855.	193	106,296	14,503	.....	.....	.....	4,270
1860.	916	403,657	153,721	.....	.....	.....	9,230
1865.	997	409,062	181,638	.....	.....	.....	19,777
1870.	1,828	690,826	539,883	.....	.....	.....	17,153
1875.	2,023	1,259,534	833,465	.....	.....	.....	19,685
1880.	3,503	1,734,890	1,321,906	.....	.....	.....	25,766
1885.	5,380	3,035,987	3,256,628	.....	.....	.....	36,147
1890.	10,557	8,454,435	9,041,213	1·3	102,214,948	3·5	24,856
1891.	10,191	8,400,685	8,888,759	1·35	128,178,208	4·0	26,190
1892.	12,580	10,647,203	11,214,333	1·31	135,117,267	3·8	25,896
1893.	12,008	8,949,754	10,796,572	1·1	145,436,957	4·1	18,869
1894.	14,491	13,110,366	13,195,860	·99	143,114,503	3·5	27,236
1895.	17,956	16,806,781	15,062,580	1·14	159,573,129	3·75	31,656
1896.	18,615	17,249,418	16,239,071	1·	195,146,842	3·	37,066
1897.	17,171	17,619,933	18,982,755	·83	218,235,927	3·	40,213
1898.	17,761	18,622,764	21,234,634	·79	233,069,739	2·2	43,426
1899.	20,255	21,958,347	25,255,810	1·5	281,364,750	3·1	49,082
1900* . . .	19,452	22,315,834	25,643,073	1·18	267,011,959	3·	58,553
1901.	20,041	24,626,976	28,403,065	·99	289,906,865	4·	59,663
1902.	22,659	31,955,582	35,961,146	·89	358,306,300	4·	59,377
1903.	18,596	27,736,444	34,674,437	·92	349,405,014	6·	55,175

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During the season of 1903 the traffic through this canal was 16 per cent of the freight and 58 per cent of the passenger, the amounts being 5,502,185 tons of freight and 32,019 passengers. Compared with the season of 1902 there was an increase of 773,834 tons or 16 per cent ; and a decrease of 4,580 passengers, or 13 per cent.

I would again call attention to the want of a small building for the use of the lockmen whilst on duty. The room in the power house that they have to occupy is not large enough and is needed for the use of the electrician and his assistants.

More of the grounds should be levelled up and trees and shrubs planted to add to the beauty of the place.

The necessary repairs have been made to the buildings and machinery to keep up their efficiency.

Cement sidewalks should be built to replace the wooden ones now in use they having lived out their usefulness.

No damage has been done to the gates or piers by vessels using the canal.

I am, sir, your obedient servant,

J. C. BOYD,
Superintendent.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Deputy Minister and Chief Engineer,
Railways and Canals,
Ottawa.

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TRENT CANAL.

SUPERINTENDENT ENGINEER'S OFFICE,
PETERBORO, August 6, 1904.

SIR,—I have the honour to submit my annual report for the fiscal year ending June 30, 1904, on the works under my charge known as the Trent Canal. This is a term applied to the several works constructed to improve navigation, together with the several navigable reaches between the town of Trenton, on Lake Ontario and Georgian Bay on Lake Huron.

The object of the works is to connect the several stretches. When the present contracts are completed there will only remain three more comparatively inexpensive stretches of canal to construct in order to complete the whole of this land-locked waterway from Lake Huron to Lake Ontario.

A glance at the map of this district will show at once the great length of natural navigable reaches compared to the length of artificial navigable reaches required to connect them. Wherever possible advantage has been taken of utilizing the bed of the fine rivers which follow the course of this waterway for its entire length. By utilizing the beds of the lakes and rivers a comparatively cheap mode of construction is employed, while the cost of future maintenance will be reduced to a minimum. The Imperial government as far back as the year 1835, chose this route as being the most natural and feasible to make a water communication between Lake Ontario and Lake Huron, and they spent considerable sums in carrying out the project, and in fact a sufficient sum of money was voted by the government at that time to construct that part of the work lying between Lake Ontario and Balsam lake. The works then constructed have ever since been used for local traffic.

When the two divisions at present under construction are completed, a continuous line of navigation between Heeley's Falls and the ports on Lake Simcoe, a distance of about 160 miles, will then be available. Though a draught of six feet is provided on all the sills, the land necessary to flood for a draught of eight feet has been purchased on the new sections at present under construction, so that if required a draught of eight feet could be provided at comparatively little extra cost by raising the water level two feet.

Owing to the fact that this waterway is also used by the lumbermen to float their logs down stream to their mills, and many of the reaches which are now opened up for navigation, have heretofore been used exclusively by the lumbermen for the floating of their logs, brings a new condition of things into existence, and some means will have to be adopted to meet this changed condition. It has heretofore been the custom of lumbermen to allow water-soaked logs to remain in the channel after the rest of the drive had passed on. This is a most dangerous practice and is a great menace to navigation. Some of these water-soaked logs lie in the navigation channel with one end on the bottom and the other end a few inches above the surface of the water. At night it is impossible to see the tops of these logs, and several accidents have occurred by vessels striking these logs, in some cases the logs have passed through the planking of the vessel.

MAINTENANCE.

Navigation closed on November 18, 1903, and opened again on April 30, 1904.

The height of the water on the mitre sills of all the locks was very fair throughout the season with the exception of the lower sill of the lock at Peterborough. The water

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level on the lower sill of this lock, during the period of low water, has been much reduced owing to the shoal at 'Yankee Bonnet' being dredged out. This will necessitate the lowering of the lower mitre sill and also of the bottom of this lock for a depth of three feet. An appropriation has been made for this purpose and the work will be done during the present year.

The regulation of the water at the present time is under three managements, namely, the Dominion Government, the Ontario Government and the lumbermen, consequently it is not surprising that there are complaints regarding the management of the water during the dry seasons. Owing to the immense country drained and the country every year becoming more cleared, the proper regulation of the water becomes less under control on account of the water running off so suddenly during the spring, and there being no dams to conserve it. Negotiations between the Ontario Government and the Dominion Government are at present under way for the transference of the several dams (over fifty in number) from the Ontario Government to the Dominion Government. These dams control the water to a certain extent in the north country, and it is proposed to extend this system for the benefit of navigation of the whole canal. The regulation also of the water between Lakefield and Peterborough is, under the present circumstances, very unsatisfactory, and as the power at the several dams along the river is developed, the trouble will be increased. Owing to the mills at Young's Point and Lakefield using all the surplus water, any temporary stoppage almost stops the entire flow; in consequence the mills below are often stopped for a time. If the power owners at Lakefield and other dams were to notify the government caretakers of the dams, or otherwise compensate for the stoppage by allowing extra water to escape, when it is necessary to stop temporarily for repairs, the cause of the complaint would be removed.

With reference to the water supply, it is not generally known that such a vast system of reservoirs exists as there are in the country to the north of the direct route of the canal. From a recent survey of these reservoirs, it was ascertained that there are over fifty dams at present constructed, which control about 70,000 acres of water, in which over 25 billion cubic feet of water can be stored, not taking into account the large quantity that could be stored by many new dams that could be constructed. The proper storing and regulation of the large quantity of water above referred to is a most important matter, not only to navigation, but to the vast commercial interests that are located along the valley of the Trent. The traffic on this waterway has nearly doubled during the last ten years; the total number of lockages ten years ago was only 2,500, now the lockages total 5,442, being an increase of 143 over those of last year. This does not fairly represent the traffic on the canal, as owing to many of the longer routes of the steamers not passing through a lock, no record of the traffic is kept. There are over 30 steamers engaged in commerce between Lakefield and Balsam lake, besides a large number of small steamers belonging to private individuals.

There are seven steamers on the reach between Peterborough and Heeley's Falls, and several on Lake Simcoe. Many of the larger steamers are of considerable size some of them carrying as many as 450 passengers.

REPAIRS.

The following repairs were made :—

ROSEDALE.

Guide booms were placed at the swing bridge.

FENELON FALLS.

The new pattern of valves were placed in the centre gates and three top bars of the gates, which were rotten, were replaced with new timbers. The lower entrance pier on

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the north side, which was of timber, had become decayed, was replaced with a concrete pier 200 feet in length.

BOBCAYGEON.

The lock-gates were temporarily repaired. These will be replaced with new gates during the present year.

Boulders were removed from the lower entrance to the lock, which has much improved the channel.

BUCKHORN.

The upper entrance pier, which had been removed by the ice, was replaced by a concrete pier. Repairs were also made to the sluices, and the north end of the flat dam, which was partially burnt, when the mill was burnt, was replaced.

LOVESICK.

New stop log gains in the timber slide and two of the sluices were put in. New timbers were also put on some of the piers. The platform over the dam was also panked.

BURLEIGH.

The glance booms were repaired and new stop-log gains were put in the timber slide. The cast-iron casings of the quoin posts were repacked with oak.

YOUNG'S POINT.

The tops of the piers and the platform and platform timbers of this dam, which had become very decayed, were renewed. New stop-log gains were placed in several of the sluices.

LAKEFIELD.

The dam at this station, which was built about the same time as that at Young's Point, was repaired in the same way as the dam at that place. The whole of the sheeting on the upper face of the dam was renewed. The filling in front of the dam and the sheeting was removed and replaced by means of a diver, and considerable time was required to complete this work.

All these old timber dams should have the piers of the sluices, which have become decayed, replaced with concrete piers, and it is the intention to follow out this mode of repair as required.

PETERBOROUGH.

New upper lock-gates were built and minor repairs made to the old gates.

PAINTING STRUCTURES.

The bridges, lock-gates and guard railings to bridges, wailing timbers, &c., from Peterborough to No. 3 lock, were painted. The work is being continued this year.

BUOYING OUT.

The buoys along the navigation channels were repainted and new buoys were placed where required.

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REPAIRS TO PLANT.

The tug *Empire*, which was built some seventeen years ago, had considerable repairs made to it. New side plank and new bracing were put in the dredge *Trent* and the whole hull re-caulked. The hull of the dredge *Otonabee*, which has become almost beyond repair, was strengthened in the way of bracing, &c., to do for another season. A new hull has been built, and it will be put in commission next season.

CLEARING.

The work of clearing and underbrushing the canal lands, along the river between Nassau and Lakefield, has been continued.

INCOME.

PETERBOROUGH.

The old cribwork of the old entrance pier on the south-east side was removed and replaced by 450 feet in length of concrete entrance pier.

The contract for the construction of the new dam was taken out of the contractor's hands, and is being completed by day work.

BURLEIGH.

A new concrete entrance pier 225 feet in length has been constructed on the north-east entrance to the lock at Burleigh.

LOVESICK.

One hundred and seventy-five feet of new concrete entrance pier was constructed at the north-east entrance to the lock.

DREDGING.

The work of dredging the shoals between Lakefield and Buckhorn, and between Peterborough and Heeley's Falls, was proceeded with during the season.

ROAD CONSTRUCTION.

Part of the grant towards the construction of a road between Lindsay and Fenelon Falls was expended in the way of timber bridge piers, but as the municipalities refused to grant any contribution towards the construction of this road the balance of the grant was unexpended.

CAPITAL.

Hydraulic Lock No. 1.

The banks of the hydraulic lock, at Peterborough, were left in an unfinished state by the contractors, in order that they might be allowed to settle before the sod was placed on them. The contract for the sodding of these banks was let to Mr. David Conroy, and was completed in a most satisfactory manner.

Protection lining along the west bank of the canal, from the hydraulic lock to the Norwood Road bridge, was constructed, where it was not put on by the contractors. The grounds about the hydraulic lock were levelled off, when the sidings and contrac-

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tor's plants were removed. The bottom of the prism between the entrance piers of the hydraulic lock was floored with a foot of concrete.

The following work about the hydraulic lock, which was not included in the Dominion Bridge Company contract, was completed:—

Cabins over central tower and spiral stairway, doors, windows, iron grills for openings on the side of the driveway, railings on walls and stairways and spiral stairway. The foundation of the lockmaster's house was completed.

The steelwork of this lock has been completed, and the lock is open for traffic.

Guard Rail.

Guard railings along the Portage Road and the tenth concession road, in the township of Eldon, where they run through the flooded parts of the land, were constructed.

Construction.

Section No. 1, Simcoe-Balsam Lake Division.—The work on this section, as was mentioned in my last report, has been completed.

Section No. 2, Simcoe-Balsam Lake Division.—The contract for the construction of this section was awarded to Messrs. Larkin & Sangster, on September, 1900. The work on this section is almost completed, and it is expected that by the end of the present season the whole work will be fully completed.

The masonry and substructure for hydraulic lock No. 2 is comprised in this contract and has been completed, ready for the steelwork of the lock—the plans for which are now being prepared.

Section No. 3, Simcoe-Balsam Lake Division.—The work on this section is well advanced. The concrete of locks No. 1, 2, 3 and 5 is completed. Dam No. 1 is completed, and No. 2 and 3 are completed, with the exception of the closing gaps. The upper and lower entrance piers to the canal at Lake Simcoe are yet to construct.

There is considerable earthwork yet to do—this will be for the most part dredging.

The swing bridges at the Portage Road, Centre Road and River Road have been completed. This section will not be completed before the middle of next season.

Plant.

The dredge *Otonabee* has been employed continually throughout the season. During July and August she was dredging the channel at the lower entrance to the lock at Young's Point. During the balance of last season, and up to June 30 last, she was dredging the shoals in Katchawannoe lake.

The dredge *Trent* has been loaned to the Department of Public Works for the purpose of deepening the river channel up to and in front of the Cereal Company's Works, at Peterborough, in order to allow barges to ascend and load at the mill.

The tug *Empire* has been fully employed throughout the season in hauling scows of dredged material from the dredge, buoying out and snagging the navigation channel, delivering stone, timber, gravel, &c., for the various works of repair along the route, besides the use for inspection by the staff officials.

I am, sir, your obedient servant,

RICHARD B. ROGERS, M.I.C.E.,
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Chief Engineer and Deputy Minister.
Department of Railways and Canals.
Ottawa, Ont.

RIDEAU CANAL.

SUPERINTENDING ENGINEER'S OFFICE,
OTTAWA, July 2, 1904.

SIR.—I have the honour to submit herewith my annual report on the Rideau canal, under my charge, for the fiscal year ending June 30, 1904.

Navigation closed at Ottawa, November 24, 1903.

Navigation closed at Kingston Mills, November 16, 1903.

Navigation opened at Ottawa, May 2, 1904.

Navigation opened at Kingston Mills, May 2, 1904.

The depth of water maintained in the various levels throughout the whole season of navigation was excellent, no trouble or delay on account of low water for navigation having occurred anywhere, although our reservoir for the Tay branch of this canal, Bob's lake, was run down so low as to cause inconvenience to the electric light plant in the town of Perth during the past winter.

The spring freshet this year was, I regret to say, the most disastrous one for our works that we have had for many years, not on account of the height of water, for it has often been as high and even higher, but the weather kept so cold that the ice when it broke up came down on our works as firm and solid as when it was formed; and at Poonamalie the retaining dam was partially carried away from this cause, as will be detailed hereafter.

Other damage was done at various points, which will be specified under the various localities.

The principal works and repairs executed along the line of the canal are as follows:—

OTTAWA.

One new pair of lock gates and four new sluice frames were put in here. Considerable repairs were made to the planking of the basin wharfs, and also to the roadway in rear of the same.

The lockhouse was painted inside and cleaned, as was the office of the collector of tolls.

A large number of boulders were removed from the basin this spring and sundry small repairs made to the station generally.

STEWARTON BRIDGE.

Sundry small repairs were made to the bridge, and to the bridge-keeper's house.

BANK STREET BRIDGE.

Sundry small repairs were made to the bridge, and to the approaches thereto.

CONCESSION STREET BRIDGE.

This is an entirely new bridge, which was built last winter across Mutchmor's cut on the line of Concession street in the city of Ottawa.

The masonry abutments and roadway and approaches were built by contract with Mr. Thomas McLaughlin, of Ottawa, and the steel swing superstructure by contract

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with the Dominion Bridge Company, of Montreal. The whole work has been satisfactorily executed, and the bridge, which is the class I type, is solid and substantial.

A small cottage for the bridge-keeper is now being built.

HARTWELL'S.

The whole of the old stone waste weir was taken down last winter, together with the upper wing wall of the upper lock on the east side, as far around as the hollow quoin, and rebuilt by our own masons.

This old masonry was in a dangerous state, the coping in some places overhanging 18 inches.

The new waste weir is of a different pattern from the old one, consisting now of two masonry abutments, with 12 foot stop-logs between. Sundry small repairs were made to the tow-path road, and portions of the bank were faced with stone to break the wash of the boats when passing.

The lock-house, although in a fair state of repair, appears to be in an unsanitary condition, as it is damp all the year round; so much so that paper will not stay on the walls, &c.

I have reported to you on this subject separately, and my report also applies to the lock-house at Hogsback.

These cottages are all of the same pattern, being square stone structures of one story only, and although everything has been done to keep them dry that can be suggested, yet they appear to be still damp and unhealthy; and repairs to them only seem to be a waste of money, as they are over 70 years old.

HOGSBACK.

The old wooden swing bridge across the upper lock, and a new steel span substituted therefor, by contract with the Hamilton Bridge Works Company, and the approaches thereto, were built and graded up by our own men. The lower wing wall of the lock on the west side is in a bad condition, and arrangements are being made to rebuild it next winter, and the stone for this purpose is now being cut in Elgin quarry by our own masons.

Sundry small repairs were made to the dam and to the tow-path road, and also to the station generally.

BLACK RAPIDS.

A new pair of lock-gates were put in here last winter. The hollow quoin coping of the lower gate on the east side is broken, but the new stones are now on the ground, and will be put in this year.

LONG ISLAND.

A large amount of work was done at this station during the last year. The large stop-log bulkheads at the locks, and also at the back channel in the village of Manotick, were taken down and rebuilt by our repairs gang. The middle piers of the locks were grouted up, and considerable leakage stopped thereby. Small repairs were made to the lock-house and to the station generally.

MANOTICK BRIDGE.

No repairs were necessary here, except raising the swing span, which was bearing too heavily on the trucks.

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WELLINGTON BRIDGE.

The swing span was raised a little, and some of the timbers on the upstream sides of the piers, which were broken by the ice last spring, were repaired.

BECKETT'S LANDING BRIDGE.

No repairs were required here last year.

BURRITT'S RAPIDS.

Sundry small repairs to the station and embankments generally were made, and small repairs to the swing bridge. The ice during the freshet damaged the ice breaker in front of the waste weir, and also on the far side of the long dam. Arrangements have been made to have these repaired this coming winter.

NICHOLSON'S.

Sundry small repairs were made to the station generally.

OLWS.

The protection crib on the south side of the lock was raised and some more stone placed therein. During the freshet the stop logs were kept in the weir to save the lock bank from the rush of water and ice. The flat dam is long enough to allow of this being done without raising the water to any appreciable extent. Some stones were carried out of the dam during the freshet ; but they are large and heavy, and can be recovered when the water lowers, and replaced.

MERRICKVILLE.

The lower wing walls of the middle lock was taken down and rebuilt by our own masons ; and a new pair of lock gates put in by our carpenters ; and sundry small repairs made to the station in general. The north bulkhead of the waste weir, was damaged by ice during the late freshet ; but it is safe enough for the present season of navigation, and will be repaired, together with the back of the flat dam, this year. Some damage was done to the roadway leading to the north pier of the Snye bridge, and also to private property in the village, during the late freshet. These damages, it is claimed, resulted from the breaking of our dam at Poonamalie, and various claims were filed against the department in this connection ; which claims, I understand, are now before the department.

KILMARNOCK.

Sundry small repairs were made to the swing bridge and to the station generally. The swing bridge will be rebuilt this coming winter. The bridge crossing the bulkhead was damaged by ice during the late freshet ; quite a number of the timbers of the crib piers being broken. However arrangements are being made to repair this damage at the present time ; and the crossing is perfectly safe. The Back dam is also in need of repairs ; and the timber for this is delivered on the ground.

EDMOND'S.

Small repairs were made to the upper sill, and to the station generally. The masonry of the waste weir and of the upper wing wall on the north side, is in bad condi-

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tion, and will be rebuilt this coming winter. The ice damaged the wing walls of the waste weir considerably, and carried out some stones from the top of the dam. The lock-house is in bad condition, and the back walls are in such a shape as to necessitate their being taken down and rebuilt.

OLD SLY'S.

The waste weir bridge was damaged by ice during the freshet ; but repairs have been made thereto. A new boom was placed in front of the waste weir, and was of great use holding back the ice during the late freshet. The lay by piers at the head of the locks, require to be rebuilt, and this will be done this winter.

SMITH'S FALLS, COMBINED.

Sundry small repairs were made to the station generally. The long wooden bridge leading to Jason island, will be replaced with a steel structure on masonry piers, this summer. Considerable damage was done to private property in the town during the late freshet ; which it is claimed was the result of the breaking of Poonamalie dam, three miles above the town. Claims for compensation for the same, have been made, and are now, I believe, before the department. No damage worth mentioning, was done to our works during the freshet. The two abutments of the swing bridge across the upper lock, which are of timber, are to be rebuilt of masonry this winter, and the stone for this is being cut in Elgin quarry, as is also the stone for the new bridge to Jason island.

SMITH'S FALLS DETACHED.

The upper wing walls and sill of this lock, are in bad condition, and will be taken down next winter and rebuilt : the stone for this purpose is now being cut in Elgin quarry. The Lombardy road embankment was slightly damaged during the freshet, after the breaking of Poonamalie dam ; but by watching it day and night, until the water receded, nothing serious resulted, and the damage has been repaired.

POONAMALIE.

As mentioned in the commencement of this report, a serious break occurred in the dam here during the late freshet, when about 175 feet of the timber flat dam were carried out by ice ; but as stated in my reports to you on this subject, in April last, we regained control of the water in a week ; and in less than three weeks, had the dam rebuilt temporarily on the same line as the old one ; without any loss of water or delay to navigation whatever.

The repairs however, are only temporary ; as a new concrete dam is to be built below the present one : arrangements to do which, are now being made.

It is on account of the breaking of this dam, that the claims for compensation, before mentioned, have been made to the department from Smith's Falls and Merrickville.

A new cottage was built for the lock labourer here ; and a large shed for storing the cement for the new dam, has been built : the material in which after the dam is built, will be utilized to build a new storehouse at the lock, as the present one requires to be replaced.

BEVERIDGE'S.

Sundry small repairs were made to the station in general. The ice during the freshet, broke the centre bent of the bulkhead of the retaining dam ; but this has been temporarily repaired, and the whole bulkhead will be rebuilt this coming winter.

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PERTH.

Sundry small repairs were made to some of the culverts in the tow path road, and also to the wharves and bridges. The four bridges are now being painted by the bridge men.

BOB'S LAKE DAM.

This dam, which is situated at the outlet of Bob's lake, about 24 miles above the town of Perth, and which stores the water in the said lake for navigation in the Tay branch of the Rideau canal is to be rebuilt this coming winter.

NARROWS.

Stone facing was placed on the long dam, and the top of the roadway was raised and graded, and sundry small repairs made to the station in general.

NEWBORO.

The high level bridge was replanked, and sundry small repairs made to the station in general. The lockmaster's house is now being repainted.

CHAFFEY'S.

Sundry small repairs were made to the station in general.

DAVIS'S.

Some new wire fencing was put up at this station; and sundry small repairs made to the lock labourers' house and to the station in general. The waste weir is to be rebuilt this winter.

JONES'S FALLS.

The two middle sills of the combined locks were rebuilt by our own masons; and two pairs of lock gates framed and put in by our carpenters. The waste weir was also rebuilt, and sundry small repairs made to the station generally. Arrangements are being made to build the basin dam and weir this winter; and portion of the stone from the old lock sills will be used in this work.

WOLF LAKE DAM.

This dam, which is situated about 10 miles from Newboro, and which creates a reservoir of Wolf lake for the summit level, is to be rebuilt this coming winter.

MORTON DAM.

Sundry small repairs were made to the dam and approaches thereto.

UPPER BREWER'S.

The small bridge across the waste water channel was rebuilt by our own carpenters; and a small office for the lockmaster was built at the head of the upper lock; and small general repairs made to the station.

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LOWER BREWER'S.

Some wire fencing was put up around the station; and small repairs made to the lockmaster's house and to the station generally.

KINGSTON MILLS.

A new house has been built here for the lockmaster, as the old one had become uninhabitable. Some stone was placed on the embankments, and small repairs made to the masonry of the locks, and to the station generally. The long wooden bridge was replanked by our own carpenters.

GENERAL.

The pointing and grouting of the lock masonry, and the painting of the wooden structures was done by our own lockmen as usual this spring. The cement for this purpose was purchased by contract with Messrs. Bellhouse, Dillon & Co., of Montreal, the amount purchased being 500 barrels. The dimension timber (Douglas fir) for the lock gates, &c., was purchased by contract with Mr. M. Ryan, of Smith's Falls, the quantity being 154,000 feet B.M. The annual supply of paint, amounting to 4,375 lbs., was purchased by contract with Mr. J. G. Howe, of Ottawa.

DREDGING PLANT.

The dredge 'Rideau' was employed the whole of last season in deepening the cut below the lock at Washburn; and had just reached the lock when she had to cease work for the season. She is now working above the lock deepening the cut between Lower Brewer's and Upper Brewer's lock stations; and is in first rate order.

The tug 'Shanly' was employed as usual in attending to the dredge, delivering stores along the canal, and on inspection work. She was raised this spring and thoroughly overhauled and caulked; but she is getting old, and her frames are decaying. Her hull will have to be rebuilt very shortly; and she will require a new boiler.

I append hereto a table showing the highest and lowest water during each month at Ottawa and Kingston Mills lock stations, during the past year. I would draw your attention to the fact that Lake Ontario is higher this year than it has been for many years, as shown by the readings on our gauge on the lower sill at Kingston Mills.

I have the honour to be, sir, your obedient servant,

ARTHUR T. PHILLIPS, M.C.S.CE.,
Superintending Engineer.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Chief Engineer Canals,
Ottawa.

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RIDEAU CANAL.

Table showing monthly, the highest and lowest water on the lower mitre sills of Locks Nos. 1 and 47, at Ottawa and Kingston Mills lock stations, respectively, from July 1, 1903, to June 30, 1904.

OTTAWA, LOCK NO. 1.				KINGSTON MILLS, LOCK NO. 47.			
Highest.		Lowest.		Highest.		Lowest.	
Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
July 3-4	16 4	July 31	11 0	July 13-20	8 10	July 31	8 8
Aug. 1	10 10	Aug. 26-29	9 2	Aug. 1-4	8 8	Aug. 28-31	8 4
Sept. 27-28	10 1	Sept. 15-17	8 1	Sept. 1-4	8 4	Sept. 23-30	8 1
Oct. 22	11 3	Oct. 5-7	9 4	Oct. 18-31	8 3	Oct. 1-9	8 1
Nov. 1-2	10 0	Nov. 27-30	8 8	Nov. 1	8 3	Nov. 28-30	7 5
Dec. 1-4	8 8	Dec. 24-31	8 5	Dec. 1-2	7 5	Dec. 28-31	6 7
Jan. 1-11	8 4	Jan. 12-31	8 3	Jan. 1-17	6 7	Jan. 18-31	6 6
Feb. 1-19	8 3	Feb. 29-29	8 2	Feb. 1-8	6 6	Jan. 26-29	6 3
Mar. 31	11 11	Mar. 1-7	8 2	Mar. 30-31	8 0	Mar. 1-2	6 3
April 11	18 10	April 1	12 3	April 30	9 4	April 1	8 0
May 9-12	23 6	May 1	17 6	May 5-31	9 5	May 1-4	9 4
June 11-12	23 6	June 30	16 10	June 23-30	10 0	June 1-2	9 5

ARTHUR T. PHILLIPS,

Superintending Engineer.

Rideau Canal Office. July 2nd, 1904.

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DEPARTMENT OF RAILWAYS AND CANALS,
CANALS REVENUE BRANCH,
CANAL OFFICE, ST. PETERS, June 30, 1904.

SIR,—I have the honour to submit my annual report on work and operation on St. Peters canal, under my charge, during the fiscal year ending June 30, 1904.

There has not been any repairing done to the canal the past year outside of minor repairs such as was required for the operation of the canal, the shimming up of three of the tracks by marine divers, and rearing four new chains on lock gates, &c.

The canal will require inside of six months a new swing bridge, as the one that is now in use is getting very bad. It is in use some twenty-four years, and shows signs of sagging on turn table. The bridge is a wooden one, and has served its time, and I would suggest that a good iron bridge be built and placed at as short a time as possible.

The government fence leading from the main road north entrance canal down to the warehouse south entrance will have to be thoroughly repaired, and a new fence built from the warehouse leading west northwest, a distance of 175 yards. This last mentioned fence should be built at once, as the one that is now in use is good for nothing.

The lock-house will require some small repairs, as well as painting.

The government warehouse floor has sagged down; the pillars and posts underneath have given away, and will have to be raised up with jack-screws.

The dredging at north entrance and at south entrance is still undone, and should be attended to as soon as a dredge boat can be secured.

The canal is in very good condition, and the operating in first-class condition.

Navigation and traffic on canal is up to the general standard. Navigation opened on St. Peters canal April 15, 1903, and closed on December 31, 1903. During that time 1,719 steamers and vessels passed up and down the canal.

There is one tidal lock and four pair of gates on St. Peters canal.

I have the honour to be, sir,

Your obedient servant,

JNO. H. DEVEREUX,
Lockmaster.

COLLINGWOOD SCHREIBER, Esq., C.M.G.,
Chief Engineer and Deputy Minister,
Railways and Canals,
Ottawa, Ont.

THE RAILWAY COMMITTEE OF THE PRIVY COUNCIL.

The report of the secretary of the Railway Committee of the Privy Council, herewith, enumerates the cases which were before the committee during the four months from October 1, 1903, to February 1, 1904 (when the Railway Act, 1903, became operative). Within the period above named there were five meetings of the Railway Committee of the Privy Council as follows:—

October 31, 1903, November 10, 1903, December 1, 1903, January 9, 1904, and January 25, 1904.

The character of the business before them was:—

1. For permission to make highway crossings over railways.
2. For permission for one railway to cross another.
3. For permission for one railway to form a junction with another.
4. For permission for railways to cross and run along streets and highways.
5. For approval of plan and proposed site of bridges over navigable water.
6. For permission to use crossings and junctions before installation of interlocking appliances.
7. For permission to construct branch lines.
8. For protection of streets and highways crossed by railways.
9. For running powers of one railway over another.
10. For permission to change location of sections of railways.
11. For permission to close streets and highways and to divert them.

The matters submitted to the committee during the said period from October 1, 1903, to February 1, 1904, and the decisions arrived at are as follows:—

1. Application of the Winnipeg Street Railway Company for permission to cross, at rail level, the Canadian Pacific Railway at Main street and Higgins avenue, in the city of Winnipeg.—Under consideration.

2. Application of the Corporation of the city of Toronto for an Order authorizing the construction and maintenance of a street by means of an overhead bridge, east of and immediately adjoining York street, across the tracks of the Grand Trunk and Canadian Pacific Railway Companies in the city of Toronto.—Under consideration.

3. Application of the Niagara, St. Catharines and Toronto Railway Company for permission to intersect and unite with the Wabash Company's line which the latter have leased from the Grand Trunk Railway Company.—Under consideration.

4. Application of the Canadian Pacific Railway Company for approval of plan and profile of proposed crossing of Main street and Maple street, in the city of Winnipeg.—Under consideration.

5. Application of the Municipal Corporation of the village of Dutton for permission to open up across the lands of the Canadian Southern Railway and the Lake Erie and Detroit River Railway a highway known as Charles street, and to extend Nancy street and the said Charles street across the tracks of the said railway companies.—Under consideration.

6. Application of the Canadian Pacific Railway Company for use of tracks and facilities at Central station, Ottawa, for through as well as terminal purposes.—Under consideration.

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7. Application of the Ottawa, Northern and Western Railway Company to the Committee to determine the terms and conditions on which it may use, for railway purposes (jointly with all parties entitled to use the same), the passenger station and passenger tracks and approaches in connection therewith, situate on ordnance lands of the Crown near Sapper's bridge, Ottawa.—Under consideration.

8. Application of the Pontiac Pacific Junction Railway Company to the Committee to determine the terms and conditions on which it may use, for railway purposes (jointly with all parties entitled to use the same), the passenger station and passenger tracks and approaches in connection therewith, situate on ordnance lands of the Crown near Sapper's bridge, Ottawa.—Under consideration.

9. Application of the Ottawa, Northern and Western Railway Company for approval of the place and mode of junction of its railway with the Canada Atlantic Railway near Sapper's bridge, Ottawa.—Under consideration.

10. Application of the Canadian Northern Railway Company for approval of the place and mode of crossing by its railway of the Canadian Pacific Railway on Point Douglas avenue, Winnipeg.—Under consideration.

11. Application of the Algoma Central and Hudson Bay Railway Company for approval of plans and profiles of its proposed crossings of the Canadian Pacific Railway at Sault Ste. Marie, Ontario.—Under consideration.

12. Application of the Municipal Council of the county of Richmond, in the province of Quebec, for an Order directing that a public highway may be constructed across the track of the Grand Trunk Railway Company, at rail level, as shown on plan submitted.—Under consideration.

13. Application of the Bay of Quinté Railway Company for approval of the place and mode of crossing, at rail level, by its railway of the Grand Trunk Railway at Napanee station.—Approved.

14. Application of the International Transit Company for approval of the place and mode of crossing by its railway of the Canadian Pacific Railway in the town of Sault Ste. Marie.—Interim order granted.

15. Application of the Niagara, St. Catharines and Toronto Railway Company for approval of plan and profile of its proposed extension in the city of St. Catharines, running along Ontario street from King street to junction with the main line to Port Dalhousie.—Under consideration.

16. Application of the Canadian Pacific Railway Company for authority to carry a portion of the highway between concessions 2 and 3 of the township of London, over its railway by an overhead bridge, and to divert a portion of the said highway, and to expropriate from lot 22 the land necessary for that purpose, as well as authority to close up a portion of the original highway, when so diverted, and to take down and to remove the present overhead wooden bridge.—Under consideration.

17. Application by the town of Whitby for an Order directing that protection be provided at certain highway crossings of the Grand Trunk Railway.—Under consideration.

18. Application of the Corporation of the city of Ottawa for an Order directing the widening of the bridge on Somerset street, over the tracks of the Canada Atlantic and Canadian Pacific Railway Companies, as shown on plan submitted.—Under consideration.

19. Application of the Corporation of the city of Ottawa and the county of Carleton for an Order directing the removal by the Canadian Pacific Railway Company of the earth embankment constituting the eastern approach of the railway bridge over the Rideau river at New Edinburgh, and the substitution therefor of a bridge having a clear span of 150 feet, and also the restoration of the island at this point to its original condition.—Under consideration.

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20. Application of the Mabou and Gulf Railway Company for approval of the place and mode of junction of its railway with the Intercolonial Railway, as shown on the plan submitted.—Under consideration.

21. Application of the Mabou and Gulf Railway Company for approval of the place and mode of crossing by its railway of the Cape Breton Railway, as shown on the plan submitted.—Under consideration.

22. Application of the Canadian Pacific Railway Company for an Order approving of the construction of Beatty street across the tracks of the Canadian Pacific Railway Company, in the city of Vancouver.—Approved.

23. Application of the Mabou and Gulf Railway Company for approval of the place and mode of crossing by its railway of the Inverness Railway and Coal Company's line at Hillsborough, N.S., as shown on plan submitted.—Under consideration.

24. Application of the Canadian Northern Railway Company for approval of the place and mode of crossing by its railway of the Brookdale branch of the Canadian Pacific Railway, in Manitoba.—Granted.

25. Application of the Canadian Pacific Railway Company for permission to cross 1st and 18th streets in the city of Brandon.—Under consideration.

26. Application of the British Columbia government for approval of revised location of its line of railway from Fraser river bridge easterly to the junction of the Vancouver, Westminster and Yukon Railway, also for permission to remove the track of the British Columbia Electric Railway Company, as shown on plans submitted.—Granted.

27. Application of the Vancouver, Westminster and Yukon Railway Company for a right of way over and through lot No. 1, Sapperton, B.C., owned by the Canadian Pacific Railway Company.—Granted.

28. Complaint of the town of Toronto Junction, *re* refusal of the Grand Trunk Railway Company to provide necessary siding facilities to the Union stock yards at Toronto Junction, for the purpose of unloading live stock consigned to that place.—Withdrawn.

29. Application of the Vancouver and Lulu Island Railway Company for permission to cross certain streets in Vancouver.—Under consideration.

30. Complaint of Mr. Joseph James that the proposed location of the Bay of Quinté Railway Company's line between Bridgewater and Queensborough will run through his mining property, being part of lots 2 and 3, concession 4, township of Elzear, county of Hastings, which will injuriously affect and damage his mining rights and privileges, and applies for an Order limiting and defining the operations and works of said railway, &c., &c.—Under consideration.

31. Application of the village of Hastings that protection be provided by placing a watchman or otherwise at the crossing of the Grand Trunk Railway in the said village.—Under consideration.

32. Application of the Corporation of the city of Vancouver for an Order directing that gates be erected and maintained by the Canadian Pacific Railway Company at its crossing of Granville street at the present time, and that an overhead bridge be erected by the said railway company, when in the opinion of this Committee it becomes necessary, owing to increase in traffic.—Under consideration.

33. Application of the Corporation of the city of Chatham for a hearing under section 3, chapter 69, 2 Edward VII, *re* the erection and establishing workshops, &c., in said city of Chatham by the Lake Erie and Detroit River Railway Company.—Under consideration.

34. Application of the city of St. Thomas for an Order permitting the electric cars of the St. Thomas Street Railway to cross the tracks of the Canadian Southern Railway, at rail level, at William and Elgin streets, and for a further Order com-

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elling the Canada Southern Railway Company to construct a subway on Ross street, in that city.—Under consideration.

35. Application of the village of Weyburn, N.W.T., for permission to extend Third street across the Canadian Pacific Railway.—Under consideration.

36. Application of the Vancouver, Westminster and Yukon Railway Company for approval of the place and mode of crossing by its railway, of the Canadian Pacific Railway near Heatley avenue, in the city of Vancouver.—Approved.

37. Application of the Vancouver, Westminster and Yukon Railway Company for approval of the place and mode of crossing by its railway of the British Columbia Electric Railway on Venables and Powell streets, in the city of Vancouver.—Approved.

38. Application of the Winnipeg Street Railway Company for approval of the place and mode of crossing by its railway of the Canadian Pacific Railway on Portage avenue west in the city of Winnipeg.—Under consideration.

39. Application of the Canadian Pacific Railway Company for approval of the construction of the Princess branch in the city of Winnipeg.

40. Application of the Lindsay, Bobcaygeon and Pontypool Railway Company for approval of change in the location of its line in the township of Verulam.—Approved.

41. Application of the Lindsay, Bobcaygeon and Pontypool Railway Company for approval of plan and proposed site of a bridge to be built by that company across Emily creek.

42. Application of the Lindsay, Bobcaygeon and Pontypool Railway Company for approval of changes in the location of its line in the townships of Manvers and Cartwright.

43. Application of the Grand Valley Railway Company for approval of the place and mode of crossing, by means of an overhead bridge, by its railway of the Grand Trunk Railway.—Approved.

44. Application of the Lindsay, Bobcaygeon and Pontypool Railway Company for approval of the place and mode of crossing by its railway of the Grand Trunk Railway in the town of Lindsay.—Approved.

45. Application of the Corporation of the City of Ottawa for an order directing the construction by the Canada Atlantic Railway Company of a subway under its tracks on Bank street and apportioning the cost between the Canada Atlantic Railway Company and the Ottawa Electric Street Railway Company.—Under consideration.

46. Application of the Grand Trunk Railway Company for approval of plans and profiles of its highway crossings on its branch line to the city of Brantford.—Approved.

47. Application of the Canadian Pacific Railway Company for approval of the construction of a branch line to the premises of James Turner & Company, in the city of Calgary.—Approved.

48. Application of the Canadian Pacific Railway Company for approval of the construction of a branch line to the premises of the Western Packing Company in the city of Winnipeg.—Approved.

49. Application of the Canadian Northern Railway Company for approval of the place and mode of crossing by its railway of the Pembina branch of the Canadian Pacific Railway near Homefield station.—Interim Order.

50. Application of the Canadian Pacific Railway Company for approval of the construction of a branch line to the premises of Swanson and Patterson, in the city of Winnipeg.—Approved.

51. Application of the Corporation of the City of Toronto for permission to lay and maintain a line of water pipes under the tracks of the Grand Trunk Railway Company.—Granted.

SESSIONAL PAPER No. 20

52. Application of the Grand Trunk Railway Company for approval of the construction of a branch line to the premises of the Kemp Manufacturing Company, in the city of Toronto.—Approved.

53. Application of the Chateauguay and Northern Railway Company for approval of the place and mode of crossing by its railway of the track of the tramway of the Rev. Sisters of Providence at Longue Pointe.—Approved.

54. Application of the Canadian Pacific Railway Company for approval of the construction of a branch line from its main line crossing Pacific avenue to the premises of A. Y. Griffin and Company in the city of Calgary.—Approved.

55. Application of the Grand Trunk Railway Company for approval of plans and profiles of each highway crossing, 10 in all, on the diversion of its line between Port Hope and Neytonville.—Under consideration.

56. Application of the Compagnie du Chemin de fer de Colonisation du Nord for approval of plan and site of a proposed bridge to be constructed by the company across the Nomingue river.—Approved.

57. Application of the Bay of Quinté Railway Company for approval of the place and mode of crossing, at rail level, by its railway of the tracks of the Canadian Pacific Railway in the village of Tweed.—Approved.

58. Application of the Canadian Northern Railway Company for approval of the place and mode of crossing, at rail level, by its railway of the tracks of the Pembina branch of the Canadian Pacific Railway near Holmfield station.—Approved.

59. Application of the Grand Trunk Railway Company of Canada for the approval of the construction of a branch line in the township of Barton.—Approved.

60. Application of the Vancouver, Westminster and Yukon Railway Company for approval of certain changes in the location of its line in the city of Vancouver.—Approved.

COLLINGWOOD SCHREIBER,
Secretary Railway Committee, P. C.

Prepared by

J. W. PUGSLEY,
Clerk of the Railway Committee, P. C.

PART II

STATEMENTS OF THE ACCOUNTANT

No. 1.

STATEMENT showing the amount expended by the Department of Railways and Canals, Dominion of Canada, during the Fiscal Year ended June 30, 1904.

Name of Work.	Chargeable to Capital.	Chargeable to Income.	CHARGEABLE TO REVENUE.	
			Staff.	Repairs.
CANALS.				
	§ cts.	§ cts.	§ cts.	§ cts.
Beauharnois.....			9,236 27	11,936 37
Carillon.....				
Grenville.....		9,150 07	16,224 94	17,262 29
Chambly.....		26,701 59	21,544 69	25,656 00
Cornwall.....	113,795 16	1,730 16	45,792 64	20,932 55
Culbute.....		2,204 50		
Lachine.....	181,487 06	162,705 14	77,233 17	50,660 92
Lake St. Louis.....	7,916 90			
Lake St. Francis.....		2,199 52		
Murray.....	750 00	2,521 13	5,291 43	6,075 94
Rideau.....		13,525 04	39,127 96	38,496 78
Sault Ste. Marie.....	32,029 54		14,653 35	9,491 44
Soulanges.....	113,328 45	15,608 69	25,235 25	39,382 01
Ste. Anne's.....			2,292 94	2,244 13
St. Lawrence.....				
{ North Channel.....	68,595 42			
{ Galops Channel.....	6,450 00			
{ River Reaches.....	9,634 66			
St. Ours.....		7,984 41	2,334 67	1,690 61
St. Peter's.....			3,126 94	122 45
Trent.....	489,038 44	21,228 55	7,237 05	21,179 12
Welland.....	555,751 00	31,140 58	91,115 35	85,717 88
Williamsburg.....				
{ Galops.....	256,536 30			
{ Rapide Plat.....	26,774 27	1,978 85	20,570 17	19,430 05
{ Farran's Point.....	18,700 00			
Total.....	1,880,787 20	298,678 23	381,016 82	350,278 54
GENERAL ON CANALS.				
Arbitrations and awards.....		562 95		
Dredge vessels—Lachine.....				3,200 64
" Rideau.....				7,848 72
Miscellaneous.....			1,470 30	
Salaries and contingencies, canal officers.....			33,426 29	
Sunday labour.....			20,121 85	
Surveys and inspections.....		2,421 38		
Quebec canals survey for boundaries.....		746 46		
Total.....		3,730 79	55,017 94	11,049 36
RAILWAYS.				
Canadian Pacific.....	33,076 39			
Intercolonial.....	1,880,856 60		7,239,982 04	
National Transcontinental.....	6,249 40			
Prince Edward Island.....	698,877 47		335,695 44	
Windsor Branch.....			24,281 09	
Total.....	2,619,059 86		7,599,958 57	

4-5 EDWARD VII., A. 1905

STATEMENT showing the amount expended by the Department of Railways and Canals,
&c.—*Concluded.*

Name of work.	Chargeable to Capital.	Chargeable to Income.	CHARGEABLE TO REVENUE.	
			Staff.	Repairs.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
GENERAL ON RAILWAYS.				
Railway statistics		2,532 84		
Railway subsidies.....		2,046,878 45		
Repairs to Governor General's car.....		1,450 60		
Reporting evidence before Railway Com- mittee of the Privy Council.....		500 00		
Railway Commission		67,101 68		
Subscription to Railway Congress, Brussels..		97 33		
Surveys and inspections.....		13,670 72		
Total.....		2,132,231 62		
MISCELLANEOUS.				
Cost of litigation.....		4,770 34		
Salaries of engineers, draughtsmen, &c.....		28,293 85		
" " extra clerks, &c.....		3,057 80		
Salaries <i>re</i> returns to Parliament		140 33		
Total.....		36,262 32		
RECAPITULATION.				
Total on canals.....	1,880,787 20	298,678 23	381,016 82	350,278 54
" " general.....		3,730 79	55,017 94	11,049 36
Total on canals	1,880,787 20	302,409 02	436,034 76	361,327 90
Total on railways.....	2,619,059 86		7,599,958 57	
" " general.....		2,132,231 62		
Total on railways	2,619,059 86	2,132,231 62	7,599,958 57	
Grand total railways and canals, including miscellaneous.....	4,499,847 06	2,470,902 96	8,035,993 33	361,327 90

Total amount expended, \$15,368,971.25.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

No. 2.

STATEMENT showing the amount expended on Construction, Renewals, Ordinary Repairs and Working Staff of the Canals of the Dominion of Canada, up to June 30, 1904.

ST. PETER'S CANAL.

—	Year ending June 30.	Capital.		Renewals Chargeable to Income.		Staff.		Repairs.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
Government expenditure prior to Confederation		156,523	32						
" since	1868	21,519	72						
"	1869	70,719	80						
"	1870			46,193	57				
"	1871					225	36	555	78
"	1872					289	00	6,122	67
"	1873					343	32	6,539	58
"	1874					725	93	1,558	57
"	1875	20	97			560	00	889	35
"	1876	11,125	00			641	55		
"	1877	63,330	18			600	00	17	45
"	1878	26,511	51			600	00		
"	1879	107,337	75			631	50		
"	1880	80,120	54			400	00		
"	1881	69,434	76			959	58		
"	1882	484	00			1,920	54	200	63
"	1883					2,089	19	232	42
"	1884	2,471	40			2,601	47	367	85
"	1885	16,820	15			1,929	11	183	11
"	1886	2,316	85			2,360	67	297	81
"	1887	1,087	75	750	00	2,777	13	343	23
"	1888					3,217	77	1,588	40
"	1889			500	00	3,085	29	353	38
"	1890					3,110	15	255	34
"	1891	972	65	510	53	3,255	30	312	02
"	1892	14,387	00	30,936	82	3,007	70	1,461	24
"	1893	811	59	9,987	78	2,934	15	1,856	30
"	1894	437	05	3,852	21	2,935	94	1,986	70
"	1895	868	44	26,222	46	2,499	81	353	55
"	1896	1,455	21	16,743	64	2,182	04	260	90
"	1897					2,728	38	1	20
"	1898			111	70	2,785	25	453	85
"	1899					2,819	86	456	61
"	1900					2,833	24	1,483	30
"	1901			2,311	26	2,730	44	841	63
"	1902			10,014	43	2,939	81	274	44
"	1903					2,836	49	764	11
"	1904					3,126	94	122	45
Less—Refunds of previous years.		648,755	64						
		208	50						
Total		*648,547	14	148,134	40	68,677	91	30,133	27

* Expenditure as above. \$ 648,547 14
Less expenditure prior to Confederation 156,523 32

Agreeing with Public Accounts, 1904, page 4. \$ 492,023 82

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

LACHINE CANAL.

	Year ending June 30.	Chargeable to Capital.		Renewals Chargeable to Income.		Staff.		Repairs.	
		§	cts.	§	cts.	§	cts.	§	cts.
Expenditure by Imperial Gov- ernment.		40,000	00						
Government expenditure prior to Confederation.		2,547,532	85						
Government expenditure since Confederation.	1868			1,852	70	13,742	05	10,431	51
" "	1869	2,000	00			14,209	02	12,085	84
Cost of original construction and enlargement of 1843 to 1848. Expenditure by Dominion Gov- ernment.				2,589,532	85				
" " " "	1870					15,834	49	13,302	39
" " " "	1871			12,231	40	17,478	52	15,093	25
" " " "	1872	36,708	15			16,076	93	12,334	69
" " " "	1873	7,824	28	35,158	21	23,601	03	34,300	60
" " " "	1874	158,618	35			25,811	07	22,828	66
" " " "	1875	197,420	52			28,592	01	30,057	34
" " " "	1876	327,769	39			33,797	73	29,103	65
" " " "	1877	1,439,375	73			33,148	86	19,824	33
" " " "	1878	1,484,619	63			39,062	97	13,646	41
" " " "	1879	958,053	30			42,338	84	12,400	78
" " " "	1880	369,566	74			38,950	90	10,223	62
" " " "	1881	292,165	51			39,027	99	19,888	33
" " " "	1882	252,821	33	2,978	66	41,158	90	17,116	46
" " " "	1883	396,496	96	1,859	68	45,554	91	18,199	59
" " " "	1884	188,266	18			48,624	51	19,683	24
" " " "	1885	111,215	23			49,004	85	20,199	78
" " " "	1886	210,509	42			50,969	10	19,199	18
" " " "	1887	28,772	52	12,981	59	53,113	97	22,567	81
" " " "	1888	19,414	34	7,996	38	52,229	61	19,909	64
" " " "	1889	76,032	96	972	71	54,110	67	22,957	71
" " " "	1890	7,448	03	8,238	46	53,114	34	22,999	38
" " " "	1891	217	53	16,155	75	50,721	69	36,292	98
" " " "	1892	87,852	35	27,480	80	52,729	37	67,499	62
" " " "	1893	445,983	21	50,937	40	53,185	00	51,616	79
" " " "	1894	64,345	14	17,152	48	60,174	03	40,939	70
" " " "	1895	189,944	36	32,405	20	56,337	44	25,891	45
" " " "	1896	184,998	25	8,193	15	58,342	96	24,950	20
" " " "	1897	282,052	48	14,664	21	57,533	20	25,820	73
" " " "	1898	216,717	44	819	62	57,282	50	33,391	92
" " " "	1899	162,351	83	3,103	99	55,990	00	35,776	90
" " " "	1900	125,009	41	12,210	88	56,791	45	31,988	81
" " " "	1901	97,305	52	12,072	87	58,364	29	50,005	48
" " " "	1902	113,328	26	36,249	02	59,435	33	45,853	97
" " " "	1903	58,426	92	109,893	43	69,762	03	53,054	20
" " " "	1904	181,487	06	162,705	14	77,233	17	50,660	92
Cost of enlargement.				8,773,118	33				
Total.				11,362,651	18	588,313	73	1,653,435	73
								1,012,187	86

Total expenditure on capital account as above. § 11,362,651 18

Less charged to St. Lawrence River and Canals, see page 9. § 2,950,104 15

Less expenditure by Imperial Government. 40,000 00

2,990,104 15

Agreeing with Public Accounts balance sheet, 1904, page 4 § 8,372,547 03

S. LEONARD SHANNON,

DEPARTMENT OF RAILWAYS AND CANALS,

Accountant.

OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

BEAUHARNOIS CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation		1,611,424 11			
" " since "	1868		63,193 75	9,349 99	6,216 98
" " " " " "	1869		55 00	9,626 99	6,498 57
" " " " " "	1870		27 50	10,117 57	6,384 81
" " " " " "	1871			12,316 53	5,722 36
" " " " " "	1872		27 50	11,792 46	13,733 38
" " " " " "	1873		5,122 50	12,210 73	9,882 06
" " " " " "	1874		26 00	15,392 51	10,990 56
" " " " " "	1875		36 00	14,399 32	12,253 01
" " " " " "	1876			14,465 86	17,170 83
" " " " " "	1877			14,377 63	15,207 36
" " " " " "	1878			14,383 37	9,861 05
" " " " " "	1879			15,015 86	10,370 71
" " " " " "	1880	266 15		15,362 61	8,997 34
" " " " " "	1881			17,659 93	10,770 67
" " " " " "	1882			18,804 53	20,813 86
" " " " " "	1883		6,727 44	18,287 77	15,826 71
" " " " " "	1884		3,277 98	19,107 38	16,232 61
" " " " " "	1885		7,999 79	18,960 40	14,637 70
" " " " " "	1886		8,491 80	19,228 90	14,356 00
" " " " " "	1887		3,633 57	18,867 45	14,999 88
" " " " " "	1888		14,411 97	19,325 05	14,285 98
" " " " " "	1889		10,993 52	20,019 11	14,982 54
" " " " " "	1890			19,847 42	14,999 20
" " " " " "	1891		17,085 68	18,886 86	12,537 39
" " " " " "	1892		1,636 23	20,050 01	14,999 80
" " " " " "	1893			20,348 34	14,107 11
" " " " " "	1894		6,547 72	20,574 53	13,903 46
" " " " " "	1895		27,982 93	20,428 59	12,299 49
" " " " " "	1896			20,725 47	15,050 85
" " " " " "	1897		9,813 15	21,012 64	14,862 98
" " " " " "	1898	25,000 00	5,799 34	20,650 00	16,164 92
" " " " " "	1899		1,000 00	20,613 22	13,463 01
" " " " " "	1900		4,959 22	20,147 59	14,505 30
" " " " " "	1901		483 40	20,118 42	14,199 12
" " " " " "	1902			16,682 52	6,532 33
" " " " " "	1903			8,218 14	10,063 38
" " " " " "	1904			9,236 27	11,936 37
Total		*1,636,690 26	199,391 99	616,611 97	471,819 68

* See page 9 for total cost of St. Lawrence River and Canals.

S. LEONARD SHANNON,

*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c. —(Continued).

ST. LAWRENCE RIVER AND CANALS, SURVEYS, &c.

	Year ending June 30,	CHARGEABLE TO CAPITAL.				Chargeable to Income.
		North Channel.	River Reaches.	Galops Channel.	Total.	
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation					18,442 85	98,378 46
Government expenditure since Confederation	1868					
" " "	1869					
" " "	1870					
" " "	1871					
" " "	1872					
" " "	1873				33,241 69	
" " "	1874				26,541 30	
" " "	1875				20,611 36	
" " "	1876				50,215 47	
" " "	1877				47,377 31	
" " "	1878				5,570 46	
" " "	1879				9,265 77	
" " "	1880				9,214 56	
" " "	1881				6,927 06	
" " "	1882		6,933 45	22,000 00	28,933 45	
" " "	1883		3,574 31	41,300 00	44,874 31	
" " "	1884		15,546 03	74,300 00	89,846 03	
" " "	1885		13,710 17	101,400 00	115,110 17	
" " "	1886		16,251 73	99,800 00	116,051 73	
" " "	1887		20,037 31	54,400 00	74,437 31	
" " "	1888		16,082 85	40,400 00	56,482 85	
" " "	1889		1,293 92	17,200 00	18,493 92	
" " "	1890		18,279 91	5,700 00	23,979 91	
" " "	1891		35,137 25		35,137 25	
" " "	1892		59,779 31		59,779 31	
" " "	1893		52,643 39		52,643 39	
" " "	1894		13,721 66		13,721 66	
" " "	1895		1,223 72	181,552 03	182,775 75	
" " "	1896		7,457 05		7,457 05	
" " "	1897		12,347 31		12,347 31	
" " "	1898	171,336 65	7,491 11	32,710 00	211,537 76	
" " "	1899	461,979 50	9,366 47	42,430 00	513,775 97	
" " "	1900	225,000 00	72,484 41	50,000 00	347,484 41	
" " "	1901	184,790 34	19,389 75	91,211 97	295,392 06	
" " "	1902	125,000 00	29,268 64	24,037 85	178,306 49	
" " "	1903	126,833 94	16,432 28	25,000 00	168,266 22	
" " "	1904	68,595 42	9,634 66	6,450 00	84,680 08	
		1,363,535 85	458,086 69	909,891 85	2,958,923 12	98,378 46

ST. LAWRENCE RIVER AND CANALS.

St. Lawrence River and Canals, as above	\$ 2,958,923 12
Beauharnois Canal, see page 8	1,636,690 26
Cornwall Canal " 12	7,077,094 13
Williamsburg Canal " 14	9,869,087 32
Lake St. Louis " 10	298,176 11
Soulanges Canal " 26	6,851,971 77
Lachine Canal, from prior to Confederation to June 30, 1875, see page 7	2,950,104 15
Lake St. Francis, see page 11	75,906 71

Agreeing with Public Accounts Balance Sheet, 1904, page 4.....\$ 31,717,953 57

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Continued.*

LAKE ST. LOUIS.

	Year ending June 30.	Chargeable to Capital.		Chargeable to Revenue.	
		\$	cts.	\$	cts.
Government expenditure prior to Confederation.					
" " since " "	1868				
" " " "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873				
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" " " "	1891				
" " " "	1892				
" " " "	1893				
" " " "	1894				
" " " "	1895		4,753 14		
" " " "	1896		49,909 31		
" " " "	1897		73,300 41		
" " " "	1898		64,495 83		
" " " "	1899		57,607 79		
" " " "	1900		11,765 70		
" " " "	1901		12,918 31		
" " " "	1902		6,000 00		
" " " "	1903		9,508 72		
" " " "	1904		7,916 90		
Total.			*298,176 11		

* Included in total cost of St. Lawrence River and Canals, see page 9.

S. LEONARD SHANNON,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.— *Continued.*

LAKE ST. FRANCIS.

	Year ending June 30.	Capital.		Renewals Chargeable to Income.	
		\$	cts.	\$	cts.
Government expenditure since Confederation.....	1868				
" " " "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873				
" " " "	1874				
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" " " "	1891				
" " " "	1892				
" " " "	1893				
" " " "	1894				
" " " "	1895				
" " " "	1896				
" " " "	1897				
" " " "	1898		3,420 00		
" " " "	1899		23,110 00		
" " " "	1900		15,431 46	12,288	39
" " " "	1901		15,000 00	8,060	30
" " " "	1902		13,945 25		
" " " "	1903		5,000 00		
" " " "	1904			2,199	52
Total.....			*75,906 71	22,548	21

* Included in total cost of St. Lawrence River and Canals, see page 9.

S. LEONARD SHANNON,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—Continued.

CORNWALL CANAL.

—	Year ending June 30	Chargeable to Capital.		Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ ct.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation.....		1,933,152	69			
Government expenditure since Confederation..	1868			2,786	11,244	3,774
"	1869	10,692	04		10,347	3,859
"	1870			17,780	10,368	7,145
"	1871			7	11,848	8,891
"	1872			10,000	10,594	8,163
"	1873			1,011	13,042	12,467
"	1874				13,405	7,610
"	1875	1,780	00		13,351	7,097
Cost of original construction..			1,945,624			
Expenditure by Dominion Gov- ernment..	1876				13,320	6,423
"	1877	49,211	37		13,375	6,440
"	1878	145,015	45		13,825	4,935
"	1879	143,032	05		13,817	4,983
"	1880	109,454	95		14,440	9,735
"	1881	53,948	14		15,173	5,524
"	1882	44,587	61		15,052	6,634
"	1883	21,728	93		18,283	8,361
"	1884	22,018	13		18,475	9,007
"	1885	62,034	90	16,298	15,988	12,368
"	1886	57,820	83	6,960	15,994	11,832
"	1887	46,966	43		17,520	12,100
"	1888	67,945	74		16,938	13,942
"	1889	163,993	85		17,890	58,205
"	1890	365,038	01	2,000	17,063	12,758
"	1891	599,091	85	1,459	16,077	9,830
"	1892	398,555	25	2,345	15,596	8,864
"	1893	352,536	13		15,173	9,668
"	1894	404,990	22		15,344	7,733
"	1895	450,689	65	21,497	15,414	13,053
"	1896	448,408	31	2,175	15,472	25,259
"	1897	438,487	51		15,540	16,438
"	1898	133,208	96		15,011	15,431
"	1899	37,649	00	15,960	16,000	14,623
"	1900	169,889	51	18,547	18,798	13,998
"	1901	62,032	47		17,104	13,166
"	1902	90,535	18		17,896	15,045
"	1903	77,833	81		70,129	19,205
"	1904	113,795	16	1,730	45,792	20,932
Cost of enlargement.....			5,131,469			
Total			7,077,094	120,561	649,715	446,515

* Included in total cost of St. Lawrence River and Canals, see page 9.

S. LEONARD SHANNON,
Accountant.DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—Continued.

WILLIAMSBURG CANALS.

	Year ended June 30	Capital.				Renewals Chargeable to Income.	Staff.	Repairs.
		Farran's Point.	Gadops.	Rapids Plat.	Total.			
		%	%	%	%	%	%	
Government expenditure prior to Confederation being amount of original construction	1868	.....	.....	.....	1,320,655 54	.....	5,745 97	6,442 41
Government expenditure since Confederation	1869	.....	.....	.....	.....	.....	5,769 81	5,670 88
"	1870	.....	.....	.....	.....	.....	5,573 13	6,546 16
"	1871	.....	.....	.....	.....	.....	6,382 17	5,308 41
"	1872	.....	.....	.....	1,077 06	.....	3,542 94	3,230 07
"	1873	.....	.....	.....	.....	.....	6,424 49	7,347 75
"	1874	.....	.....	.....	.....	.....	6,857 19	7,385 92
"	1875	.....	.....	.....	.....	.....	6,547 62	4,110 20
"	1876	.....	.....	.....	.....	.....	7,418 39	11,699 98
"	1877	.....	.....	.....	.....	.....	7,388 68	10,053 61
"	1878	.....	.....	.....	.....	.....	7,430 11	4,449 78
"	1879	.....	.....	.....	.....	.....	7,517 20	3,549 71
"	1880	.....	.....	.....	.....	.....	7,590 15	3,993 77
"	1881	.....	.....	.....	.....	.....	7,572 35	5,020 73
"	1882	.....	.....	.....	.....	.....	7,589 41	7,447 69
"	1883	.....	.....	.....	.....	.....	7,423 48	7,299 39
"	1884	.....	.....	.....	13 19	.....	7,757 04	7,349 37
"	1885	.....	.....	.....	2,473 44	.....	7,696 67	8,198 03
"	1886	.....	.....	.....	103,237 12	.....	7,671 54	7,817 05
"	1887	.....	.....	.....	149,835 71	.....	7,635 51	7,904 76
"	1888	.....	.....	.....	115,853 00	.....	7,646 79	8,190 13
"	1889	.....	.....	.....	70,128 29	.....	7,485 28	8,794 61
"	1890	.....	.....	.....	59,867 26	.....	8,954 53	8,191 69
"	1891	.....	.....	.....	230,078 37	.....	8,678 25	7,987 40
"	1892	.....	.....	.....	376,545 32	.....	9,158 33	8,551 32
"	1893	.....	.....	.....	372,193 29	797 83	8,676 03	8,347 95
"	1894	.....	.....	.....	498,390 23	3,675 00	10,230 09	7,029 95
"	1895	.....	.....	.....	347,357 23	13,720 36	9,675 69	7,371 37
Carried forward.		2,853 76	1,250,620 93	1,209,681 73	3,786,298 59	20,883 86	210,337 70	195,327 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—Continued.

WILLIAMSBURG CANALS—Continued.

	Year ending June 30.	Capital.						Renewals Chargeable to Income.	Staff.	Repairs.					
		Farran's Point.		Cullops.		Rapide Plat.					Total.				
		\$	cts.	\$	cts.	\$	cts.					\$	cts.		
Brought forward		2,853	76	1,250,620	93	1,209,681	73	3,786,298	59	20,883	86	210,337	70	195,327	20
Government expenditure since Confederation.	1896	4,980	00	150,744	16	286,396	96	442,121	12	8,007	04	9,588	51	9,036	00
"	1897	231,321	44	262,795	78	205,480	55	468,274	33	3,880	76	8,697	54	8,210	71
"	1898	346,936	54	734,192	07	116,072	55	1,081,886	06	7,410	00	10,708	66	8,032	84
"	1899	100,534	64	987,186	44	57,869	18	1,332,012	16	4,137	04	9,900	61	10,000	00
"	1900	111,458	39	752,799	27	14,298	74	867,632	65	4,137	04	11,092	06	10,897	79
"	1901	42,299	89	390,112	78	76,501	57	577,772	74	601,973	92	12,342	32	11,755	09
"	1902	10,266	92	421,945	81	137,818	22	349,105	18	1,978	85	14,463	28	13,673	26
"	1903	18,700	00	320,354	92	18,483	34	349,105	18	1,978	85	15,246	91	20,092	79
"	1904			256,536	30	26,774	27	302,010	57			20,570	17	19,430	05
Total		868,981	58	5,527,586	46	2,149,377	11	*9,869,087	32	46,897	55	322,947	79	306,455	73

* Original construction. \$ 1,320,655 54
 Cost of enlargement. 8,548,431 78

Total. \$ 9,869,087 32

Included in total cost of St. Lawrence River and Canals, page 9.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
 OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENTS showing the amounts expended on Construction, Renewals, &c.—Continued.

WELLAND CANAL.

—	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		§ cts.	§ cts.	§ cts.	§ cts.
Imperial Government..		222,220 00			
Government expenditure prior to Confederation		7,416,019 83			
" " * since " " " " " " " "	1868	12,097 84		37,679 05	38,852 96
" " " " " " " " " " " "	1869	43,486 36		39,060 61	50,773 03
" " " " " " " " " " " "	1870		22,173 72	40,340 45	65,009 19
" " " " " " " " " " " "	1871		48,569 10	42,383 33	53,381 02
" " " " " " " " " " " "	1872	53,680 32	6,022 44	37,085 37	50,276 90
" " " " " " " " " " " "	1873	82,282 20	47,876 27	45,382 99	66,550 73
" " " " " " " " " " " "	1874	746,420 61		50,966 48	103,666 99
" " " " " " " " " " " "	1875	1,047,119 91		52,595 00	88,539 99
" " " " " " " " " " " "	1876	1,569,478 19	700 00	57,623 31	81,376 12
" " " " " " " " " " " "	1877	2,199,962 61		59,963 47	49,783 93
" " " " " " " " " " " "	1878	2,138,392 99		60,188 59	66,393 53
" " " " " " " " " " " "	1879	1,552,697 41		59,912 23	56,755 57
" " " " " " " " " " " "	1880	1,252,924 75		63,198 10	76,535 25
" " " " " " " " " " " "	1881	1,242,943 37	6,593 19	56,398 04	69,249 53
" " " " " " " " " " " "	1882	603,402 17	13,664 80	74,641 51	84,374 97
" " " " " " " " " " " "	1883	549,433 29	5,979 03	109,207 21	72,707 62
" " " " " " " " " " " "	1884	482,336 21		113,276 87	90,926 97
" " " " " " " " " " " "	1885	463,505 38	6,150 21	112,670 00	91,534 66
" " " " " " " " " " " "	1886	215,380 75	1,359 00	111,660 22	69,507 48
" " " " " " " " " " " "	1887	1,071,073 87	3,828 67	109,371 69	77,440 80
" " " " " " " " " " " "	1888	429,720 94	10,740 86	110,806 01	86,518 97
" " " " " " " " " " " "	1889	225,910 21	48,803 80	113,587 05	77,547 77
" " " " " " " " " " " "	1890	117,633 22	51,648 28	109,202 02	72,686 19
" " " " " " " " " " " "	1891	36,371 03	19,767 73	107,662 63	82,548 30
" " " " " " " " " " " "	1892	29,541 21	9,068 80	104,673 73	73,771 87
" " " " " " " " " " " "	1893	8,259 94	25,103 13	104,926 73	65,016 84
" " " " " " " " " " " "	1894	1,571 78	13,430 20	102,018 80	53,053 71
" " " " " " " " " " " "	1895	3,869 35	24,245 02	90,438 07	48,270 94
" " " " " " " " " " " "	1896	1,677 67	18,768 99	87,988 11	62,542 64
" " " " " " " " " " " "	1897	2,282 35	22,283 06	88,095 20	41,247 81
" " " " " " " " " " " "	1898		34,803 25	84,806 54	59,571 66
" " " " " " " " " " " "	1899		30,099 84	86,110 88	56,270 60
" " " " " " " " " " " "	1900	18,167 29	37,164 84	84,888 36	59,507 64
" " " " " " " " " " " "	1901	224,536 96	87,777 43	86,889 24	72,055 89
" " " " " " " " " " " "	1902	303,997 81	78,965 37	88,048 95	69,279 90
" " " " " " " " " " " "	1903	315,819 49	94,127 21	90,684 05	72,004 59
" " " " " " " " " " " "	1904	555,731 00	31,140 58	91,115 35	85,717 88
Total	* 1904	25,189,908 31	795,734 82	2,965,526 24	2,541,250 44

*Total expenditure as above. § 25,189,908 31
 Less expenditure by Imperial Government 222,220 00

Agreeing with Public Accounts Balance Sheet, 1904, page 4 . . . § 24,967,688 31

Original cost of construction, including first enlargement. . . . § 7,693,824 03
 Enlargement, including new Welland Canal. 17,496,084 28

Total expenditure as above. § 25,189,908 31

S. LEONARD SHANNON,
Accountant.

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—Continued.

STE. ANNE'S LOCK AND CANAL.

Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
	§ cts.	§ cts.	§ cts.	§ cts.
Government expenditure prior to Confederation	134,456 51			
" " " since " " 1868			778 16	432 47
" " " " " " 1869			1,062 96	1,873 51
" " " " " " 1870			1,136 54	1,280 36
" " " " " " 1871			1,285 84	1,539 02
" " " " " " 1872		1,939 46	1,106 80	1,393 63
" " " " " " 1873		540 11	2,199 64	1,264 40
" " " " " " 1874	12,753 27		2,614 90	7,208 63
" " " " " " 1875	32,627 71		1,859 20	4,506 68
" " " " " " 1876	24,935 85		1,952 14	4,033 72
" " " " " " 1877	30,003 08		1,982 65	1,756 93
" " " " " " 1878	14,618 85		2,057 32	541 95
" " " " " " 1879	22,113 02		2,202 03	3,259 70
" " " " " " 1880	3,054 68		2,152 57	1,704 71
" " " " " " 1881	69,042 76		2,553 02	3,257 92
" " " " " " 1882	193,158 36		2,611 30	2,343 99
" " " " " " 1883	172,959 95		2,569 86	3,448 83
" " " " " " 1884	142,006 25		2,775 32	2,725 49
" " " " " " 1885	93,679 57		2,618 60	4,042 04
" " " " " " 1886	120,681 67		2,611 90	5,803 01
" " " " " " 1887	45,276 08	6,054 10	2,537 41	1,499 96
" " " " " " 1888	18,910 55	1,372 59	2,505 61	1,380 75
" " " " " " 1889	24,786 33		2,569 22	1,730 79
" " " " " " 1890	6,151 14		2,571 04	1,525 51
" " " " " " 1891		8,173 69	2,505 69	1,503 56
" " " " " " 1892		25,471 61	2,571 28	1,666 21
" " " " " " 1893		6,521 88	2,581 08	2,800 03
" " " " " " 1894		3,497 56	2,640 00	2,799 63
" " " " " " 1895		3,694 33	2,508 14	3,025 91
" " " " " " 1896			2,495 54	4,993 89
" " " " " " 1897			2,357 51	1,688 12
" " " " " " 1898			1,904 10	1,639 44
" " " " " " 1899			1,920 12	1,997 96
" " " " " " 1900			1,840 51	2,679 21
" " " " " " 1901			1,895 89	3,999 02
" " " " " " 1902			1,904 52	3,015 97
" " " " " " 1903		1,984 39	2,072 17	4,684 42
" " " " " " 1904			2,292 94	2,244 13
Total.....	*1,170,215 63	59,249 72	79,893 52	97,351 50

* Included in total cost of Ottawa River Works, see page 19.

Original construction.....	§ 134,456 51
Enlargement, including new lock.....	1,035,759 12
	<u>§ 1,170,215 63</u>

S. LEONARD SHANNON,

*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

CARILLON AND GRENVILLE CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Imperial Government.....		*			
Government expenditure prior to Confederation		63,053 64			
" " since	1868		19,817 22	6,301 88	8,911 28
" " " " " " "	1869			6,549 38	10,157 42
" " " " " " "	1870		4,167 96	6,617 81	9,852 09
" " " " " " "	1871		23,119 37	8,676 90	8,218 24
" " " " " " "	1872	165,257 28		8,324 51	17,235 31
" " " " " " "	1873	133,199 10	3,051 38	10,068 28	8,781 50
" " " " " " "	1874	245,258 38		10,710 88	10,605 82
" " " " " " "	1875	339,864 76		10,378 57	18,520 44
" " " " " " "	1876	326,203 16		10,764 38	11,475 96
" " " " " " "	1877	245,738 04		11,050 27	10,304 06
" " " " " " "	1878	22,676 20		11,401 30	5,082 72
" " " " " " "	1879	243,141 24		11,501 22	7,629 98
" " " " " " "	1880	281,514 27		11,959 14	7,625 54
" " " " " " "	1881	336,707 53		13,059 18	8,076 91
" " " " " " "	1882	433,054 39		14,387 49	7,582 68
" " " " " " "	1883	433,575 10		17,479 58	8,310 02
" " " " " " "	1884	399,267 16		17,393 91	7,918 42
" " " " " " "	1885	157,187 72		19,702 30	10,429 26
" " " " " " "	1886	104,973 24	75 00	20,597 82	9,303 31
" " " " " " "	1887	20,747 11		20,011 36	10,554 41
" " " " " " "	1888	38,996 29		21,531 12	10,036 62
" " " " " " "	1889	298 17		22,098 88	10,135 66
" " " " " " "	1890	17 58	4,526 61	15,896 16	7,582 38
" " " " " " "	1891		4,395 25	21,230 22	10,796 68
" " " " " " "	1892	34,585 64	15,036 48	17,458 69	8,620 15
" " " " " " "	1893	207 00	42,298 74	16,762 71	10,669 28
" " " " " " "	1894	385 55	20,034 94	14,144 98	11,620 09
" " " " " " "	1895		5,963 76	15,453 21	12,303 25
" " " " " " "	1896	3,850 31		13,995 69	12,161 10
" " " " " " "	1897	1,908 44	4,939 20	13,780 29	11,607 95
" " " " " " "	1898	82,663 37	5,082 03	11,697 81	10,993 61
" " " " " " "	1899	39,999 37		11,919 27	11,478 88
" " " " " " "	1900	22,802 27	4,476 50	13,657 06	14,666 71
" " " " " " "	1901	4,930 65	9,331 95	13,342 22	13,416 00
" " " " " " "	1902		16,998 69	13,725 99	19,366 30
" " " " " " "	1903		15,992 52	14,348 17	17,766 28
" " " " " " "	1904		9,150 07	16,224 94	17,262 29
Total.....		†4,182,092 96	208,457 67	514,203 57	407,058 60

* Expenditure not given—records relating to same were kept in Ordnance Office at Montreal and were destroyed by fire in 1852

† Included in total cost of Ottawa River Works, see page 19, cost of enlargement, \$4,119,039.32.

S. LEONARD SHANNON

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

CULBUTE LOCK AND DAM.

	Year ending June 30.	Capital.		Renewals Chargeable to Incoms.		Staff.		Repairs.	
		\$	cts.	\$	cts.	\$	cts.	\$	cts.
Government expenditure since Confederation..	1868								
" " " "	1869								
" " " "	1870								
" " " "	1871								
" " " "	1872								
" " " "	1873				835 53				
" " " "	1874				38,388 99				
" " " "	1875	63,659	29						
" " " "	1876	76,842	44						
" " " "	1877	56,081	87						
" " " "	1878	5,933	53						
" " " "	1879	20,694	19						
" " " "	1880	16,688	20				202 50		259 31
" " " "	1881	4,721	62				962 85		
" " " "	1882	29,567	15				790 00		162 33
" " " "	1883	14,249	60				695 00		288 99
" " " "	1884	8,151	16				733 50		
" " " "	1885	19,071	76				730 00		572 75
" " " "	1886	26,385	27				730 00		2,396 14
" " " "	1887	7,760	88				730 00		967 33
" " " "	1888	7,573	99				739 50		730 60
" " " "	1889	17,112	01				1,050 00		116 53
" " " "	1890	2,818	35				747 83		
" " " "	1891	2,183	15		9,122 05		745 25		499 91
" " " "	1892				1,546 25		736 00		
" " " "	1893				1,420 65		749 00		13 55
" " " "	1894				2,540 14		730 00		494 43
" " " "	1895				1,475 26		436 05		434 28
" " " "	1896								
" " " "	1897								
" " " "	1898								100 00
" " " "	1899								
" " " "	1900		3,085 00						
" " " "	1901		197 00						
" " " "	1902				1,135 00				
" " " "	1903								
" " " "	1904				2,204 50				
Total.....			*382,776 46		58,668 37		11,507 48		7,036 15

* Included in total cost of Ottawa River Works, see page 19.

S. LEONARD SHANNON,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,

OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*
RIDEAU CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Imperial Government.....	1868	3,911,701 47			
Government expenditure prior to Confederation	1869	153,062 60			
" " since " " "	1870	165 50	7,298 12	18,397 28	16,475 21
" " " " "	1871		13 16	19,250 71	13,140 77
" " " " "	1872		11,732 98	20,022 37	19,469 33
" " " " "	1873		4,967 50	22,814 58	18,120 52
" " " " "	1874		18,070 97	22,139 48	14,005 32
" " " " "	1875		5,793 16	22,841 51	26,074 49
" " " " "	1876	9,310 85		26,815 44	22,957 40
" " " " "	1877	2,163 96		26,553 37	19,699 81
" " " " "	1878	214 11		26,430 77	14,428 25
" " " " "	1879	7,703 88		25,959 56	14,198 13
" " " " "	1880			26,651 51	11,034 22
" " " " "	1881			26,042 52	7,134 55
" " " " "	1882		133 50	26,463 88	11,434 05
" " " " "	1883		70 65	26,024 71	8,627 00
" " " " "	1884		4,597 50	26,915 29	13,860 28
" " " " "	1885		2,098 76	27,322 81	23,524 84
" " " " "	1886		550 00	26,938 95	19,245 02
" " " " "	1887		20,823 96	26,971 32	18,189 55
" " " " "	1888		18,889 48	27,045 95	35,648 04
" " " " "	1889		6,665 22	29,440 46	18,565 34
" " " " "	1890		21,124 10	33,458 83	25,478 87
" " " " "	1891		20,967 25	33,801 77	18,106 36
" " " " "	1892		31,363 23	34,270 57	18,025 21
" " " " "	1893		24,274 71	34,641 98	21,537 56
" " " " "	1894		14,485 11	35,002 82	21,507 16
" " " " "	1895		31,559 48	35,022 49	18,789 50
" " " " "	1896		21,452 29	34,943 35	16,939 47
" " " " "	1897		19,079 11	33,827 08	19,897 32
" " " " "	1898		13,608 39	34,052 77	30,196 38
" " " " "	1899		700 29	31,461 55	29,585 94
" " " " "	1900		11,780 41	30,759 05	26,599 93
" " " " "	1901		8,894 40	30,751 20	28,199 49
" " " " "	1902		16,235 13	30,623 27	30,237 09
" " " " "	1903		13,525 04	31,334 40	33,791 17
" " " " "	1904			32,193 66	33,959 86
" " " " "				34,595 31	36,424 23
" " " " "				39,127 96	38,496 78
Total.....		*4,084,323 37	350,753 90	1,071,408 53	793,554 49

* Ottawa River Works.

Ste. Anne's Lock, page 16.....	\$	1,170,215 63
Carillon and Grenville Canal, page 17.....		4,182,092 96
Culbute Canal, page 18.....		382,776 46
Rideau Canal, as above.....	\$	4,084,323 37
Less expenditure by Imperial Government.....		3,911,701 47
		172,621 90
Total Ottawa River Works (Capital).....	\$	5,907,706 95
Add expenditure on slides and booms prior to Confederation.....	\$	719,247 13
" " " since " " ".....		7,243 60
" " on Chats Canals prior to Confederation.....		482,950 81
" " in 1881, charged to Miscellaneous, see page 229, part ii,		
Public Accounts.....		1,136 84
Add amount transferred, see page xxxvi, Public Accounts Balance Sheet,		
1881.....		233,555 85
		1,444,134 23
	\$	7,351,841 18
Less expenditure prior to Confederation, transferred to Income Account.....	\$	320,618 28
Less expenditure in 1872, on Carillon and Grenville Canal, as shown in		
Public Accounts Balance Sheet, page xx, under Miscellaneous .. .		163,257 28
		485,875 56
Agreeing with Balance Sheet, Public Accounts, 1904, page 4	\$	6,865,965 62

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

ST. OURS LOCK.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		§ cts.	§ cts.	§ cts.	§ cts.
Government expenditure prior to Confederation		121,537 65			
" since	1868			1,532 75	753 74
"	1869			1,755 15	1,399 18
"	1870			1,458 09	1,006 22
"	1871			1,414 48	1,210 98
"	1872			1,565 80	1,263 19
"	1873			2,076 50	1,575 10
"	1874			2,219 13	2,363 42
"	1875			1,362 22	1,245 69
"	1876			1,403 92	1,601 71
"	1877			1,533 40	750 80
"	1878			1,556 65	283 77
"	1879			1,581 55	456 07
"	1880			1,614 01	705 54
"	1881			1,741 97	1,299 77
"	1882			2,002 71	1,902 41
"	1883		17,230 32	2,361 65	2,188 08
"	1884		5,279 17	2,315 37	1,494 99
"	1885		4,700 64	2,271 57	3,652 63
"	1886			2,311 70	4,143 47
"	1887			2,175 37	5,864 78
"	1888			2,216 04	2,801 17
"	1889		17,964 45	2,421 14	2,002 63
"	1890		24,571 96	2,138 40	1,935 44
"	1891		21,696 74	2,011 08	4,460 16
"	1892		3,585 34	2,168 44	1,944 33
"	1893			2,136 66	1,994 34
"	1894			2,216 68	924 55
"	1895			2,161 63	915 50
"	1896			2,094 91	1,678 49
"	1897			2,135 60	707 06
"	1898			2,049 67	692 04
"	1899			2,244 12	1,494 93
"	1900		1,596 88	2,181 43	2,681 10
"	1901		3,610 06	2,128 25	1,681 44
"	1902		15,549 27	2,262 39	984 36
"	1903		9,344 89	2,288 63	1,671 83
"	1904		7,984 41	2,334 67	1,690 61
Total		*121,537 65	133,114 13	73,443 73	65,421 52

* Included in the total cost of Chambly Canal and Richelieu River, *see* page 21.

S. LEONARD SHANNON,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,

OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

CHAMBLY CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		§ cts.	§ cts.	§ cts.	§ cts.
Government expenditure prior to Confederation		634,711 76			
" since	1868			8,312 90	9,355 70
"	1869			8,437 22	13,120 97
"	1870			8,934 41	20,180 73
"	1871		2,839 85	10,214 71	22,426 33
"	1872		1,906 40	9,628 50	22,327 99
"	1873		759 00	10,390 44	11,789 27
"	1874		2,810 00	11,675 67	16,427 19
"	1875	2,415 00		12,201 99	16,306 91
"	1876			10,593 14	13,273 56
"	1877	80 00		10,281 78	10,111 32
"	1878			10,413 99	6,022 96
"	1879			11,301 53	8,809 77
"	1880			11,516 22	12,377 74
"	1881			13,950 47	20,705 17
"	1882		31,796 41	16,686 78	16,843 60
"	1883		21,332 36	15,904 38	15,182 24
"	1884		41,640 77	18,448 85	12,003 34
"	1885		21,049 23	18,378 55	13,046 95
"	1886		14,547 27	19,501 28	11,999 77
"	1887		17,911 17	19,053 62	20,071 37
"	1888		65,536 54	20,073 60	11,823 74
"	1889		51,437 87	19,679 22	19,392 18
"	1890		23,221 48	19,655 38	14,399 93
"	1891		43,344 41	19,204 76	11,399 93
"	1892		38,353 99	19,665 22	12,976 48
"	1893		21,127 65	19,310 29	12,451 03
"	1894		8,567 78	19,040 93	11,920 74
"	1895		6,147 63	19,325 49	11,779 12
"	1896		3,694 63	19,349 65	11,801 12
"	1897		12,665 88	18,754 17	13,128 55
"	1898		13,184 68	17,992 90	12,466 51
"	1899		15,255 42	18,336 50	11,997 51
"	1900		5,448 88	18,397 58	13,995 00
"	1901		1,195 09	18,529 48	17,572 35
"	1902		19,132 80	18,832 25	17,313 02
"	1903		8,977 43	19,286 10	21,745 65
"	1904		26,701 59	21,544 69	25,656 00
Less proceeds of sale of piece of land.....		637,206 76 150 00			
Total		*637,056 76	520,586 31	582,804 64	544,201 74

*Chamby Canal and River Richelieu.

Chamby Canal, as above \$ 637,056 76
 St. Ours Lock, see page 20..... 121,537 65

\$ 758,594 41

Less amount deducted at Confederation, see
 Public Accounts, 1868, part 1, page 9.

Government expenditure prior to Confederation.
 Chamby Canal, as above \$ 634,711 76
 St. Ours Lock, see page 20 121,537 65

\$ 756,249 41

Returned as an asset in Public Accounts, 1868.. 433,807 83

322,441 58

Agreeing with Public Accounts, 1904, page 4..... \$ 436,152 83

S. LEONARD SHANNON,

Accountant,

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

MURRAY CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation					
" since	1868		400 00		
" " " "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873				
" " " "	1874				
" " " "	1875				
" " " "	1876				
" " " "	1877				
" " " "	1878				
" " " "	1879				
" " " "	1880				
" " " "	1881				
" " " "	1882	7,135 63			
" " " "	1883	84,071 68			
" " " "	1884	118,187 43			
" " " "	1885	148,902 66			
" " " "	1886	179,704 52			
" " " "	1887	142,563 66			
" " " "	1888	146,754 37			
" " " "	1889	215,326 46			
" " " "	1890	106,760 35		494 31	
" " " "	1891	61,260 49		5,137 03	173 53
" " " "	1892	5,964 22		5,803 48	3,505 15
" " " "	1893	30,838 79		5,499 62	5,341 34
" " " "	1894			5,667 52	5,295 57
" " " "	1895			5,354 97	5,063 49
" " " "	1896			5,409 10	5,410 33
" " " "	1897			5,526 87	3,966 41
" " " "	1898			5,799 94	4,710 23
" " " "	1899			5,073 70	3,533 68
" " " "	1900			5,613 83	2,777 60
" " " "	1901			5,175 74	1,138 15
" " " "	1902			5,254 51	6,377 19
" " " "	1903	500 00		5,757 00	4,627 70
" " " "	1904	750 00	2,521 13	5,291 43	6,075 94
Total.....		*1,248,720 26	2,921 13	76,859 05	57,996 31

*Agreeing with Public Accounts Balance Sheet, 1904, page 4.

S. LEONARD SHANNON,

*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c. —*Con.*

TRENT CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income.	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation	1868	309,371 31			
" since	1869				
"	1870				
"	1871				
"	1872				
"	1873				
"	1874				
"	1875				
"	1876				
"	1877				
"	1878				
"	1879				
"	1880	561 50		1,188 92	3,568 89
"	1881			2,489 93	2,233 50
"	1882		5,836 51	2,011 92	8,115 50
"	1883	40,767 16	9,303 66	2,235 50	3,047 42
"	1884	120,393 91	6,198 57	2,208 64	5,264 35
"	1885	121,382 84		3,303 87	4,653 50
"	1886	75,103 30		1,639 75	5,917 88
"	1887	179,541 63		1,938 08	6,008 88
"	1888	114,879 35		1,770 29	5,151 42
"	1889	47,592 13	29,677 92	3,242 05	5,935 94
"	1890	58,644 50	11,522 65	3,450 99	730 55
"	1891	9,826 49	3,164 81	3,803 66	4,888 98
"	1892	4,457 28	6,506 97	3,695 85	4,721 85
"	1893	5,962 47	10,838 90	3,739 86	2,987 17
"	1894	3,412 32	20,403 93	3,785 47	4,988 59
"	1895	53,907 70	21,143 41	4,184 18	3,374 49
"	1896	392,976 08	6,185 75	4,349 34	3,329 97
"	1897	486,575 70	13,880 37	4,965 39	3,497 90
"	1898	351,273 31	8,991 54	5,034 60	4,998 80
"	1899	166,611 49	6,179 79	5,048 72	6,454 49
"	1900	334,583 01	8,043 39	5,131 52	9,989 26
"	1901	284,503 89	10,494 82	5,254 51	13,075 89
"	1902	449,075 45	26,165 93	5,575 52	14,984 88
"	1903	523,950 74	18,548 58	6,993 25	10,791 15
"	1904	489,038 44	21,228 55	7,237 05	21,179 12
Total		*4,624,392 00	244,316 05	94,278 86	158,990 37

*Total expenditure on Capital Account as above \$4,624,392 00
 Less—Expenditure prior to Confederation \$ 309,371 31
 " Year 1880 561 50
 309,932 81

Agreeing with Public Accounts Balance Sheet, 1904, page 4 \$4,314,459 19

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
 OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

TAY CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure since Confederation.	1868				
" " " "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873				
" " " "	1874				
" " " "	1875				
" " " "	1876				
" " " "	1877				
" " " "	1878				
" " " "	1879				
" " " "	1880				
" " " "	1881				
" " " "	1882		748 65		
" " " "	1883	4,831 80			
" " " "	1884	50,878 12			
" " " "	1885	92,473 97			
" " " "	1886	65,561 51			
" " " "	1887	49,617 92			
" " " "	1888	54,166 57			
" " " "	1889	89,486 18			
" " " "	1890	22,226 23		*	*
" " " "	1891	17,114 78		*	*
" " " "	1892	29,771 65		*	*
" " " "	1893			*	*
" " " "	1894			*	*
" " " "	1895			*	*
" " " "	1896			*	*
" " " "	1897	10,720 50		*	*
" " " "	1898			*	*
" " " "	1899			*	*
" " " "	1900	2,750 00		*	*
" " " "	1901			*	*
" " " "	1902			*	*
" " " "	1903			*	*
" " " "	1904			*	*
Total.....		+489,599 23	748 65	*	*

* Included in Rideau Canal.

† Agreeing with Public Accounts, 1904, page 4

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

SAULT STE. MARIE CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income	Staff.	Repairs.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure since Confederation.	1868	.....	.....	.....	.....
" " " "	1869	.....	.....	.....	.....
" " " "	1870	.....	.....	.....	.....
" " " "	1871	.....	.....	.....	.....
" " " "	1872	.....	949 35	.....	.....
" " " "	1873	.....	.....	.....	.....
" " " "	1874	.....	.....	.....	.....
" " " "	1875	.....	.....	.....	.....
" " " "	1876	.....	.....	.....	.....
" " " "	1877	.....	.....	.....	.....
" " " "	1878	.....	.....	.....	.....
" " " "	1879	.....	.....	.....	.....
" " " "	1880	.....	.....	.....	.....
" " " "	1881	.....	.....	.....	.....
" " " "	1882	.....	.....	.....	.....
" " " "	1883	.....	.....	.....	.....
" " " "	1884	.....	.....	.....	.....
" " " "	1885	.....	.....	.....	.....
" " " "	1886	.....	.....	.....	.....
" " " "	1887	.....	.....	.....	.....
" " " "	1888	8,145 06	.....	.....	.....
" " " "	1889	34,018 95	.....	.....	.....
" " " "	1890	176,568 55	.....	.....	.....
" " " "	1891	325,336 33	.....	.....	.....
" " " "	1892	341,474 31	.....	.....	.....
" " " "	1893	589,801 25	.....	.....	.....
" " " "	1894	1,316,529 29	.....	.....	.....
" " " "	1895	466,151 50	.....	3,432 73	.....
" " " "	1896	189,986 59	.....	16,074 70	2,650 17
" " " "	1897	209,561 82	.....	15,381 59	7,671 79
" " " "	1898	21,004 56	.....	14,389 92	8,172 09
" " " "	1899	63,935 48	.....	13,840 24	6,564 40
" " " "	1900	27,157 98	.....	13,901 40	13,219 87
" " " "	1901	323,353 93	48 39	13,730 93	10,289 18
" " " "	1902	122,505 73	.....	15,920 80	14,839 71
" " " "	1903	65,933 43	.....	16,077 22	10,855 70
" " " "	1904	32,029 54	.....	14,653 35	9,491 44
Total		*4 313,494 30	997 74	137,402 88	83,754 35

Agreeing with Public Accounts, 1904, page 4.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

STATEMENT showing the amounts expended on Construction, Renewals, &c.—*Con.*

SOULANGES CANAL.

	Year ending June 30.	Capital.	Renewals Chargeable to Income	Staff.	Repairs.
		§ cts.	§ cts.	§ cts.	§ cts.
Government expenditure prior to Confederation	1868				
" " since " "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873				
" " " "	1874				
" " " "	1875				
" " " "	1876				
" " " "	1877				
" " " "	1878				
" " " "	1879				
" " " "	1880				
" " " "	1881				
" " " "	1882				
" " " "	1883				
" " " "	1884				
" " " "	1885				
" " " "	1886				
" " " "	1887				
" " " "	1888				
" " " "	1889				
" " " "	1890				
" " " "	1891				
" " " "	1892	54,235 76			
" " " "	1893	210,336 24			
" " " "	1894	723,380 95			
" " " "	1895	752,016 53			
" " " "	1896	535,939 07			
" " " "	1897	363,126 06			
" " " "	1898	1,016,401 00			
" " " "	1899	1,442,824 22			
" " " "	1900	693,806 24		6,711 84	5,000 00
" " " "	1901	462,626 36	115 00	25,154 78	5,888 77
" " " "	1902	235,021 79		22,672 50	2,267 13
" " " "	1903	248,929 10		31,987 06	10,362 23
" " " "	1904	113,328 45	15,608 69	25,235 25	39,382 01
Total		*6,851,971 77	15,723 69	111,761 43	62,900 14

*Included in total cost of St. Lawrence River and Canals, see part ii, page 9.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing amount expended on Construction and Enlargement of Canals, to
June 30, 1904.

Canal.	Construction.		Enlargement.		Total.		
	\$	cts.	\$	cts.	\$	cts.	
St. Peters.....	248,762	84	399,784	30	648,547	14	
Lachine.....	2,589,532	85	8,773,118	33	11,362,651	18	
Beauharnois.....	1,636,690	26			1,636,690	26	
St. Lawrence River and Canals.....	18,442	85	2,940,480	27	2,958,923	12	
Lake St. Louis.....			298,176	11	298,176	11	
Lake St. Francis.....			75,906	71	75,906	71	
Cornwall.....	1,945,624	73	5,131,469	40	7,077,094	13	
Williamsburg.....			Farran's Point.....	868,981	58	9,869,087	32
			Galops.....	5,527,586	46		
			Rapide Plat.....	2,149,377	11		
			Williamsburg.....	2,486	63		
Welland.....	7,693,824	03	17,496,084	28	25,189,908	31	
St. Anne's.....	134,456	51	1,035,759	12	1,170,215	63	
*Carillon and Grenville.....	63,053	64	4,119,039	32	4,182,092	96	
Culbute.....	382,776	46			382,776	46	
Rideau.....	4,084,323	37			4,084,323	37	
St. Ours.....	121,537	65			121,537	65	
Chambly.....	637,056	76			637,056	76	
Murray.....	1,248,720	26			1,248,720	26	
Trent.....	4,624,392	00			4,624,392	00	
Tay.....	489,599	23			489,599	23	
Sault Ste. Marie.....	4,313,494	30			4,313,494	30	
Soulanges.....	6,851,971	77			6,851,971	77	
Total.....	38,404,915	05	48,818,249	62	87,223,164	67	

* Construction by Imperial Government not included, records relating to same were kept in Ordnance Office, Montreal, and were destroyed by fire in 1852.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

*RECAPITULATION—EXPENDITURE on Canals, also showing Revenue received.

Year ending June 30.	Capital.	Income.	Staff.	Repairs.	Revenue received.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation, including Imperial Government.....	20,593,866 13	98,378 46			
Government expenditure since Confederation.....	1868 33,784 06	95,347 79	113,084 50	101,646 44	403,879 19
" " 1869	126,898 20	55 00	116,069 76	118,579 31	400,263 32
" " 1870		90,355 96	120,403 02	150,176 70	414,687 02
" " 1871		116,429 54	135,040 81	140,467 52	488,538 76
" " 1872	255,645 75	33,289 27	124,137 09	152,086 25	466,847 52
" " 1873	256,547 27	127,369 55	148,581 18	186,573 13	486,433 26
" " 1874	1,189,591 91	51,037 05	167,194 40	213,613 86	510,755 99
" " 1875	1,714,830 37	479 00	168,401 21	203,226 85	414,979 59
" " 1876	2,388,733 46	810 75	178,411 80	190,578 45	390,337 04
" " 1877	4,131,374 30	22 30	179,661 40	138,448 51	390,857 37
" " 1878	3,843,338 62		187,521 31	122,251 60	373,814 17
" " 1879	3,064,098 61		191,892 44	115,349 99	337,675 13
" " 1880	2,123,366 34		195,039 33	147,167 52	341,598 14
" " 1881	2,075,891 65	7,246 69	197,573 62	154,653 63	361,558 17
" " 1882	1,593,174 09	55,025 03	224,572 61	187,399 02	325,231 54
" " 1883	1,763,001 97	62,503 14	269,415 01	178,617 86	361,604 01
" " 1884	1,577,295 42	60,993 99	280,657 29	192,219 38	372,561 69
" " 1885	1,504,621 47	58,297 59	280,226 20	201,708 47	321,289 47
" " 1886	1,333,324 80	31,984 02	282,323 63	198,251 97	328,977 43
" " 1887	1,783,698 16	65,983 06	285,172 62	198,888 84	321,784 88
" " 1888	1,033,118 34	120,561 59	292,458 76	201,928 93	317,902 04
" " 1889	972,918 43	162,015 49	301,040 23	240,261 36	333,188 90
" " 1890	1,026,364 24	146,853 54	290,516 63	176,089 00	354,816 92
" " 1891	1,318,092 15	165,843 87	294,562 12	204,768 45	349,431 90
" " 1892	1,487,149 30	194,129 61	293,115 58	231,089 54	324,475 24
" " 1893	2,069,573 30	196,185 84	291,588 97	204,759 39	357,089 87
" " 1894	3,027,164 19	109,216 33	294,446 34	179,630 13	387,788 97
" " 1895	2,452,273 65	216,057 58	281,477 04	164,033 71	339,890 49
" " 1896	2,258,778 97	85,820 49	292,121 05	209,321 60	339,538 72
" " 1897	2,348,636 91	101,205 74	287,970 36	178,385 47	384,780 53
" " 1898	3,207,249 79	82,400 55	280,872 44	203,478 86	407,652 81
" " 1899	3,899,877 31	82,205 60	280,628 57	202,312 36	369,044 38
" " 1900	2,639,564 93	120,653 93	292,609 24	227,626 97	322,642 86
" " 1901	2,360,569 89	135,500 57	314,095 04	262,876 07	315,425 69
" " 1902	2,114,689 88	213,044 91	317,838 61	263,768 27	300,413 68
" " 1903	1,823,273 61	275,103 58	390,281 82	294,113 92	230,213 15
" " 1904	1,880,787 20	298,678 23	381,016 82	350,278 54	79,536 51
Total	87,223,164 67	3,661,085 64	9,022,018 85	7,086,627 87	13,327,506 35

*This does not include expenditure which has been charged to Canals,—General—but amounts expended on specified canals.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

HYDRAULIC AND OTHER RENTS, 1903-1904.

Balance due July 1.	Accrued during the Year ended June 30.	Totals.	Abatement.	Paid into the Hands of the Collectors.	Balance Due June 30.	Totals.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
34,037 08	20,554 16	54,591 24	55 00	15,500 16	39,036 08	54,591 24
1,616 84	1,657 00	3,273 84	290 00	1,463 67	1,600 17	3,253 84
3,328 50	5,271 00	8,599 50	38 63	5,115 00	3,445 87	8,599 50
12,213 84	3,718 00	15,931 84	4 50	3,542 50	12,384 84	15,931 84
17,283 32	41,280 29	58,563 61	556 00	38,131 11	19,876 50	58,563 61
652 81	324 00	976 81		301 00	675 84	976 84
3,446 51	3,631 35	7,077 86		3,318 50	3,759 56	7,077 86
307 00	2,611 04	2,918 04	13 55	1,321 54	1,582 95	2,918 04
5 00	495 00	500 00		490 00	10 00	500 00
10,557 00	5,499 00	16,056 00		481 00	15,575 00	16,056 00
9 00	37 00	46 00		37 00	9 00	46 00
	3,000 00	3,000 00		3,000 00		3,000 00
83,536 93	88,077 84	171,614 77	957 68	72,701 28	97,955 81	171,614 77

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October, 31, 1904.

S. LEONARD SHANNON,
Accountant.

4-5 EDWARD VII., A. 1905

REVENUE STATEMENT.

CANAL REVENUE.				Total Canal Revenue Accrued.		Hydraulic and Other Rents, &c.		Total.		COLLECTION DIVISIONS.		DEPOSITED TO THE CREDIT OF THE RECEIVER GENERAL.		Total.		Cost of Staff, Repairs and Offices of Collection chargeable to Revenue.			
Tolls.	Wharfage and Storage.	Fines.	Other Receipts.	%	cts.	%	cts.	%	cts.	On Account Canal Revenue.	%	cts.	On Account Hydraulic Rents.	%	cts.	%	cts.		
																		On Account Canal Revenue.	On Account Hydraulic Rents.
					0 76		734 00		734 76		0 76				734 00		734 76		182,981 58
		7 00	369 50		369 50		1,565 50		1,882 00		316 50				1,565 50		1,882 00		3,490 42
		10 00			10 00		226 00		226 00						226 00		226 00		2,175 03
					10 00		12,969 66		12,979 66		10 00				12,969 66		12,979 66		293 92
					5 00		5 00		5 00						5 00		5 00		124 96
		17 00	310 26		327 26		15,500 16		15,827 42		327 26				15,500 16		15,827 42		189,855 96
		85 00			85 00		3,000 00		3,085 00		85 00				3,000 00		3,085 00		329,773 00
		49 22			49 22		3,542 50		3,542 50						3,542 50		3,542 50		1,543 20
					49 22		5,115 00		5,164 22						5,115 00		5,164 22		957 45
					957 63		1,463 67		1,463 67						1,463 67		1,463 67		1,708 70
	7 80				965 43		965 43		965 43						965 43		965 43		1,061 35
	2,387 53		3,151 12		5,538 65		38,131 11		43,669 76		5,538 65				38,131 11		43,669 76		2,284 66
	2,395 33	134 22	4,108 75		6,638 30		51,252 28		57,890 58		6,638 30				51,252 28		57,890 58		8,163 13
		10 00			10 00		224 00		234 00						224 00		234 00		696 45
					10 00		77 00		77 00						77 00		77 00		51,978 67
		10 00			10 00		301 00		311 00						301 00		311 00		1,651 25
					8 00		461 00		469 00						461 00		469 00		1,625 77
					8 00		20 00		29 00						20 00		29 00		685 50
					8 00		481 00		489 00						481 00		489 00		55,941 19
					8 00		481 00		489 00						481 00		489 00		38,888 30
					8 00		461 00		469 00						461 00		469 00		466 55
					8 00		20 00		29 00						20 00		29 00		684 02
					8 00		481 00		489 00						481 00		489 00		795 53
					8 00		481 00		489 00						481 00		489 00		40,834 40

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18 84	211 00	229 84	3,031 95	3,261 79	3,261 79	229 84	3,031 95	3,261 79	77,024 74
.....	15 00	15 00	230 00	245 00	245 00	15 00	230 00	245 00	2,593 70
.....	.....	.....	56 35	56 35	56 35	.....	56 35	56 35	427 86
18 84	226 00	244 84	3,318 30	3,563 14	3,563 14	244 84	3,318 30	3,563 14	345 00
.....	.....	.....	32 00	32 00	32 00	.....	32 00	32 00	80,991 30
.....	.....	.....	.....	.....	.....	.....	.....	.....	3,249 39
.....	.....	.....	.....	.....	.....	.....	.....	.....	199 92
.....	.....	.....	.....	.....	.....	.....	.....	.....	3,149 31
.....	.....	.....	.....	.....	.....	.....	.....	.....	11,836 97
.....	.....	.....	.....	.....	.....	.....	.....	.....	732 88
.....	.....	.....	.....	.....	.....	.....	.....	.....	12,589 85
.....	.....	.....	.....	.....	.....	.....	.....	.....	28,416 17
.....	.....	.....	.....	.....	.....	.....	.....	.....	15 00
.....	55 00	55 00	.....	55 00	55 00	55 00	.....	55 00	23 73
.....	.....	.....	.....	.....	.....	.....	.....	.....	15 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	89 45
.....	.....	.....	.....	.....	.....	.....	.....	.....	28,559 35
.....	.....	.....	.....	.....	.....	.....	.....	.....	25,620 09
2,414 17	161 22	4,708 01	72,701 28	79,984 68	79,984 68	7,283 40	72,701 28	79,984 68	.....
.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	11,019 36
.....	.....	.....	.....	.....	.....	.....	.....	.....	739 66
.....	.....	.....	.....	.....	.....	.....	.....	.....	1,543 75
.....	.....	.....	.....	.....	.....	.....	.....	.....	797,362 66
.....	.....	.....	.....	.....	.....	.....	.....	.....	448 17
.....	.....	.....	.....	.....	.....	.....	.....	.....	79,536 51

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

INTERCOLONIAL RAILWAY.

(Including amounts paid to Nova Scotia Railway and European and North American Railway, N.B.)

	Year.	Construction.	Income.	Working Expenses including Windsor Branch Ry.	Revenue received, including Windsor Branch Ry.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.
Expenditure prior to Confederation.....		10,766,725 54			
" since	1868	483,353 65		359,961 08	420,752 58
" "	1869	282,615 18		387,548 47	455,022 76
" "	1870	1,729,381 49		445,208 75	471,245 09
" "	1871	2,916,782 13		442,993 31	565,713 52
" "	1872	5,131,141 51		595,076 22	622,900 56
" "	1873	3,201,450 37		1,011,892 60	703,458 26
" "	1874	3,514,898 81		1,847,175 24	893,430 17
" "	1875	3,426,099 55		1,532,589 62	861,593 43
" "	1876	1,108,321 59		1,277,197 79	848,861 46
" "	1877	1,318,352 19		1,661,673 55	1,154,445 35
" "	1878	408,816 74		1,811,273 56	1,378,946 78
" "	1879	226,639 19		2,010,183 22	1,294,099 69
" "	1880	2,048,014 60		1,607,956 70	1,520,310 45
" "	1881	608,732 80		1,780,353 53	1,777,856 76
" "	1882	585,568 79		2,080,592 37	2,100,315 85
" "	1883	1,616,632 96		2,383,477 20	2,395,034 99
" "	1884	1,405,377 52		2,366,719 95	2,376,666 19
" "	1885	1,195,363 08		2,460,229 87	2,392,605 00
" "	1886	544,958 17		2,568,473 10	2,466,858 88
" "	1887	823,070 86		2,854,158 91	2,621,337 41
" "	1888	742,203 09		3,300,481 94	2,937,337 40
" "	1889	655,228 13		3,174,785 19	2,923,736 46
" "	1890	365,246 48		3,500,455 80	2,958,243 38
" "	1891	79,929 34		3,691,273 65	3,007,630 51
" "	1892	168,101 77		3,458,891 39	2,978,950 82
" "	1893	228,984 79		3,062,207 45	3,099,815 20
" "	1894	166,362 43		2,999,317 07	3,020,485 74
" "	1895	327,034 51		2,964,940 98	2,979,795 59
" "	1896	259,105 23		3,029,304 08	2,994,201 93
" "	1897	145,142 00		2,936,789 71	2,966,631 25
" "	1898	252,367 20	70,000 00	3,275,830 14	3,154,896 49
" "	1899	1,081,929 94	210,000 00	3,478,559 30	3,775,558 08
" "	1900	1,796,348 29		4,444,296 25	4,599,423 14
" "	1901	3,633,836 57		5,477,285 30	5,019,497 76
" "	1902	4,621,841 05		5,596,939 57	5,720,990 50
" "	1903	2,254,236 68		6,214,496 38	6,366,884 53
" "	1904	†1,880,856 60		7,264,263 13	6,392,865 48
Total.....		*64,101,080 82	280,000 00	99,288,852 37	92,098,399 44

* Including \$296,672.90 charged to 'Consolidated Fund.'

† Expenditure for year.....	\$ 1,894,856 90
Less refunds of previous years.....	14,000 30
	<u>\$ 1,880,856 60</u>

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INTERCOLONIAL RAILWAY—*Concluded.*

Total cost of construction as shown on page 32 \$64,101,086 82
 Less amounts transferred from Capital to Consolidated Fund as follows :

	Nova Scotia Ry.	European and North American Ry.	
1868.....	\$ 16,800 99	\$ 11,302 89	
1870.....	34,403 45	1,749 21	
1871.....	50,405 69	.....
1873.....	106,899 59	75,311 08	
	<u>\$ 208,509 72</u>	<u>\$ 88,363 18</u>	
		<u>208,509 72</u>	296,872 90
			<u>\$63,804,207 92</u>

Cape Breton Railway, page 36.....	3,860,679 14
Oxford and New Glasgow Railway, page 37.....	1,949,063 21
Eastern Extension Railway, page 34.....	1,324,042 81
Montreal and Europe Short Line Railway, page 38.....	333,942 72
Drummond County Railway, page 42.....	1,464,000 00

Total capital cost of Intercolonial Railway system..... *\$ 72,735,935 80

*Agreeing with Public Accounts, 1903-4, page 4.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

EASTERN EXTENSION RAILWAY.

	Year.	Capital.	Working Expenses.	Revenue received.
		\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation,	1868			
" " " since " " " " " " " " " " "	1869			
" " " " " " " " " " "	1870			
" " " " " " " " " " "	1871			
" " " " " " " " " " "	1872			
" " " " " " " " " " "	1873			
" " " " " " " " " " "	1874			
" " " " " " " " " " "	1875			
" " " " " " " " " " "	1876			
" " " " " " " " " " "	1877			
" " " " " " " " " " "	1878			
" " " " " " " " " " "	1879			
" " " " " " " " " " "	1880			
" " " " " " " " " " "	1881			
" " " " " " " " " " "	1882			
" " " " " " " " " " "	1883			
" " " " " " " " " " "	1884	1,284,311 97	10,033 77	30,767 66
" " " " " " " " " " "	1885	2,055 92	78,273 65	73,050 01
" " " " " " " " " " "	1886	183 79	94,756 06	66,893 11
" " " " " " " " " " "	1887		94,254 04	64,107 10
" " " " " " " " " " "	1888		90,954 73	70,552 20
" " " " " " " " " " "	1889	34,235 73	90,719 04	72,436 65
" " " " " " " " " " "	1890		79,102 77	84,658 95
" " " " " " " " " " "	1891	3,255 40	*	†
" " " " " " " " " " "	1892		*	†
" " " " " " " " " " "	1893		*	†
" " " " " " " " " " "	1894		*	†
" " " " " " " " " " "	1895		*	†
" " " " " " " " " " "	1896		*	†
" " " " " " " " " " "	1897		*	†
" " " " " " " " " " "	1898		*	†
" " " " " " " " " " "	1899		*	†
" " " " " " " " " " "	1900		*	†
" " " " " " " " " " "	1901		*	†
" " " " " " " " " " "	1902		*	†
" " " " " " " " " " "	1903		*	†
" " " " " " " " " " "	1904		*	†
Total		‡ 1,324,042 81	538,094 06	462,465 68

* Included in Intercolonial Railway expenses. † Included in Intercolonial Railway revenue.

‡ Included in total cost of Intercolonial Railway system, page 33.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

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CARLETON BRANCH RAILWAY.

	Year.	Capital.	Working Expenses.	Revenue received.
		\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation				
" since "	1868			
" " "	1869			
" " "	1870			
" " "	1871			
" " "	1872			
" " "	1873			
" " "	1874			
" " "	1875			
" " "	1876			
" " "	1877			
" " "	1878			
" " "	1879			
" " "	1880			
" " "	1881			
" " "	1882			
" " "	1883			
" " "	1884			
" " "	1885			
" " "	1886	85,610 69		
" " "	1887	2,299 62		
" " "	1888	500 17		
" " "	1889			
" " "	1890			
" " "	1891			
" " "	1892			
" " "	1893			
" " "	1894			
" " "	1895			
" " "	1896			
" " "	1897			
" " "	1898			
" " "	1899			
" " "	1900			
" " "	1901			
" " "	1902			
" " "	1903			
" " "	1904			
Total		*88,410 48		

*56 Victoria, chap. 6, transferred the Carleton Branch Railway to the city of St. John, N.B., for the sum of \$40,000, which sum was paid in March, 1893, to the Receiver General.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

CAPE BRETON RAILWAY.

	Year.	Capital.		Working Expenses.	
		\$	cts.	\$	cts.
Government expenditure prior to Confederation.....	1868				
" " since "	1869				
" " "	1870				
" " "	1871				
" " "	1872				
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
" " "	1877				
" " "	1878				
" " "	1879				
" " "	1880				
" " "	1881				
" " "	1882				
" " "	1883				
" " "	1884				
" " "	1885				
" " "	1886				
" " "	1887		76,501 89		
" " "	1888		689,450 50		
" " "	1889		1,083,276 60		
" " "	1890		1,170,523 62		
" " "	1891		521,441 62		
" " "	1892		99,936 96		
" " "	1893		59,982 74		
" " "	1894		158,770 61		
" " "	1895		*		
" " "	1896		*		
" " "	1897		405 00		
" " "	1898		389 60		
" " "	1899				
" " "	1900				
" " "	1901				
" " "	1902				
" " "	1903				
" " "	1904				
Total.....		\$3,860,679	14		†

*Included in Intercolonial Railway capital.

†Included in Intercolonial Railway working expenses.

‡Included in total cost of Intercolonial Railway system, see page 33.

S. LEONARD SHANNON,

*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

OXFORD AND NEW GLASGOW.

	Year.	Capital.		Working Expenses.	
		\$	cts.	\$	cts.
Government expenditure prior to Confederation.....	1868				
" since ".....	1869				
" " ".....	1870				
" " ".....	1871				
" " ".....	1872				
" " ".....	1873				
" " ".....	1874				
" " ".....	1875				
" " ".....	1876				
" " ".....	1877				
" " ".....	1878				
" " ".....	1879				
" " ".....	1880				
" " ".....	1881				
" " ".....	1882				
" " ".....	1883				
" " ".....	1884				
" " ".....	1885				
" " ".....	1886				
" " ".....	1887				
" " ".....	1888	280,932	35		
" " ".....	1889	840,553	57		
" " ".....	1890	434,074	60		
" " ".....	1891	220,886	39		
" " ".....	1892	48,745	23		
" " ".....	1893	7,922	80		
" " ".....	1894	112,382	75		
" " ".....	1895	*			
" " ".....	1896	*			
" " ".....	1897	3,565	52		
" " ".....	1898				
" " ".....	1899				
" " ".....	1900				
" " ".....	1901				
" " ".....	1902				
" " ".....	1903				
" " ".....	1904				
Total		‡ 1,949,063	21	†	

*Included in Intercolonial Railway capital. †Included in Intercolonial Railway working expenses.
‡Included in total cost of Intercolonial Railway system, page 33.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

MONTREAL AND EUROPEAN SHORT LINE RAILWAY.

	Year.	Construction.		Working Expenses.	
		\$	cts.	\$	cts.
Government expenditure prior to Confederation	1868				
" " since "	1869				
" " " " "	1870				
" " " " "	1871				
" " " " "	1872				
" " " " "	1873				
" " " " "	1874				
" " " " "	1875				
" " " " "	1876				
" " " " "	1877				
" " " " "	1878				
" " " " "	1879				
" " " " "	1880				
" " " " "	1881				
" " " " "	1882				
" " " " "	1883				
" " " " "	1884				
" " " " "	1885		49,587 45		
" " " " "	1886		135,214 38		
" " " " "	1887		24,157 32		
" " " " "	1888		397 35		
" " " " "	1889				
" " " " "	1890				
" " " " "	1891		124,568 23		
" " " " "	1892				
" " " " "	1893				
" " " " "	1894		17 99		
" " " " "	1895				
" " " " "	1896				
" " " " "	1897				
" " " " "	1898				
" " " " "	1899				
" " " " "	1900				
" " " " "	1901				
" " " " "	1902				
" " " " "	1903				
" " " " "	1904				
Total			*333,942 72		

* Included in total cost of Intercolonial Railway system, page 33.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

PRINCE EDWARD ISLAND RAILWAY.

	Year.	Construction.	Working Expenses.	Revenue received.
		\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation.....		3,114,735 11		
" " since "	1874		750 00	
" " "	1875	46,086 63	49,344 62	24,493 99
" " "	1876	42,546 10	219,930 43	118,060 96
" " "	1877	200,000 00	228,595 25	130,664 92
" " "	1878	6,551 86	221,599 49	135,899 60
" " "	1879	40,129 05	223,313 12	125,855 91
" " "	1880	16,539 82	164,640 55	113,851 11
" " "	1881		203,122 88	131,131 43
" " "	1882	402 03	228,259 97	137,267 54
" " "	1883	57,186 02	252,808 41	146,170 42
" " "	1884	130,663 38	236,428 13	144,504 12
" " "	1885	76,956 56	211,207 01	158,588 06
" " "	1886	4,668 33	216,744 34	155,584 36
" " "	1887	5,800 00	204,237 45	155,303 37
" " "	1888		229,639 95	158,363 62
" " "	1889		247,559 44	171,369 56
" " "	1890		266,485 85	160,971 78
" " "	1891		257,990 08	174,258 05
" " "	1892	8,300 49	289,706 38	157,442 69
" " "	1893		226,422 17	162,690 42
" " "	1894		226,891 06	158,533 83
" " "	1895		232,905 19	149,654 78
" " "	1896		225,138 56	146,476 54
" " "	1897		240,489 90	153,443 13
" " "	1898	17,541 88	231,418 74	158,950 61
" " "	1899	22,000 00	218,053 01	165,012 03
" " "	1900	53,546 02	220,931 81	174,738 73
" " "	1901	280,173 93	261,766 24	193,883 48
" " "	1902	475,997 94	270,159 97	197,999 93
" " "	1903	829,414 18	259,637 82	217,714 24
" " "	1904	698,877 47	335,695 44	234,390 03
Total.....		*6,128,116 80	6,901,873 26	4,613,269 24

* Agrees with Public Accounts Balance Sheet, 1903-1904, page 4.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

CANADIAN PACIFIC RAILWAY.

	Year.	Construction, including Subsidy of \$25,000,000.	Working Expenses.	Revenue received.
		\$ cts.	\$ cts.	\$ cts.
Government expenditure prior to Confederation				
" since	1868			
" "	1869			
" "	1870			
" "	1871	30,148 32		
" "	1872	489,428 16		
" "	1873	561,818 44		
" "	1874	310,224 88		
" "	1875	1,546,241 67		
" "	1876	3,346,567 06		
" "	1877	1,691,149 97		
" "	1878	2,228,373 13		
" "	1879	2,240,285 47		
" "	1880	4,044,522 72	78,892 01	104,975 69
" "	1881	4,968,503 93	236,944 98	291,498 06
" "	1882	(1) 4,589,075 79	1,786 20	
" "	1883	(2) 10,033,800 04	266 09	
" "	1884	(3) 11,192,722 02	327 02	
" "	1885	(4) 9,900,281 53		
" "	1886	(5) 3,672,584 81		
" "	1887	(6) 915,057 49		
" "	1888	52,098 65		
" "	1889	86,716 07		
" "	1890	40,980 54		
" "	1891	37,367 00		
" "	1892	66,211 39		
" "	1893	413,836 49		
" "	1894	146,539 87		
" "	1895	49,209 77		
" "	1896	65,669 49		
" "	1897	14,054 50		
" "	1898	692 17		
" "	1899	8,418 53		
" "	1900	236 11		
" "	1901	8,978 87		
" "	1902	448 70		
" "	1903			
" "	1904	33,076 39		
Total		*62,785,319 97	318,216 30	396,473 75

* Agrees with Public Accounts Balance Sheet, 1903-1904, page 8.

(1) Including	\$ 2,210,000 00 on account subsidy.
(2) "	5,323,076 60 "
(3) "	7,254,208 27 "
(4) "	6,862,201 00 "
(5) "	2,890,427 00 "
(6) "	460,087 13 "

†\$25,000,000 00

† See also Statement No. 3, page 49, for the expenditure.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

ANNAPOLIS AND DIGBY RAILWAY.

	Year.	Capital.		Income Expenses.	
		£	cts.	£	cts.
Government expenditure prior to Confederation.....	1868				
" " since "	1869				
" " "	1870				
" " "	1871				
" " "	1872				
" " "	1873				
" " "	1874				
" " "	1875				
" " "	1876				
" " "	1877				
" " "	1878				
" " "	1879				
" " "	1880				
" " "	1881				
" " "	1882				
" " "	1883				
" " "	1884				
" " "	1885				
" " "	1886				
" " "	1887				
" " "	1888				
" " "	1889		9,847 27		
" " "	1890		381,942 75		
" " "	1891		196,869 36		
" " "	1892		26,129 89		
" " "	1893		2,190 62		
" " "	1894		1,075 36		
" " "	1895		570 55		
" " "	1896				
" " "	1897		41,457 29		
" " "	1898				
" " "	1899				
" " "	1900				
" " "	1901				8,381 82
" " "	1902				
" " "	1903				
" " "	1904				
Total.....			*660,683 09		8,381 82

* Of this amount Parliament voted under 52 Vic., chap. 8, the sum of \$500,000 as a subsidy to the Western Counties Railway.

S. LEONARD SHANNON.

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

DRUMMOND COUNTY RAILWAY.

	Year.	Construction.		Working Expenses.	
		\$	cts.	\$	cts.
Government expenditure prior to Confederation.....	1868				
" " " since "	1869				
" " " "	1870				
" " " "	1871				
" " " "	1872				
" " " "	1873				
" " " "	1874				
" " " "	1875				
" " " "	1876				
" " " "	1877				
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" " " "	1888				
" " " "	1889				
" " " "	1890				
" " " "	1891				
" " " "	1892				
" " " "	1893				
" " " "	1894				
" " " "	1895				
" " " "	1896				
" " " "	1897				
" " " "	1898				
" " " "	1899				
" " " "	1900		1,459,000 00		
" " " "	1901				
" " " "	1902		5,000 00		
" " " "	1903				
" " " "	1904				
Total.....			*1,464,000 00		

*Included in total cost of Intercolonial Railway system, page 33.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

YUKON TERRITORY WORKS,
(Stikine Teslin Railway.)

Year.	Construction.
	\$ cts.
Government expenditure prior to Confederation.....	
" since " 	1868
" " " 	1869
" " " 	1870
" " " 	1871
" " " 	1872
" " " 	1873
" " " 	1874
" " " 	1875
" " " 	1876
" " " 	1877
" " " 	1878
" " " 	1879
" " " 	1880
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" " " 	1891
" " " 	1892
" " " 	1893
" " " 	1894
" " " 	1895
" " " 	1896
" " " 	1897
" " " 	1898
" " " 	1899
" " " 	1900
" " " 	1901
" " " 	1902
" " " 	1903
" " " 	1904
Total.....	*283,323 55

* Agrees with Public Accounts Balance Sheet, 1903-1904, page 8.

S. LEONARD SHANNON,
Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

STATEMENTS OF THE ACCOUNTANT.

National Transcontinental Railway.

	Year.	Construction.	
		\$	cts.
Government expenditure prior to Confederation.....	1868		
since	1869		
" "	1870		
" "	1871		
" "	1872		
" "	1873		
" "	1874		
" "	1875		
" "	1876		
" "	1877		
" "	1878		
" "	1879		
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" "	1892		
" "	1893		
" "	1894		
" "	1895		
" "	1896		
" "	1897		
" "	1898		
" "	1899		
" "	1900		
" "	1901		
" "	1902		
" "	1903		
" "	1904	6,249	40
Total.....		6,249	40

* Agrees with Public Accounts Balance Sheet, 1903-1904, page 8.

S. LEONARD SHANNON,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

SESSIONAL PAPER No. 20

STATEMENT showing amount expended on Capital Account on Railways.

Railways.		\$	cts.	\$	cts.
Intercolonial.....		63,804,207	92		
Cape Breton.....		3,860,679	14		
Oxford and New Glasgow.....		1,949,063	21		
Eastern Extension.....		1,324,042	81		
Drummond County.....		1,464,000	00		
Montreal and European Short Line.....		333,942	72		
				72,735,935	80
Carleton Branch.....				48,410	48
Prince Edward Island.....				6,128,116	80
Canadian Pacific.....				62,785,319	97
Annapolis and Digby.....				660,683	09
Yukon Territory Works (Stikine-Teslin Ry).....				283,323	55
National Transcontinental.....				6,249	40
Total.....				142,648,039	09
<i>Memo. re Recapitulation—Railways.</i>					
Total cost as per statement above.....				142,648,039	09
Add amounts transferred from Capital to Consolidated Fund, Intercolonial Railway, see statement, page 33.....				296,872	90
Agreeing with total cost of construction, as per statement, page 46.....				142,944,911	99

S. LEONARD SHANNON

*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

RECAPITULATION—RAILWAYS.

	Year.	Construction.		Working Expenses.		Revenue.	
		\$	cts.	\$	cts.	\$	cts.
Government expenditure prior to Confederation		13,881,460	65				
" since	1868	483,353	65	359,961	08	420,752	58
" " " "	1869	282,615	18	387,548	47	455,022	76
" " " "	1870	1,729,381	49	445,208	75	471,245	09
" " " "	1871	2,946,930	45	442,993	31	565,713	52
" " " "	1872	5,620,569	67	595,076	22	622,900	56
" " " "	1873	5,763,268	81	1,011,892	60	703,458	26
" " " "	1874	3,925,123	69	1,847,925	24	893,430	17
" " " "	1875	5,018,427	85	1,581,934	24	886,087	42
" " " "	1876	4,497,434	75	1,497,128	22	966,922	42
" " " "	1877	3,209,502	16	1,890,268	80	1,285,110	27
" " " "	1878	2,643,741	73	2,032,873	05	1,514,846	38
" " " "	1879	2,507,053	71	2,233,496	34	1,419,955	60
" " " "	1880	6,109,077	14	1,851,489	26	1,739,137	25
" " " "	1881	5,577,236	73	2,220,421	39	2,200,436	25
" " " "	1882	5,175,046	61	2,310,638	54	2,237,583	39
" " " "	1883	11,707,619	02	2,636,551	70	2,541,205	41
" " " "	1884	14,013,074	89	2,613,508	87	2,551,937	97
" " " "	1885	11,224,244	54	2,749,710	53	2,624,243	07
" " " "	1886	4,443,220	17	2,819,973	50	2,628,336	35
" " " "	1887	1,846,887	18	3,152,650	40	2,840,747	88
" " " "	1888	1,765,582	11	3,621,076	62	3,166,253	22
" " " "	1889	2,709,857	37	3,513,063	67	3,167,542	67
" " " "	1890	2,392,767	99	3,846,044	42	3,203,874	11
" " " "	1891	1,184,317	34	3,949,263	73	3,181,888	56
" " " "	1892	417,425	73	3,748,597	77	3,136,393	51
" " " "	1893	712,917	44	3,288,629	62	3,262,505	62
" " " "	1894	585,749	01	3,226,288	13	3,179,019	57
" " " "	1895	376,814	83	3,197,846	17	3,129,450	37
" " " "	1896	324,774	72	3,254,442	64	3,140,678	47
" " " "	1897	204,624	31	3,195,959	58	3,060,074	38
" " " "	1898	270,990	85	3,507,248	88	3,313,847	10
" " " "	1899	1,112,348	47	3,696,612	31	3,940,570	11
" " " "	1900	3,309,130	42	4,665,228	06	4,774,161	87
" " " "	1901	3,922,989	37	5,739,051	54	5,213,381	24
" " " "	1902	5,386,611	24	5,861,099	54	5,918,990	43
" " " "	1903	3,083,680	86	6,474,134	20	6,584,598	77
" " " "	1904	2,619,059	86	7,599,958	57	6,627,255	51
Total		*142,984,911	99	107,065,715	96	97,569,608	11

*Total amount paid on construction.....\$ 142,984,911 99

Less amount received from the City of St. John, N.B., as purchase of the Carleton Branch Railway.....40,000 00

Total cost of construction.....†\$ 142,944,911 99

†Agreeing with amount expended on capital, see page 45.

S. LEONARD SHANNON,
*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904,

SESSIONAL PAPER No. 20

STATEMENT showing Miscellaneous Expenditure, yearly, by the Department of
Railways and Canals.

Year ending June 30.	CHARGEABLE TO INCOME.			CHARGEABLE TO REVENUE.			Total, Yearly Expenditure
	Canals.	Railways.	General.	Canals.	Railways.	General.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1868.....			6,305 66	12,000 00		2,416 66	20,722 32
1869.....			8,367 52	12,000 00		1,000 00	21,367 52
1870.....			7,853 03	18,698 89		7,679 78	34,231 70
1871.....			34,773 72	12,018 98			46,792 70
1872.....			20,049 50	12,208 76			32,258 26
1873.....			36,891 74	12,099 44		6,889 20	55,880 38
1874.....			40,098 84	12,959 25		5,428 98	58,487 07
1875.....			35,579 24	12,047 43		5,620 17	53,246 84
1876.....			42,920 10	86 08		5,690 28	48,696 46
1877.....				51 87	43,639 97		43,691 84
1878.....	1,860 00			556 00		34,388 59	36,804 59
1879.....							
1880.....	2,561 55			323 16			2,884 71
1881.....	2,338 41			5,535 22			7,873 63
1882.....				9,826 23			9,826 23
1883.....	11,781 27			6,978 54			18,759 81
1884.....	7,486 62	62,256 58		8,305 41			78,048 61
1885.....	16,725 47	11,003 38		1,210 61			28,939 46
1886.....	20,323 62	10,383 59		776 30			31,483 51
1887.....	20,873 21	23,545 34		649 04			45,067 59
1888.....	34,533 07	22,898 90		5,799 83			63,231 80
1889.....	10,091 87	16,552 64		5,207 64			31,852 15
1890.....	16,426 69	50,909 74		49,550 21			116,886 64
1891.....	16,925 31	16,314 41		56,922 05			90,161 77
1892.....	6,540 49	19,062 51		65,074 07			90,677 07
1893.....	8,498 41	4,313 73	28,640 93	63,965 54			105,418 61
1894.....	4,178 85	4,855 11	15,746 31	60,265 22			85,045 49
1895.....	19,695 48	13,221 27	19,304 87	60,769 56			103,991 18
1896.....	10,893 40	6,562 20	25,194 21	70,340 22			112,990 03
1897.....	2,937 47	5,118 99	25,142 90	62,777 12		597 39	96,573 87
1898.....	1,719 69	8,327 96	28,042 10	56,284 42	1,400 00		95,774 17
1899.....	1,318 79	67,005 86	22,085 19	66,850 29			157,260 13
1900.....	11,873 35	33,496 99	22,802 18	58,836 57			127,009 09
1901.....	12,267 99	28,658 78	33,986 68	61,938 61			136,852 06
1902.....	3,658 23	21,752 58	34,138 50	65,770 65			125,319 96
1903.....	2,491 84	15,570 43	35,398 00	63,175 19			116,635 46
1904.....	3,730 79	85,353 17	36,262 32	66,067 30			191,413 58
	242,731 87	527,164 16	559,583 54	1,077,925 70	45,039 97	69,711 05	2,522,156 29

S. LEONARD SHANNON,

Accountant.

DEPARTMENT OF RAILWAYS AND CANALS,

OTTAWA, October 31, 1904.

4-5 EDWARD VII., A. 1905

RECAPITULATION—RAILWAYS AND CANALS, TO JUNE 30, 1904.

EXPENDITURE.			
<i>Chargeable to Capital Account—</i>			
Railways, <i>see</i> Statement page 45.....		\$ 142,648,039	09
Canals " " " 28		87,223,164	67
		\$ 229,871,203	76
<i>Chargeable to Consolidated Fund—</i>			
* Railway Subsidies as per Statement No. 3, page 49.....		\$ 31,341,931	16
<i>Income Account—</i>			
Intercolonial Railway, <i>see</i> page 32.....	\$ 280,000	00	
Add transferred from Capital " 33.....	296,872	90	
Railways " 47	527,164	16	
Canals " 28.....	3,661,085	64	
" " 47	242,731	87	
General, Railways and Canals " 47.....	559,583	54	
		5,567,438	11
<i>Revenue Account—</i>			
Canals—Operating and maintaining Staff, <i>see</i> page 28.	\$ 9,022,018	85	
Canals—Repairs, <i>see</i> page 28	7,086,627	87	
" " 47.....	1,077,925	70	
Railways—Working Expenses, <i>see</i> page 46.....	107,065,715	96	
" " 47.....	45,039	97	
General—Railways and Canals " 47	69,711	05	
		124,367,039	40
		161,276,408	67
Total expenditure on Railways and Canals.....		\$ 391,147,612	43

EXPENDITURE AS ABOVE, SEPARATED AS BETWEEN RAILWAYS AND CANALS.

RAILWAYS.			
Capital Account.....	\$ 142,648,039	09	
Consolidated Fund.....	139,556,724	15	
	\$ 282,204,763	24	
CANALS.			
Capital Account.....	\$ 87,223,164	67	
Consolidated Fund.....	21,090,389	93	
	108,313,554	60	
GENERAL, COMMON TO BOTH.			
Consolidated Fund.....		629,294	59
Total expenditure on Railways and Canals.....		\$ 391,147,612	43
REVENUE.			
Railways—Revenue received from July 1, 1867, to June 30, 1903, (for details <i>see</i> page 46).	\$ 97,569,608	11	
Canals " " " " " 28).	13,327,506	35	
Total Revenue, Railways and Canals.....	\$ 110,897,114	46	

* This amount does not include the subsidy of \$25,000,000 to the Canadian Pacific Railway, nor the amount \$669,683.09 expended on the Annapolis and Digby Railway, both of which are included in Capital Account, nor the annual payment of \$119,700 to the Provincial Government of Quebec, being interest at the rate of 5 per cent on the sum of \$2,394,000 granted by 47 Vic., ch. 8 (1884) for the line between Ottawa and Quebec, which sum was transferred to the Public Debt as a liability, and is dealt with by the Finance Department, *see* Public Accounts, 1898-99, page x.

S. LEONARD SHANNON,

*Accountant.*DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, October 31, 1904.

Date	Description	Amount	Balance	Total
1910				
Jan 1	Balance forward			
Jan 15	Dr. J. H. Smith	100.00		100.00
Jan 20	Dr. A. B. Jones	50.00		150.00
Jan 25	Dr. C. D. Brown	75.00		225.00
Jan 30	Dr. E. F. Green	125.00		350.00
Feb 5	Dr. G. H. White	150.00		500.00
Feb 10	Dr. I. J. Black	175.00		675.00
Feb 15	Dr. K. L. Gray	200.00		875.00
Feb 20	Dr. M. N. Hall	225.00		1100.00
Feb 25	Dr. O. P. King	250.00		1350.00
Feb 30	Dr. Q. R. Lewis	275.00		1625.00
Mar 5	Dr. S. T. Clark	300.00		1925.00
Mar 10	Dr. U. V. Adams	325.00		2250.00
Mar 15	Dr. W. X. Baker	350.00		2600.00
Mar 20	Dr. Y. Z. Carter	375.00		2975.00
Mar 25	Dr. A. B. Jones	400.00		3375.00
Mar 30	Dr. C. D. Brown	425.00		3800.00
Apr 5	Dr. E. F. Green	450.00		4250.00
Apr 10	Dr. G. H. White	475.00		4725.00
Apr 15	Dr. I. J. Black	500.00		5225.00
Apr 20	Dr. K. L. Gray	525.00		5750.00
Apr 25	Dr. M. N. Hall	550.00		6300.00
Apr 30	Dr. O. P. King	575.00		6875.00
May 5	Dr. Q. R. Lewis	600.00		7475.00
May 10	Dr. S. T. Clark	625.00		8100.00
May 15	Dr. U. V. Adams	650.00		8750.00
May 20	Dr. W. X. Baker	675.00		9425.00
May 25	Dr. Y. Z. Carter	700.00		10125.00
May 30	Dr. A. B. Jones	725.00		10850.00
Jun 5	Dr. C. D. Brown	750.00		11600.00
Jun 10	Dr. E. F. Green	775.00		12375.00
Jun 15	Dr. G. H. White	800.00		13175.00
Jun 20	Dr. I. J. Black	825.00		14000.00
Jun 25	Dr. K. L. Gray	850.00		14850.00
Jun 30	Dr. M. N. Hall	875.00		15725.00
Total				15725.00

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PART III

RAILWAY SUBSIDIES

No. 1.

RAILWAY SUBSIDIES.

TABLE of per mile Cash Subsidies paid in aid of Railway Construction, showing amount of Subsidy granted for same Railways.

Number.	Name of Railway.	No. of miles built up to June 30, 1904.	No. of miles paid and provided for.	Subsidy paid and available at June 30, 1904.		Subsidy paid to June 30, 1904.		Subsidy paid to September 30, 1904.	
				\$	cts.	\$	cts.	\$	cts.
1	Albert Southern	16	16	50,460	00	50,460	00	50,460	00
2	+Atlantic and Lake Superior.....	30	30	165,734	00	164,153	98	164,153	98
3	+Algoma Central and Hudson Bay...	77	91	748,800	00	583,536	00	583,536	00
4	Baie des Chaleurs	70	70	620,000	00	620,000	00	620,000	00
5	Baie of Quinté.....	15	35	112,000	00	69,120	00	69,120	00
6	Beauharnois Junction.....	19·50	19·50	62,400	00	62,400	00	62,400	00
7	Belleville and North Hastings.....	6·84	6·84	21,888	00	21,888	00	21,888	00
8	Brantford, Waterloo and Lake Erie..	18	18	57,600	00	57,600	00	57,600	00
9	Brockville, Westport and Sault Ste. Marie.....	44·50	44·50	105,200	00	105,200	00	105,200	00
10	Bruce Mines and Algoma.....	9	9	28,800	00	28,800	00	28,800	00
11	Buctouche and Moncton.....	31·75	31·75	101,600	00	101,600	00	101,600	00
12	Canada Atlantic	54·05	54·05	282,355	20	282,355	20	282,355	20
13	Canada Central.	120	120	1,525,250	00	1,525,250	00	1,525,250	00
14	+Canada Eastern	107	107	350,400	00	350,400	00	350,400	00
15	+Canadian Pacific	1,905	1,905	25,000,000	00	25,000,000	00	25,000,000	00
16	" (extension)*.....	676	695·83	5,815,696	00	5,753,493	85	5,753,493	85
17	+Cape Breton extension.....	30	30	191,595	00	182,400	00	182,400	00
18	Caraget	67	67	224,000	00	224,000	00	224,000	00
19	Central (of New Brunswick).....	45·66	89·50	238,400	00	142,400	00	142,400	00
20	Cornwallis Valley	14	14	44,800	00	44,800	00	44,800	00
21	Columbia and Kootenay	27·75	27·75	88,800	00	88,800	00	88,800	00
22	+Canadian Northern.....	490	490	2,048,000	00	1,909,132	00	1,909,132	00
23	Chateauguay and Northern.....	36·04	58	265,744	00	191,595	00	191,595	00
24	Cap de la Madeleine	2·32	2·32	7,424	00	7,424	00	7,424	00
25	+Coast of Nova Scotia (now Halifax and Yarmouth).....	50	61	160,000	00	160,000	00	160,000	00
26	+Central Ontario.....	21	21	67,200	00	67,200	00	67,200	00
27	Cumberland	14	14	39,850	00	39,850	00	39,850	00
28	Dominion Lime Co.....	4·80	4·80	15,360	00	15,360	00	15,360	00
29	Dominion Coal Co.....	27·44	27·44	87,808	00	87,808	00	87,808	00
30	+Drummond Counties.....	133·00	135·60	423,936	00	423,936	00	423,936	00
31	+East Richelieu Valley.....	21·86	21·86	69,952	00	69,952	00	69,952	00
32	Elgin, Petitecodiac and Havelock....	12	12	38,400	00	38,400	00	38,400	00
33	Erie and Huron.....	30	30	96,000	00	96,000	00	96,000	00
34	Esquimalt and Nanaimo	71	71	750,000	00	750,000	00	750,000	00
35	Fredericton and St. Mary's Bridge Co.....	1·33	1·33	30,000	00	30,000	00	30,000	00
36	Grand Trunk, Georgian Bay and Lake Erie.....	12·42	12·42	39,744	00	39,744	00	39,744	00
37	Grand Trunk.....	Bridge.	Bridge.	500,000	00	500,000	00	500,000	00
38	Great Eastern	12·50	12·50	40,345	00	40,345	00	40,345	00
39	+Great Northern.....	140·42	143·59	557,788	31	557,788	31	557,788	31
40	Guelph Junction	15·25	15·25	46,000	00	46,000	00	46,000	00
41	+Gulf Shore	16·78	16·78	53,699	20	53,699	20	53,699	20
	Carried forward.....	4,496·21	4,632·61	41,173,028	71	40,522,890	54	40,522,890	54

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TABLE of per mile Cash Subsidies granted and paid in aid of Railway Construction, &c.—Continued.

Number.	Name of Railway.	No. of miles built up to June 30, 1904.	No. of miles paid and provided for.	Subsidy paid and available at June 30, 1904.	Subsidy paid to June 30, 1904.	Subsidy paid to September 30, 1904.
				\$ cts.	\$ cts.	\$ cts.
	Brought forward	4,496·21	4,632·61	41,173,028 71	40,522,890 54	40,522,890 54
42	Halifax and South Western	50	231	739,200 00	185,422 00	185,422 00
43	Harvey Branch	3	3	5,553 57	5,553 57	5,553 57
44	Hereford	48·50	48·50	155,200 00	155,200 00	155,200 00
45	Iroindale, Bancroft & Ottawa	45	45	144,000 00	144,000 00	144,000 00
46	International (Quebec)	49	49	156,800 00	156,800 00	156,800 00
47	International (N.B.), formerly Restigouche and Western	15	20	100,180 00	77,138 00	77,138 00
48	†Inverness Ry. & Coal Co.	60·97	98	390,208 00	368,545 97	368,545 97
49	Joggins	12	12	37,500 00	37,500 00	37,500 00
50	Kingston and Pembroke	15	15	48,000 00	48,000 00	48,000 00
51	Kingston, Napanee and Western	61·35	61·35	208,732 80	208,732 80	208,732 80
52	L'Assomption	3·50	3·50	11,200 00	11,200 00	11,200 00
53	†Lake Erie and Detroit River	126·90	128·05	475,851 00	475,851 00	475,851 00
54	Lake Temiscamingue Colonization	45·84	45·84	310,335 95	310,335 95	310,335 95
55	Leamington and Lake St. Clair	16	16	51,200 00	51,200 00	51,200 00
56	Lindsay, Bobcaygeon and Pontypool	38·70	38·70	123,840 00	123,840 00	123,840 00
57	Lotbinière and Megantic	30	30	96,000 00	96,000 00	96,000 00
58	Manitoulin and North Shore	12·60	12·60	204,800 00	32,000 00	32,000 00
59	Montreal & Sorel (now South Shore)	61·50	126·67	517,541 92	293,541 92	293,541 92
60	Montreal and Lake Champlain	83	83	103,600 00	103,600 00	103,600 00
61	Montreal and Western	70	70	361,270 00	361,270 00	361,270 00
62	Montreal and Lake Maskinongé	12·90	12·90	41,280 00	41,280 00	41,280 00
63	Montreal and Ottawa	60	60	192,000 00	192,000 00	192,000 00
64	†Montreal and Province Line	18·3	18·3	58,560 00	58,560 00	58,560 00
65	Montfort Colonization	32·29	32·20	167,440 00	167,440 00	167,440 00
66	Maganetawan River	1·11	1·11	3,552 00	3,552 00	3,552 00
67	†Massawippi Valley	1·68	1·68	5,376 00	5,376 00	5,376 00
68	†Midland (Nova Scotia)	57·18	58	363,418 00	362,200 30	362,200 30
69	Nakusp and Slocan	36·80	36·80	117,760 00	117,760 00	117,760 00
70	New Brunswick and P. E. Island	35·45	35·45	113,440 00	113,440 00	113,440 00
71	New Brunswick Coal and Ry.	15	45	144,000 00	48,000 00	48,000 00
72	New Glasgow Iron and Coal Co	12·45	12·45	39,840 00	39,840 00	39,840 00
73	Northern Colonization	20·90	22	80,000 00	58,384 00	58,384 00
74	Northern Pacific Junction	110	110	1,320,000 00	1,320,000 00	1,320,000 00
75	Nova Scotia Central	73·50	73·50	235,200 00	235,200 00	235,200 00
76	Ontario, Belmont and Northern	9·60	9·60	30,720 00	30,720 00	30,720 00
77	Ontario and Quebec	61·25	61·25	196,000 00	196,000 00	196,000 00
78	Orford Mountain	26·50	26·50	84,800 00	84,800 00	84,800 00
79	Oshawa Railway and Navigation Co.	7	7	22,400 00	22,400 00	22,400 00
80	†Ottawa, Northern and Western (formerly Ottawa & Gatineau Valley)	82·28	86	410,688 00	410,688 00	410,688 00
81	†Ottawa and New York	53·87	53·87	262,384 00	262,384 00	262,384 00
82	†Ottawa, Arnprior and Parry Sound	159·58	159·58	779,712 00	779,712 00	779,712 00
83	Parry Sound Colonization	47·75	47·75	152,800 00	152,800 00	152,800 00
84	Pontiac and Pacific Junction	70	70	193,578 00	193,578 00	193,578 00
85	†Phillipsburg Junction	7·41	7·41	23,712 00	23,712 00	23,712 00
86	Pontiac and Renfrew	4·25	4·25	13,600 00	13,600 00	13,600 00
87	Pontiac and Pacific and Ottawa and Gatineau	Bridge.	Bridge.	212,500 00	212,500 00	212,500 00
88	†Pembroke Southern	20	20	64,000 00	64,000 00	64,000 00
89	†Port Arthur, Duluth and Renfrew	84·75	84·75	271,200 00	271,200 00	271,200 00
90	Quebec Central	74·86	74·86	348,342 00	348,342 00	348,342 00
91	Quebec Bridge Co	Bridge.	Bridge.	374,353 33	374,353 33	374,353 33
92	Quebec and Lake St. John	245·85	245·85	1,006,743 50	1,006,743 50	1,006,743 50
93	Quebec, Montmorency & Charlevoix	30	30	96,000 00	96,000 00	96,000 00
94	Shuswap and Okanagan	51	51	163,200 00	163,200 00	163,200 00
95	South Norfolk	17	17	54,400 00	54,400 00	54,400 00
96	St. Catharines and Niagara Central	12	12	38,400 00	38,400 00	38,400 00
	Carried forward	6,896 49	7,357·88	53,097,440 78	51,207,346 88	51,331,186 88

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TABLE of per mile Cash Subsidies granted and paid in aid of Railway Construction, &c.—*Concluded.*

Number.	Name of Railway.	No of miles built up to June 30, 1904.	No. of miles paid and provided for.	Subsidy paid and available at June 30, 1904.		Subsidy paid to June 30, 1904.		Subsidy paid to September 30, 1904.	
				\$	cts.	\$	cts.	\$	cts.
	Brought forward.....	6,896.49	7,357.88	53,097,440	78	51,207,346	88	51,331,186	98
97	St. Clair Frontier Tunnel.....	2.23	2.23	375,000	00	375,000	00	375,000	00
98	St. Lawrence and Lower Laurentian.	38.85	38.85	217,600	00	217,600	00	217,600	00
99	St. Louis, Richibucto & Buctouche ..	7	7	22,400	00	22,400	00	22,400	00
100	†St. Lawrence and Adirondack	33.51	33.51	149,481.60		149,481.60		149,481.60	
101	†St. Mary River	44	46	126,200	00	115,960	00	115,960	00
102	St. Stephen and Milltown.....	4.64	4.64	14,848	00	14,848	00	14,848	00
103	Schoenberg and Aurora.....	14.42	14.42	46,144	00	46,144	00	46,144	00
104	Temisconata.....	112.95	112.95	645,950	00	645,950	00	645,950	00
105	†Thousand Islands	5.19	5.19	29,840	00	29,840	00	29,840	00
106	†Tilsonburg, Lake Erie and Pacific.	33.96	47.50	117,431.48		117,431.48		117,431.48	
107	Tobique Valley.....	27.88	27.88	134,016	00	134,016	00	134,016	00
108	Toronto, Grey and Bruce.....	4.58	4.58	14,656	00	14,656	00	14,656	00
109	†United Counties	59	59	188,816	00	188,816	00	188,816	00
110	Waterloo Junction.....	10.25	10.25	32,800	00	32,800	00	32,800	00
111	Western Counties.....	20	20	500,000	00	500,000	00	500,000	00
112	West Ontario Pacific.....	18.75	18.75	60,000	00	60,000	00	60,000	00
113	†York and Carleton.....	5.73	5.73	18,336	00	18,336	00	18,336	00
	Total.....	7,339.43	7,816.36	55,790,959	86	53,890,625	96	54,014,465	96

‡ Add subsidy of used rails as per statement, part iii., page 7, \$152,305.20, and Atlantic and North-Western, \$2,799,000, less subsidy Canadian Pacific Railway, main line, \$25,000,000, and Western Counties Railway, \$500,000, which will then agree with statement of subsidies in part ii, page 48 viz., \$31,341,931.16.

* Includes the mileage of the North Shore Railway, 160 miles.

† By 60-61 Vic., cap. 4, 62-63 Vic., cap. 7, 63-64 Vic., cap. 8, 1 Edward VII., cap. 7, 3 Edward VII., cap. 57, and 4 Edward VII., cap. 34, a subsidy was authorized on certain mileage of this railway, specified in the Act of Parliament, of \$3,200 per mile and a further subsidy beyond the sum of \$3,200 per mile, of 50 per cent on so much of the *average cost* of the said specified mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile.

The amount of certain of the subsidies authorized by Parliament, given in this statement, includes the determined portion of the subsidies under 60-61 Vic., cap. 4, 62-63 Vic., cap. 7, 63-64 Vic., cap. 8, and 1 Edward VII., cap. 7, 3 Edward VII., cap. 57, and 4 Edward VII., cap. 34, viz.: The amount produced by the \$3,200 per mile, but the other portion is now an undetermined amount, and therefore cannot be shown here.

STATEMENT showing Railways receiving Cash Subsidies of fixed amounts, payable Annually or Semi-annually for fixed periods of years.

No.	Name of Railway.	Miles Subsidized.	Amount of Instalment.	Amount paid up to June 30, 1904.
				\$ cts.
1	International (Atlantic and North-west Railway Co	252	\$93,300 per ½ year for 20 years.	2,799,000.
2	Kingston, Smith's Falls and Ottawa Railway Co	56	\$ 3,136 " 21 "	Nil.
	Total.....	308		2,799,000.

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STATEMENT showing Railways aided by the Grant of Loans.

No.	Name of Railway	Amount of Loans authorized.	Amount loaned.
		\$	\$ cts.
1	Albert Railway Co.	15,000	14,725 56
2	Fredericton and St. Mary's Bridge Co.	300,000	300,000 00
3	St. John Bridge and Railway Extension Co.	500,000	433,900 00
	Total	815,000	748,625 56

STATEMENT showing Railways subsidized by the Grant of used Iron Rails valued at the amount set forth.

No.	Name of Railway.	Tons of used Rails.	Subsidy on value of Rails.	Subsidy on used Rails paid.
			\$ cts.	\$ cts.
1	Central Railway Co. of New Brunswick	4,052	83,612 54	83,612 54
2	Elgin, Petitcodiac and Havelock Ry. Co.	2,201	44,252 82	44,252 82
3	Chatham Branch Railway Co.	958	24,439 84	24,439 84
	Total.....	7,211	152,305 20	152,305 20

STATEMENT showing Railways aided by the Loan of used Iron Rails valued at the amount set forth.

No.	Name of Railway.	Tons of used Rails.	Value of used Rails loaned	Remarks.
			\$ cts.	
1	Kent Northern Railway Co.	2,549	58,334 27	By 51 Victoria, chapter 3, these used rails will be granted as a subsidy, (the section of road to be first laid with new steel rails weighing not less than 50 lbs. per lin. yard and after an O.C. had been passed authorizing transfer.)
2	Halifax Cotton Co.	233	4,335 00	
3	Steel Company of Canada	597	11,964 66	
4	Albert Railway Company.....	726	14,665 45	
	Total.....	4,105	89,299 38	

No. 2

LIST OF RAILWAY SUBSIDY ACTS PASSED IN EACH YEAR.

NOTE.—The marginal number opposite each subsidy has reference to the alphabetical list in the Deputy Minister's report showing the action taken in cases where a contract for work has been made with any company.

By the Acts of Parliament below specified, authority has been placed in the hands of the Governor in Council to grant, upon certain conditions, aid towards the construction of various lines of railway throughout the Dominion, as follows, namely:—

By the Acts of 45 Vic., cap. 14, 1882 (*Assented to 17th May, 1882*):—

- 1. For a railway from Gravenhurst to Callander, both in the province of Ontario, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole \$660,000
- 2. For a railway from St. Raymond to Lake St. John, both in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 384,000
- 3. For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the province of Quebec, or between them, to Edmundston, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 240,000
- 4. For a railway from Oxford to New Glasgow, both in the province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 224,000

“The said subsidies to be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to complete the said railways respectively, within a reasonable time, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in an agreement to be made by the company with the Government, and which the Government is empowered to make, and to be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, such proportion to be established by the report of the said Minister; provided always, that the granting of such bonuses or subsidies shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting therewith, as the Governor in Council may determine.”

By the special Act 45 Vic., cap. 55, 1882 (*Assented to 17th May, 1882*):—

- 5. A subsidy authorized in favour of “The Chignecto Marine Transport Railway Company,” provided that they construct and thereafter maintain and operate a ship railway, to be approved by the Government, across the Isthmus of Chignecto, from the Gulf of St. Lawrence to the Bay of Fundy, per year, for twenty-five years..... \$150,000

By the Act 46 Vic., cap. 25, 1883 (*Assented to 25th May, 1883*):—

- 6. To the Baie des Chaleurs Railway Company, for 100 miles of their railway, from Métapediac, on the Intercolonial Railway, to Paspebiac, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 320,000

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7.	To the Caraquet Railway Company, for 36 miles of their railway, from a point near Bathurst to Caraquet, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$115,200
8.	To the Gatineau Valley Railway Company, for the first 50-mile section of their railway, from Hull station, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	160,000
9.	To the Great American and European Short Line Railway Company, for 80 miles of their railway, from Canso to Louisburg or Sydney, in the province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	256,000
10.	To the International Railway Company, for 49 miles of their railway, from Sherbrooke, in the province of Quebec, to the international boundary line, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	156,800
11.	To the Northern and Western Railway Company, for 32 miles of their railway, from the Intercolonial Railway, near the Miramichi, to Moran's, near Demphy village, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	102,400
12.	To the Montreal and Western Railway Company, for the first 50-mile section of their railway, out of St. Jérôme, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	160,000
13.	To the Napanee, Tamworth and Quebec Railway Company, for 28 miles of their railway, from Napanee to Tamworth, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	89,600
14.	To the Quebec and Lake St. John Railway Company, for 25 miles of their railway, from St. Raymond to Lake St. John, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
	In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.	
15.	For a railway from the International Railway at Petitcodiac to Havelock Corner, in the province of New Brunswick, 12 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
16.	For a railway from Gravenhurst to Callander, 110 miles, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole.....	660,000
	In addition to the subsidy granted by the Act forty-fifth Victoria, chapter fourteen.	

"The nine subsidies first mentioned to be granted to the companies hereinbefore named respectively ; and the two subsidies last mentioned to be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to complete the said railways, respectively ; and all the eleven lines above mentioned, and also the lines of railway in respect of which it is provided by the Act of forty-fifth Victoria, chapter fourteen, that subsidies may be granted, shall be commenced within two years from the first day of July next, and completed within a reasonable time, not to exceed four years from and after the passing of this Act, to be fixed by Order in Council, and according to descriptions and specifications to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made by each company with the Government, and which the Government is empowered to make ; and all the said subsidies authorized by this Act, respectively, to be paid out of the Consolidated Revenue Fund of Canada by instalments, on the completion of each section of not less than ten miles of railway, proportionate to the value of the portion so completed in comparison with the whole work undertaken, to be established by the report of the said Minister ; Provided always, that the granting of such subsidies shall be subject to such conditions for securing such running powers

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or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized as the Governor in Council may determine."

By the special Act 46 Vic., cap. 26, 1883 (*Assented to 25th May, 1883*):—

17. An advance authorized in favour of the "St. John Bridge and Railway Extension Company," to enable them to build a railway bridge across the River St. John, N.B., with railway connection with the Intercolonial, such advance to be secured by a mortgage on their entire property, not to exceed 80 per cent of the expenditure on the work, nor a total sum of \$ 500,000

By the Act 47 Vic., cap. 8, 1884 (*Assented to 19th April, 1884*):—

18. To the Government of the province of Quebec, in consideration of their having constructed the railway from Quebec to Ottawa, forming a connecting line between the Atlantic and Pacific coasts via the Intercolonial and Canadian Pacific Railways, and being as such a work of national and not merely provincial utility, a subsidy not exceeding \$6,000 per mile for the portion between Quebec and Montreal, 159 miles, nor exceeding in the whole 954,000
19. And for the portion between Montreal and Ottawa, 120 miles, \$12,000 per mile, nor exceeding in the whole 1,440,000
20. For the construction of a line of railway connecting Montreal with the harbours of St. John and Halifax by the shortest and best practicable route, after the report of competent engineers, a subsidy not exceeding \$170,000 per annum, for fifteen years, or a guarantee of a like sum for a like period as interest on bonds of the company undertaking the work.
21. For the construction of a line of railway from Oxford station, on the Intercolonial Railway, to Sydney or Louisburg, a subsidy not exceeding \$30,000 per annum for fifteen years or a guarantee of a like sum for a like period as interest on the bonds of the company undertaking the work, in addition to the subsidies previously granted, and also a lease or transfer to such company of the Eastern Extension Railway, from New Glasgow to Canso, with its present equipment.
22. To the Quebec Central Railway Company, for a line of railway from Beauce Junction to the international boundary line, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 211,200
23. For the extension of the Canadian Pacific Railway, from its terminus at St. Martin's Junction, near Montreal, or some other point on the Canadian Pacific Railway, to the harbour of Quebec, in such manner as may be approved by the Governor in Council, a subsidy not exceeding \$6,000 per mile, nor exceeding in the whole 960,000
24. To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the Victoria branch of the Midland Railway to the village of Bancroft, in the township of Dungannon, county of Hastings, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 160,000
25. To the Pontiac Pacific Junction Railway, for a line of railway from Hull or Aylmer to Pembroke, provided the Ottawa River is crossed at some point not east of Lapasse, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 272,000
26. To the Gatineau Railway Company, for a line of railway from Kazuabazua to Le Désert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 160,000
27. To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth to Bogart and Bridgewater, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 70,400

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28.	To the Montreal and Western Railway Company, for a line of railway from the end of the line subsidized in the now last session of Parliament, towards Le Désert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$160,000
29.	To the Northern and Western Railway Company, for a line of railway from Fredericton to the Miramichi River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole (instead of the subsidy proposed in 1883).....	128,000
30.	To the Erie and Huron Railway Company, for a line of railway from Wallaceburg to Sarnia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
31.	To the Ontario and Pacific Railway Company, for a line of railway from Cornwall to Perth, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	262,400
32.	To the Kingston and Pembroke Railway Company, for a line of railway from Mississippi to Renfrew, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000
33.	To the Great Northern Railway Company, for that portion of their railway between St. Jérôme and New Glasgow, in the county of Terrebonne, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
34.	For a line of railway and bridge between the Jacques Cartier Union Railway Junction with the Canadian Pacific Railway and St. Martin's Junction connecting the Jacques Cartier Union Railway with the North Shore Railway proper, a subsidy not exceeding in the whole.....	200,000
35.	For a line of railway from Richibucto to St. Louis, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
36.	For a line of railway from Hopewell to Alma, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200
37.	For a line of railway from St. Andrew's to Lachute, in the county of Argenteuil, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
38.	For a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	217,600
39.	For a line of railway from Annapolis to Digby, in the province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
40.	For a line of the Central Railway, from the head of Grand Lake to the Intercolonial Railway between Sussex and St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	128,000
41.	To the Caraquet Railway Company, for the extension of their line of railway from Caraquet to Shippegan Harbour, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
42.	For a branch of the Intercolonial Railway, from Metapedia eastward towards Paspébiac, twenty miles, in the province of Quebec, a sum not exceeding in the whole.....	300,000
43.	For a branch of the Intercolonial Railway, from Derby Station to Indian-town, fourteen miles, a sum not exceeding in the whole.....	140,000

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies are

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granted shall be commenced within two years from the first day of July next and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, except the line mentioned in the fourth section of this Act,* which shall be commenced within one year, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister. The subsidies to the province of Quebec shall be capitalized, and the interest shall be payable at such time and in such manner as the Government of Canada shall agree upon with the Government of the said province. The two subsidies last mentioned in the list are for works to be constructed by the Government of Canada.

“ Provided, always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council may determine.”

By the special Act 47 Vic., cap. 6, 1884 (*Assented to 19th April, 1884*):

- 44.** Relating to an agreement with the province of British Columbia, authority was given, *inter alia*, for the grant of a subsidy to the “ Esquimalt and Nanaimo Railway Company ” in aid of the construction of a line of railway and telegraph between the points named; such subsidy to be in lands *en bloc* on Vancouver Island, the boundaries being fixed by the Act, and in money \$750,000

By the Act 48-49 Vic., cap. 59, 1885 (*Assented to 20th July, 1885*):

- 45.** To the Ottawa, Waddington and New York Railway and Bridge Company, for a line of railway from Ottawa to Waddington, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 166,400
- 46.** To the New Brunswick and Prince Edward Island Railway Company, for a line of railway from Sackville to the Straits of Northumberland, at or near Cape Tormentine, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 118,400
- 47.** To the Montreal and Sorel Railway Company, for a line of railway from St. Lambert to Sorel, a subsidy not exceeding \$1,600 per mile, nor exceeding in the whole 72,000
- 48.** To the Brockville, Westport and Sault Ste. Marie Railway Company, for a line of railway from Brockville to Westport, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 128,000
- 49.** To the Quebec and Lake St. John Railway Company, for a line of railway from its junction on the North Shore Railway to St. Raymond, upon condition of the company extending their road to a point 50 miles north of St. Raymond, a subsidy not exceeding \$3,200 per mile nor exceeding in the whole 96,000
- 50.** To the Northern and Western Railway Company, for a line of railway from the northern end of the 40 miles subsidized between Fredericton and the Miramichi River by 47 Victoria, chapter 8, to Boiestown, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 19,200

* The extension of the Canadian Pacific Railway from its terminus at St. Martin's Junction, or some other point on the said railway to the harbour of Quebec.

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51.	To the Montreal and Champlain Junction Railway Company, for a line of railway from Brosseau's to Dundee, a subsidy not exceeding \$500 per mile, nor exceeding in the whole	\$30,000
52.	To the Thunder Bay Colonization Railway Company, for a line of railway from the Murillo station of the Canadian Pacific Railway to the east end of Whitefish Lake, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	92,000
53.	To the Central Ontario Railway Company, for a line of railway from Coe Hill or Rathbun, to Bancroft, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	64,000
54.	To the Belleville and North Hastings Railway Company, for a line of railway from the village of Madoc to the junction with the Central Ontario Railway at Eldorado, a subsidy not exceeding \$1,500 per mile, nor exceeding in the whole	10,500
55.	For a line of railway from Long Sault to the foot of Lake Temiscamingue, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	25,600
56.	For a line of railway from a point on the Canada Southern Railway near Comber, to Lake Erie, at or near the village of Leamington, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	44,800
57.	To the Napanee, Tamworth and Quebec Railway Company, for a line of railway from Tamworth towards Bogart and Bridgewater, 16 miles, in lieu of the subsidy granted by 47 Vic., chap. 8, a subsidy of	70,000
58.	To the Gatineau Railway Company, for a line of railway from Hull station towards Le Désert, a distance of 62 miles, in lieu of the subsidies granted by 46 Vic., chap. 25, and 47 Vic., chap. 8, a subsidy of	320,000
59.	For a line of railway from the Grand Piles, on the River St. Maurice, to its junction with Lake St. John Railway, a distance of about 50 miles, in lieu of the subsidy granted by 47 Vic., chap. 8, for a line of railway from the Grand Piles, on the River St. Maurice, to Lake Edward, a subsidy of	217,600
60.	To the Canada Atlantic Railway Company, for a line of railway from Valleyfield to a point one and a half miles west of Johnston's, a subsidy not exceeding \$1,600 per mile, and from one and a half miles west of Johnston's to Lacolle; also from the present terminus at Ottawa, to the Chaudiere Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	96,000
61.	For a line of railway from Indiantown via the Miramichi Valley, to its junction with the Northern and Western Railway at or near Boiestown, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	140,800

* The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies, respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways, respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions, specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister.

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“ Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connected with those so subsidized, as the Governor in Council may determine.”

By the Act 48-49 Vic., cap. 58, 1885 (*Assented to 20th July, 1885*):—

- 62.** For a railway from a point on the Intercolonial Railway at Rivière du Loup or Rivière Ouelle, in the province of Québec, to Edmundston, in the province of New Brunswick, a subsidy not exceeding two thousand eight hundred dollars per mile for seventy-five miles, and six thousand dollars per mile for eight miles, nor exceeding in the whole two hundred and fifty-eight thousand dollars; the said subsidy to be in addition to the subsidy authorized to be granted in aid of the construction of the said railway by the Act forty-fifth Victoria, chapter fourteen, and constituting with the subsidy so authorized, a subsidy not exceeding in the whole four hundred and ninety-eight thousand dollars, and to be granted for the said railway upon the terms and conditions specified in the said Act, and payable out of the Consolidated Revenue Fund of Canada; and for the purpose of incorporating the persons undertaking the construction of the said railway and those who shall be associated with them in the undertaking, the Governor may grant to them, under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, which shall be similar to such of the franchises, privileges and powers granted to railway companies during the present session as the Governor shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada.
- 63.** For a line of railway from the south bank of the St. Lawrence river, opposite or near Montreal, to the harbours of St. Andrew's, St. John and Halifax via Sherbrooke, Moosehead Lake, Mattawamkeag, Harvey, Fredericton and Salisbury, a subsidy not exceeding eighty thousand dollars per annum for twenty years, forming in the whole, together with the subsidy authorized by the Act forty-seventh Victoria, chapter eight, for a line of railway connecting Montreal with the said harbours of St. John and Halifax by the shortest and best practicable route, which the line above described is found to be, a subsidy not exceeding two hundred and fifty thousand dollars per annum, the whole of which shall be paid in aid of the construction of such a line of railway for a period of twenty years, or a guarantee bond of a like sum for a like period as interest on the bonds of the company undertaking the work; the said subsidy to be so granted upon the terms and conditions of and payable out of the Consolidated Revenue Fund in the manner specified in the said last mentioned Act in respect of the subsidy thereby authorized in aid of the said line of railway.
- 64.** The Governor in Council may grant a further subsidy as an aid towards procuring free access as hereinafter described for the trains and traffic of the Canadian Pacific Railway Company from St. Martin's Junction, near Montreal, or from some other point on their railway to be selected by the said company, to the harbour of Quebec, in such a manner as shall be approved by the Governor in Council, that is to say: an additional subsidy not exceeding three hundred and forty thousand dollars, constituting, together with the subsidy authorized by the said last mentioned Act, to aid in procuring the extension of

the Canadian Pacific Railway to Quebec, and the subsidy also thereby authorized to aid in constructing a line connecting the Canadian Pacific Railway at the Jacques Cartier Union Junction with the North Shore Railway proper (which subsidies shall be applicable to the said first mentioned purpose) a sum not exceeding in the whole the sum of one million five hundred thousand dollars, payable out of the Consolidated Revenue Fund of Canada.

The said Act further provided as follows in relation to this matter :—

“ If it should be expedient so to do in order to facilitate such access, the Governor in Council may acquire the North Shore Railway, and may apply the said sum of one million five hundred thousand dollars, or any part thereof, in aid of such acquisition and upon such acquisition may transfer and convey or lease the said railway to the Canadian Pacific Railway Company, subject to such obligation as the Government shall have assumed in acquiring it.”

By the Act 49 Vic., cap. 10, 1886 (*Assented to 2nd June, 1886*):—

- 65. For a railway from a point at or near Moncton, to Buctouche, in the province of New Brunswick, thirty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$ 96,000
- 66. For a railway from Ingersoll via London to Chatham, in the province of Ontario, eighty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 256,000
- 67. To the Northern and Western Railway Company, for ten miles of their railway, intervening between the termini of the portions of their railway for which subsidies are already granted, the one from Fredericton and the other from Indiantown, and an extension of two miles down to deep water at Chatham, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 32,000
- 68. To the Caraquet Railway Company, for ten miles of their railway, from the end of the present subsidized portion at Lower Caraquet to Shippegan, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 32,000
- 69. To the Lake Erie, Essex and Detroit River Railway Company, for thirty-seven miles of their railway, from Windsor to Leamington, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 118,400
- 70. To the Thunder Bay Colonization Railway Company, for fifty-six miles of their railway, from the end of the present subsidized section to a point near Crooked Lake, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 179,200
- 71. To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the village of Sundridge, on the line of the Northern Pacific Junction Railway, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 128,000
- 72. For a railway from a point at or near New Glasgow or St. Lin, to or near Montcalm, in the province of Quebec, eighteen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 57,600
- 73. For a railway from Hereford to the International Railway, in the township of Eaton, in the province of Quebec, thirty-four miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 108,800
- 74. For a railway from St. Félix to Lake Maskinongé, parish of St. Gabriel in the province of Quebec, ten miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 32,000
- 75. For a railway from Glenannan to Wingham, in the province of Ontario, five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 16,000

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76.	For a railway from a point at or near the McCann Station, on the Intercolonial Railway, to the Joggins, on Cumberland Basin, in the province of Nova Scotia, twelve miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 38,400
77.	For a railway from L'Assomption to L'Epiphanie, in the province of Quebec, three miles and a half, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	11,200
78.	To the Montreal and Western Railway Company, for seventy miles of their railway from St. Jérôme, north-westerly towards Désert, in the province of Quebec, a subsidy of \$5,161 per mile, in lieu of the subsidies granted by 46 Vic., chap. 25, and 47 Vic., chap. 8, not exceeding in the whole.....	361,270
79.	For a railway from St. Andrew's to the Canadian Pacific Railway at or at any point east of the town of Lachute, in the county of Argenteuil, in the province of Quebec, seven miles, in lieu of the subsidy granted by 47 Vic., chap. 8, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
80.	To the Canada Atlantic Railway Company, for twelve miles of their railway from Clark's Island to Valleyfield, and from Lacolle, in the province of Quebec, to the international boundary, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
81.	For a railway from Truro to Newport, in the province of Nova Scotia, forty-nine miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	156,800
82.	To the Quebec and Lake St. John Railway Company, for ninety-five miles of their railway, from a point fifty miles north of St. Raymond to Lake St. John, in the province of Quebec, a subsidy not exceeding \$1,961 per mile, nor exceeding in the whole (in addition to the subsidy granted by 45 Victoria, chapter 14, and 46 Victoria, chapter 25, of \$3,200 per mile).....	186,295
83.	To the Cap Rouge and St. Lawrence Railway Company, for twelve miles of their railway from Lorette via Cap Rouge to Quebec, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
84.	For the construction of wharfs and landing stages on the line of the railway from Long Sault to the foot of Lake Temiscamingue, a subsidy of.....	6,000
85.	To the Gananogue, Perth and James Bay Railway Company, seventeen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	54,400
86.	For a railway from St. Eustache to St. Placide, county of Two Mountains, eighteen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600
87.	For a railway from a point on the Intercolonial Railway through the Stewiacke Valley, on the line which will afford facilities of communication with the Iron Mines, Spring Side, Upper Stewiacke and Musquodoboit settlements, twenty-five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
88.	For a railway from Yamaska to the River St. Francis, in the province of Quebec, ten miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
89.	For a railway from Perth Centre station, on the New Brunswick Railway, to a point near Plaister Rock Island, in the province of New Brunswick, twenty-eight miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	89,600
90.	For a railway from Fredericton to the village of Prince William, in the province of New Brunswick, twenty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400

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91.	For a railway from a point on the Intercolonial Railway near Newcastle or via Douglstown to a point on the River Miramichi, opposite the town of Chatham, in the province of New Brunswick, six miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	\$19,200
92.	For a railway from a point on the Canadian Pacific Railway to Eganville, in the province of Ontario, twenty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	70,400
93.	To the Belleville and North Hastings Railway Company, for seven miles of their railway, from the village of Madoc to the junction with the Central Ontario Railway at Eldorado, in the province of Ontario, a subsidy (in addition to the subsidy of \$1,500 per mile granted by 48-49 Victoria, chapter 59), not exceeding \$1,700 per mile, nor exceeding in the whole.	11,900
94.	To the Napanee, Tamworth and Quebec Railway Company, for eighteen miles of their railway from Tamworth to Tweed, in lieu of the subsidy granted by 48-49 Victoria, chapter 59, a subsidy of.	70,000
95.	To the Albert Railway Company, for their railway from Salisbury to Hopewell, in the province of New Brunswick, which is a feeder to the Intercolonial Railway, in the form of a loan, repayable at such time and secured in such manner as the Governor in Council determines, a subsidy of.	15,000

“The subsidies hereinbefore mentioned as to be granted to the companies named for that purpose shall be granted to such companies respectively; the other subsidies shall be granted to such companies as shall be approved by the Governor in Council as having established, to his satisfaction, their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies have been granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall be so constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in the agreement to be made in each case by the company to the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council, and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister: Provided always, that the granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements, and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council may determine.”

By section 2 of this Act authority was given for the grant of a charter by the Governor in Council for the purpose of constructing a railway from Long Sault to the foot of Lake Temiscamingue.

By the Act 50-51 Vic., cap. 24, 1887 (*Assented to 23rd June, 1887*).

96.	To the St. Catharines and Niagara Railway Company, for twelve miles of their railway from the city of St. Catharines to the bridge over the Niagara River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	\$ 38,400
97.	To the Vaudreuil and Prescott Railway Company, for thirty miles of their railway from Vaudreuil towards Hawkesbury, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	96,000
98.	To the Richmond Hill Junction Railway Company, for five miles of their railway from Richmond Hill Junction, on the Northern Railway of Canada, to Richmond Hill village, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	16,000

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99.	To the Drummond County Railway Company, for thirty miles of their railway from Drummondville towards Nicolet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
100.	To the Jogjins Railway Company, for one and a quarter miles of their railway extending from the southern end of the portion subsidized by the Act 49 Victoria, chapter 10, to the wharfs, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	4,000
101.	To the Moncton and Buctouche Railway Company, for two miles of their railway from the west end of the portion subsidized by the Act 49 Victoria, chapter 10, to Moncton, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	6,400
102.	To the Beauharnois Junction Railway Company, for thirty miles of their railway from St. Martin's towards St. Anicet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
103.	To the Harvey Branch Railway Company, for three miles of their railway from the southern terminus of the Albert Railway to Harvey Bank, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	9,600
104.	To the Brantford, Waterloo and Lake Erie Railway Company, for eighteen miles of their railway from the town of Brantford to the village of Hagersville or the village of Waterford, or some intermediate point on the Canada Southern Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600
105.	To the Guelph Junction Railway Company, for sixteen miles of their railway from its junction with the Canadian Pacific Railway to the town of Guelph, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200
106.	To the Massawippi Railway Company, for ten miles of their railway from a point on the Atlantic and North-western Railway near the village of Magog, to Ayer's Flat station, on the Massawippi Valley Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
107.	To the Napanee, Tamworth and Quebec Railway Company, for four miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, to Tweed, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	12,800
108.	To the Dominion Lime Company, for seven miles of their railway from a point on the Quebec Central Railway, in the township of Dudswell, to the Dudswell Lime Company's quarries, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
109.	To the South Norfolk Railway Company, for seventeen miles of their railway from Port Rowan to the town of Simcoe, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	54,400
110.	To the Jacques Cartier Union Railway Company, extending and completing their railway, a subsidy of.....	20,000
111.	For a line of railway from Mount Forest to Walkerton, twenty-four miles in length, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
112.	To the Oshawa Railway and Navigation Company, for seven miles of their railway from Port Oshawa towards Raglan, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400
113.	To the Saguenay and Lake St. John Railway Company, for thirty miles of their railway from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000

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114. To the Great Eastern Railway Company, for thirty miles of their railway from the River St. Francis to the Arthabaska Railway, at St. Grégoire station, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$96,000
115. To the Ontario and Pacific Railway Company, for six miles of their railway from the northern end of the portion subsidized by the Act 47 Victoria, chapter 8, to the town of Perth, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	19,200
116. To the Caraqueet Railway Company, for seven miles of their railway from Lower Caraqueet to Shippegan, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding in the whole..	32,000
117. To the St. Lawrence and Lower Laurentian and Saguenay Railway Company, for the section of this railway from Grand Piles, on the St. Maurice River, to its junction with the Quebec and Lake St. John Railway, in lieu of the subsidy granted by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, for a line of railway from Grand Piles, on the St. Maurice River, to its junction with the Lake St. John Railway, a distance of about fifty miles, a subsidy of.....	217,600
118. To the St. John Valley and River du Loup Railway Company, for twenty-two miles of their railway from the village of Prince William towards the town of Woodstock, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
119. To the Lake Temiscamingue Railway Company, for four short sections of railway, in all about two miles in length, to overcome the rapids of the Ottawa River, known as "La Mi-Charge," "La Cave," "Les Erables," and "La Montagne," and for the construction of wharfs and landing stages at these rapids, to connect the Canadian Pacific Railway at Mattawa with Lake Temiscamingue by steamboats, railways and other works (in lieu of a portion two miles in length, out of the eight miles of railway subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, under which about six miles of railway have already been built from the foot of Long Sault proper to the foot of Lake Temiscamingue, and in lieu also of the subsidy granted by the Act 49 Victoria, chapter 10), a subsidy of.....	12,400
120. To the Carillon and Grenville Railway Company, for twelve miles of their railway from St. Eustache to Sault au Récollet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
121. To the Minudie Branch Railway Company, for five and a half miles of their railway from its junction with the Joggins Railway, near the River Hébert railway bridge, to the village of Minudie, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	17,600
122. To the Lake Temiscamingue Colonization and Railway Company, for ten and a half miles of their railway from the Long Sault to Lake Kippewa, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	33,600
123. To the Leamington and St. Clair Railway Company, for two miles of their railway from the north end of the section subsidized by the Act passed in the session held in the forty-eighth and forty-ninth years of Her Majesty's reign, chapter 59, to the village of Comber, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	6,400
124. To the Cumberland Railway and Coal Company for fourteen miles of their railway from a point on the Spring Hill and Parrsboro' Railway, near Spring Hill, to a point on the railway between Oxford and New Glasgow, near Oxford village, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	44,800

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125.	To the Montreal and Champlain Junction Railway Company, a subsidy of.....	\$ 64,000
126.	To the Quebec and Lake St. John Railway Company, for nine miles of their railway, the distance which the previous subsidies granted are short of covering from the city of Quebec to Lake St. John, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	28,800
127.	To the Temiscouata Railway Company, for thirty miles of a branch of their railway from Edmundston towards the St. Francis River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	96,000
128.	To the Cornwallis Valley Railway Company, for thirteen miles of their railway from Kentville to Kingsport, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	41,600
129.	To the Nova Scotia Central Railway Company, for thirty-four miles of their railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	108,800
130.	To the Tobique Valley Railway Company, for fourteen miles of their railway from Perth Centre station towards Plaister Rock Island, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, for a railway from Perth Centre station, on the New Brunswick Railway, to a point near Plaister Rock Island, a subsidy of.....	89,600
131.	For a railway from Woodstock towards Centreville, twenty miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	64,000
132.	For a railway bridge over the St. Lawrence River, at Coteau Landing on the line of the Canada Atlantic Railway, a subsidy of fifteen per cent on the value of the structure, not to exceed.....	180,000
133.	To the Lake Erie, Essex and Detroit River Railway Company, for twenty-seven miles of their railway, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding.....	118,400

“For the purpose of granting corporate powers to persons or companies undertaking the construction of railways or parts of railways, mentioned in the next preceding section, for the construction of which no corporate powers exist at the time of the passing of this Act, the Governor in Council may grant to them, under such corporate name as he shall deem expedient, a charter conferring upon them the franchises, privileges and powers requisite for the said purposes, as the Governor in Council shall deem most useful or appropriate to the said undertaking; and such charter being published in the *Canada Gazette*, with any Order or Orders in Council relating to it, shall have force and effect as if it were an Act of the Parliament of Canada.

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies respectively; the other subsidies, including subsidies granted for railways over a line extending beyond a point to which any company hereinbefore mentioned by name is authorized to construct their railway, shall be granted to such companies as shall be approved by the Governor in Council, as having established, to his satisfaction, their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized, except as regards the subsidy for the bridge over the

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St Lawrence River, upon which shall be paid fifteen per cent of the value of work done on monthly progress estimates, certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals.

“The granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

“Notwithstanding anything contained in the Act forty-fifth Victoria, chapter fourteen, or in the Act forty-sixth Victoria, chapter twenty-five, the balances of the sums granted for a railway from St. Raymond to Lake St. John and to the Quebec and Lake St. John Railway Company by the said Acts respectively, which have not yet been paid by the Government, may be paid at any time within one year from the passing of this Act, subject to the conditions in the said Act contained.”

By the Act 51 Vic., cap. 3, 1888 (*Assented to 22nd May, 1888*):—

- | | | |
|-------------|--|--------------|
| 134. | To the Ottawa and Parry Sound Railway Company, for 22 miles of their railway from a point on the Canadian Pacific Railway to Eganville, in lieu of the subsidy granted by 49 Victoria, chapter 10, for a railway from a point on the Canadian Pacific Railway to Eganville, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | \$ 70,400 00 |
| 135. | To the Nova Scotia Central Railway Company, for 46 miles of their railway, in the province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 147,200 00 |
| 136. | To the Montreal and Champlain Junction Railway Company, for 3 miles of their railway from the end of the present subsidized section, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 9,600 00 |
| 137. | To the Massawippi Junction Railway Company, for their railway from a point on the Atlantic and North-west Railway, near the village of Magog, to Ayer's Flat station, on the Massawippi Valley Railway, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy of..... | 32,000 00 |
| 138. | To the Pontiac Pacific Junction Railway Company, for bridging the several channels of the Ottawa River at Culbute and west thereof, a subsidy of \$31,500, to be paid out monthly as the work progresses, upon the certificate of the Chief Engineer of Government railways, in the proportion which the value of the work executed bears to the value of the whole work undertaken, and for three miles of their railway extending from a point three miles east of Pembroke to Pembroke, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$9,600, provided that the entire work subsidized upon this railway shall be completed within four years from the passing of this Act, the subsidy granted by this Act not to exceed in the whole..... | 41,100 00 |
| 139. | To the Port Arthur, Duluth and Western Railway Company, for 84 $\frac{3}{4}$ miles of their railway from Port Arthur towards Gun Flint Lake, in lieu of the subsidies granted by 48-49 Victoria, chapter 59, and 49 Victoria, chapter 10, for the construction of a railway from Murillo Station to Crooked Lake, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 271,200 00 |
| 140. | To the Quebec and Lake St. John Railway Company, for 30 miles of their railway from Lake St. John towards Chicoutimi, or from Chicoutimi towards Lake St. John, being a transfer made at the request of the Saguenay and Lake St. John Railway Company of the subsidy granted to them by 50-51 Victoria, chapter 24, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... | 96,000 00 |

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141.	To the Temiscouata Railway Company, for 20 miles of their branch railway from Edmundston towards the St. Francis River, in the province of Quebec, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy of.....	\$100,000 00
142.	To the Quebec Central Railway Company, for the construction and completion of a line of railway from St. Francis Station to a point on the Atlantic and North-west Railway near Moose River, 90 miles, in lieu of the balance of the subsidy, unearned, granted by 47 Victoria, chapter 8, a subsidy not exceeding \$21,191.54 per annum for twenty years, or a guarantee of a like sum for a like period as interest on the bonds of the company, such annual subsidy for twenty years representing a grant in cash of	288,000 00
143.	To the Central Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 4,052 tons of used iron rails and fastenings, loaned to the St. Martin's and Upham Railway Company, now forming part of the Central Railway, which rails and fastenings stand in the Public Accounts as an asset for.....	83,612 54
144.	To the Elgin, Petitcodiac and Havelock Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 2,201 tons of used iron rails and fastenings loaned to the Elgin Branch Railway, now forming part of the Elgin, Petitcodiac and Havelock Railway, which rails and fastenings stand in the Public Accounts as an asset for.....	44,252 82
145.	To the Kent Northern Railway Company of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 2,549 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	58,334 27
146.	To the Halifax Cotton Company of Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 233 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	4,335 00
147.	To the Steel Company of Canada, in Nova Scotia, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 597 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	11,964 66
148.	To the Albert Railway Company of New Brunswick, a grant as subsidy (the section of road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 726 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for.....	14,665 45

149. To the Chatham Branch Railway of New Brunswick, a grant as subsidy (the road to be first laid with new steel rails weighing not less than 56 pounds per lineal yard, and after an Order in Council has been passed authorizing their transfer to the company) of 958 tons of used iron rails and fastenings loaned to the company, which rails and fastenings stand in the Public Accounts as an asset for. \$24,439 84

" All the lines, for the construction of which subsidies are granted, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make ; the location also of every such line of railway shall be subject to the approval of the Governor in Council ; and also the said subsidies respectively, payable in cash, shall be payable out of the Consolidated Revenue Fund of Canada by instalments, on the completion to the satisfaction of the Minister of Railways and Canals of each section of the railway of not less than 10 miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon completion of the work subsidized."

* By the Act 52 Vic., chap. 3, 1889. (*Assented to 2nd May, 1889*) :—

- 150.** To the Ontario and Pacific Railway Company, for a line of railway from Cornwall to Ottawa, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. \$172,400 00
- 151.** To the Ottawa and Gatineau Railway Company, for a line of railway from Hull station towards Le Désert, a distance of sixty-two miles, a subsidy not exceeding in the whole. 320,000 00
- 152.** To the Cap Rouge and St. Lawrence Railway Company, for twelve miles of their railway, from Lorette via Cap Rouge to Quebec, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 38,400 00
- 153.** To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the village of Sundridge, or some other point on the line of the Northern and Pacific Junction Railway, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 128,000 00
- 154.** For a railway from St. Andrew's to the Canadian Pacific Railway, at or at any point east of the town of Lachute, in the county of Argenteuil, in the province of Quebec, seven miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 22,400 00
- 155.** For a railway from Truro, or a point between Truro and Steviacke, to Newport or to Windsor, in the province of Nova Scotia, forty-nine miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole 156,800 00
- 156.** For a line of the Central Railway from the head of Grand Lake to the Intercolonial Railway, in the province of New Brunswick, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. 128,000 00
- 157.** To the Albert Southern Railway Company, the balance remaining unpaid of the subsidy granted by the Act 47th Victoria, chapter 8, not exceeding in the whole 31,771 43
- 158.** To the Baie des Chaleurs Railway Company, the balance remaining unpaid of the subsidy mentioned in the Act 49th Victoria, chapter 17, not exceeding in the whole 244,500 00

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159.	To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the Victoria Branch of the Midland Railway to the village of Bancroft, in the county of Hastings, the balance remaining unpaid of the subsidy granted by the Act 47th Victoria, chapter 8, not exceeding in the whole.....	\$145,000 00
160.	To the Northern and Pacific Junction Railway Company, for a railway from Gravenhurst to Callander, the balance remaining unpaid of the subsidies granted by the Act 45th Victoria, chapter 14, and 46th Victoria, chapter 25, not exceeding in the whole..	35,000 00
161.	For a railway from some point on the Joggins Railway, near the Hébert River, to Young's Mills, in the province of Nova Scotia, a distance of five miles, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	16,000 00
162.	To the St. Clair Frontier Tunnel Company, for the construction of a tunnel under the St. Clair River, from a point at or near Sarnia, to a point at or near Port Huron, a subsidy not exceeding in the whole.....	375,000 00
163.	To the Pontiac and Renfrew Railway Company, for six miles of their railway from the north bank of the Ottawa River, opposite Braeside, or from Bristol Iron Mines, to the Pontiac Pacific Junction Railway, near the Quyon River, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	19,200 00
164.	To the Quebec, Montmorency and Charlevoix Railway Company, for thirty miles of their railway, from the east bank of the St. Charles River, to or near to Cap Tourmente, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	96,000 00
165.	To the Fredericton and St. Mary's Bridge Company, for a bridge over the St. John River, at Fredericton, in the province of New Brunswick, a subsidy not exceeding in the whole.....	30,000 00
166.	To the Napanee, Tamworth and Quebec Railway Company, for seven miles of their railway, from a point at or near Yarker to a point at or near Harrowsmith, and to a company for three miles of railway from a point at or near Harrowsmith to a point at or near Sydenham, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	32,000 00
167.	For a railway from a point near Sicamous, on the Canadian Pacific Railway, to a point on Lake Okanagan for fifty-one miles of such railway, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	163,200 00
168.	To the Cornwallis Valley Railway Company, for one mile of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, to Kingsport, in the province of Nova Scotia, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	3,200 00
169.	To the Lake Témiscamingue Colonization and Railway Company, for fifteen miles of their railway, from Mattawa station on the Canadian Pacific Railway, towards the Long Sault, or from the Long Sault towards the said Mattawa station, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
170.	To the Maskinongé and Nipissing Railway Company, for fifteen miles of their railway, from a point on the Canadian Pacific Railway at or near Maskinongé or Louiseville, towards the parish of Saint-Michel des Saints, on the River Mattawin, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00

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171. To the Kingston, Smith's Falls and Ottawa Railway Company, for twenty miles of their railway, from the city of Kingston towards Smith's Falls, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 64,000 00
172. To the South Ontario Pacific Railway Company, for forty-nine and one-half miles of their railway, from Woodstock to Hamilton, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	158,400 00
173. For a railway from St. Césaire to St. Paul d'Abbotsford, in the province of Quebec, five miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	16,000 00
174. To the Great Eastern Railway Company, for twenty miles of their railway, from the east end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Grégoire, towards the Chaudière Junction station on the Intercolonial Railway, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000 00
175. To the Drummond County Railway Company, for four and one-half miles of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, to Ball's Wharf, on the St. Lawrence River, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	14,400 00
176. To the St. Catharines and Niagara Central Railway Company, for twenty miles of their railway, from the end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Catharines, towards the city of Hamilton, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000 00
177. To the Quebec and Lake St. John Railway Company, for twenty miles of their railway, from the end of the section of thirty miles from Lake St. John towards Chicoutimi, subsidized by the Act 51 Victoria, chapter 3, towards Chicoutimi, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000 00
178. To the Grand Trunk, Georgian Bay and Lake Erie Railway Company, for fifteen miles of their railway, from the village of Tara or some point between Tara and Hepworth, to the town of Owen Sound, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
179. To the Hereford Railway Company, for fifteen miles of their railway, from Cookshire to a junction with the Quebec Central Railway at Dudswell, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
180. To the Massawippi Junction Railway Company, for fifteen miles of their railway, from Ayer's Flat to Coaticook, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
181. To the Brockville, Westport and Sault Ste. Marie Railway Company, for twenty miles of their railway, from a point at or near Newboro', towards Palmer's Rapids, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000 00
182. To the Thousand Islands Railway Company, for four miles of their railway, from a point near the St. Lawrence River, in Gananoque village, to Gananoque Junction of the Grand Trunk Railway, and for thirteen miles of their railway, from Gananoque Junction of the Grand Trunk Railway to a junction with the Brockville, Westport and Sault Ste. Marie Railway, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	54,400 00

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- 183.** For a railway from Cape Tourmente towards Murray Bay, twenty miles, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$64,000 00
- 184.** To the Amherstburg, Lake Shore and Blenheim Railway Company, for twenty miles of their railway, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 64,000 00

“ So much of the subsidy of three thousand two hundred dollars per mile, which under the provisions of the Act forty-ninth Victoria, chapter seventeen, and of this Act, may be paid to the Baie des Chaleurs Railway Company in respect of the thirty miles of their railway, from the seventieth to the hundredth mile, eastward from Metapediac, shall be applicable to the section of the said railway, comprised between the fortieth and the seventieth mile thereof, eastward from Metapediac, instead of to the said first mentioned section of thirty miles, making six thousand four hundred dollars per mile applicable to the secondly mentioned section of thirty miles; but the foregoing provision shall be subject to the condition that the said company undertake to complete the thirty miles of their railway from the seventieth to the hundredth mile eastward from Metapediac within a reasonable time, not to exceed four years, to be fixed by Order in Council, and without any further subsidy from the Government of Canada, and that they deposit with the Minister of Railways and Canals, as security to the Crown that they will well and truly carry out their undertaking, their bonds to the amount of two hundred thousand dollars.

“ The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make; the location, also, of every such line of railway shall be subject to the approval of the Governor in Council; and all the said subsidies, respectively, shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized, except as respects the tunnel under the St. Clair River, in which case there shall be paid fifteen per cent of the value of work done on monthly progress estimates, certified by the Chief Engineer, and upon the approval of the Minister of Railways and Canals.

“ The granting of such subsidies, respectively, shall be subject to such conditions for securing such running powers or traffic arrangements and other rights, as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

“ And for the removal of doubts it is hereby declared and enacted that the provision in the Act passed in the fifty-first year of Her Majesty's reign, and chaptered three, relating to the Pontiac Pacific Junction Railway Company, extended and extends the several subsidies in aid of the said company for four years from the passing of the said Act, that is to say, from the twenty-second day of May, one thousand eight hundred and eighty-eight.”

By the Special Act, 52 Vic., cap. 5, 1889 (*Assented to 2nd May, 1889*):—

- 185.** In order to enable the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company to complete their railway from Regina to some point on the South Saskatchewan River at or near Saskatoon, and thence northward to Prince Albert, the Governor in Council may enter into a contract with such company for the transport of men, supplies, materials and mails,

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for twenty years, and may pay for such services during the said term, eighty thousand dollars per annum in manner following, that is to say :—the sum of fifty thousand dollars to be paid annually on the construction of the railway to a point at or near Saskatoon, such payment to be computed from the date of the completion of the railway to such point ; and the remaining thirty thousand dollars annually on the extension of the railway to Prince Albert, such payment to be computed from the date of such last mentioned completion : Provided that if the second portion of the said railway is not built and operated to Prince Albert within two years after the completion of the railway to the South Saskatchewan as aforesaid, the payment of fifty thousand dollars shall cease until the whole railway is finished to Prince Albert.

By the Act 53 Vic., cap. 2, 1890 (*Assented to 16th May, 1890*) :—

186.	To the Montreal and Ottawa Railway Company, for thirty miles of their railway, from the western end of the thirty-six miles subsidized by the Act 50-51 Victoria, chapter 24, towards Ottawa, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	\$ 96,000
187.	To the Waterloo Junction Railway Company, for eleven miles of their railway, from Waterloo to Elmira, a subsidy not exceeding \$3,200 per mile, and not exceeding in the whole.....	35,200
188.	To the Northern and Pacific Junction Railway Company, for a railway from Gravenhurst to Callander, the balance remaining unpaid of the subsidies granted by the Acts 45 Victoria, chapter 14, and 46 Victoria, chapter 25, not exceeding in the whole...	600
189.	For a railway from Woodstock via London to Chatham, in the province of Ontario, thirty miles in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, for a railway from Ingersoll via London to Chatham, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	256,000
190.	To the St. Catharines and Niagara Railway Company, for fourteen miles of their railway, from the end of the twenty miles subsidized by the Act 52 Victoria, chapter 3, to Hamilton, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	44,800
191.	To a railway from Ottawa to Morrisburg, fifty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	166,400
192.	To the Erie and Huron Railway Company, for twenty-two miles of their railway from Petrolia via Oil Springs to Dresden, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	70,400
193.	To the Brockville, Westport and Sault Ste. Marie Railway Company, for a railway from Brockville to Westport, the balance remaining unpaid of the subsidy granted by the Act 48-49 Victoria, chapter 59, not exceeding in the whole.....	83,000
194.	To the Manitoulin and North Shore Railway Company, for thirty miles of their railway from Little Current to the Algoma Branch of the Canadian Pacific Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
195.	To the Port Arthur, Duluth and Western Railway Company, for five miles of their railway, being a branch of the main line of railway to the Kakaueka Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	16,000
196.	To the Lake Erie and Detroit River Railway Company, for fifty miles of their railway, on a line to be fixed by the Governor in Council, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	160,000

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197.	To the Lindsay, Bobcaygeon and Pontypool Railway Company, for sixteen miles of their railway, from Bobcaygeon to the Midland Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 51,200
198.	To the Kingston, Smith's Falls and Ottawa Railway Company, for thirty-six miles of their Railway, from the north-east end of the twenty miles subsidized by the Act 52 Victoria, chapter 3, to Smith's Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	115,200
199.	To the Ottawa and Parry Sound Railway Company, for thirty miles of their railway, from Eganville to Barry's Bay, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
200.	To the Belleville and Lake Nipissing Railway Company, for thirty miles of their railway, from Belleville to Tweed and thence to Bridgewater, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
201.	To the Cobourg, Northumberland and Pacific Railway Company, for thirty miles of their railway from Cobourg to the Ontario and Quebec Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
202.	To the St. Stephen and Milltown Railway Company, for three and a half miles of their railway, from the town of St. Stephen to the town of Milltown, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	11,200
203.	To the Woodstock and Centreville Railway Company, for six miles of their railway, from the western end of the twenty miles subsidized by the Act 50-51 Vic., chap. 24, to the International boundary between the province of New Brunswick and the state of Maine, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	19,200
204.	For a railway from a point at or near Fredericton, via Oromocto and Gagetown, to a point on the New Brunswick Railway west of Westfield station, for thirty miles thereof, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000
205.	To the Central Railway Company of New Brunswick, for four and a half miles of their railway, the distance which the previous subsidy granted is short of covering, from the head of Grand Lake to the Intercolonial Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	14,400
206.	To the Montreal and Western Railway Company, for seventy miles of their railway, from St. Jérôme, north-westerly towards Désert, in the province of Quebec, in lieu of the subsidy granted by the Act 49 Vic., chap. 10, a subsidy not exceeding \$5,161 per mile, nor exceeding in the whole.....	361,270

"Provided, that the subsidy hereby granted to the Montreal and Western Company may be paid by instalments on the completion of each section of the railway as follows, that is to say :—

SECTIONS.	Approximate length in miles.
St. Jérôme to Shawbridge.....	8
Shawbridge to St. Sauveur.....	4
St. Sauveur to Ste. Adèle.....	6
Ste. Adèle to Lac à la Fourche.....	6
Lac à la Fourche to Ste. Agathe.....	6½
Ste. Agathe to St. Faustin.....	14
St. Faustin to St. Jovite.....	7½
St. Jovite to Summit Lake.....	8
Summit Lake to La Chute aux Iroquois.....	7
La Chute aux Iroquois towards Désert.....	3

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“Such instalments to be proportionate to the value of the portions so completed in comparison with that of the whole work undertaken, to be established as aforesaid.”

207. For seventy-five miles of the railway from Shelburne, in the county of Shelburne, and from Liverpool, in the county of Queen's towards Annapolis, in the province of Nova Scotia, to be so contracted for as to secure the construction to both Shelburne and Liverpool, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 240,000
208. To the Inverness and Richmond Railway Company, for fifty miles of their railway from Port Hawkesbury to Broadcove, a subsidy not exceeding \$1,000 per mile, nor exceeding in the whole....	50,000
209. To the International Railway Company, for a railway from Sherbrooke to the international boundary, the balance remaining unpaid of the subsidy granted by the Act 46 Vic., chapter 25, not exceeding in the whole.....	3,840
210. For completing the Montreal and Sorel Railway from St. Lambert to Sorel.....	40,000
211. To the Pontiac Pacific Junction Railway Company, for seven and a half miles of their railway, from Hull to Aylmer, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	24,000
212. To the Montreal and Lake Maskinongé Railway Company, for three and a half miles of their railway, the distance which the subsidy granted by the Act 49 Vic., chapter 10, is short of covering from St. Félix to Lake Maskinongé, in the parish of St. Gabriel, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	10,200
213. To the Great Eastern Railway Company, for a bridge over the Nicolet River, and also a bridge on the St. Francis River, a subsidy of 15 per cent on the value of the structure, not to exceed.....	37,500
214. To the Drummond County Railway Company, for twenty-four miles of their railway, from Drummondville to Ste. Rosalie, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	76,800
215. To the Great Northern Railway Company, for fifteen miles of their railway, from, at or near Montcalm to the Canadian Pacific Railway, between Joliette and St. Félix de Valois, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000
216. To the Lake Temiscamingue Colonization Railway Company, for twenty miles of their railway, from the northern end of the fifteen miles subsidized by the Act 52 Vic., chapter 3, to the Long Sault, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
217. To the Maskinongé and Nipissing Railway Company, for fifteen miles of their railway, from the northern end of the 15 miles subsidized by the Act 52 Victoria, chapter 3, towards the parish of St. Michel des Saints, on the River Mattawa, in the province of Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000
218. To the St. Lawrence and Adirondack Railway Company, for eighteen miles of their railway, from Valleyfield to Huntingdon, on the Montreal and Champlain Junction Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	57,600
219. To the Quebec Central Railway Company, for ninety miles of their railway, from St. Francis Station, on the Quebec Central Railway, to a point on the Atlantic and North-western Railway,	

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	near Moose River, or from a point on the Quebec Central Railway between the Chaudière River and Tring Station, to a point on the International Railway at or near Lake Megantic, in lieu of the subsidy granted by the Act 51 Victoria, chapter 3, a subsidy not exceeding \$21,191.54 per annum for twenty years, or a guarantee of a like sum for a like period, as interest on the bonds of the company, such annual subsidy for twenty years representing a grant in cash of.....	\$288,000
220.	To the Quebec and Lake St. John Railway Company, for a railway bridge over the St. Charles River, to give access to the city of Quebec, a subsidy not to exceed in the whole \$30,000; also for twelve miles of their railway from Lorette via Charlesbourg to Quebec, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$38,400.....	68,400
221.	For a railway from Summerside to Richmond Bay, in the province of Prince Edward Island, three miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	9,600
222.	To the Columbia and Kootenay Railway Company, for thirty-five miles of their railway, from the outlet of Kootenay Lake to a point on the Columbia River as near as practicable to the junction of the Kootenay and Columbia Rivers, a subsidy not exceeding \$3,200 per mile, nor to exceed in the whole.....	112,000
223.	For a railway from a point on the Intercolonial Railway through the Stewiacke Valley on a line which will afford facilities of communication with the Iron Mines, Springside, Upper Stewiacke and Musquodoboit settlements, twenty-five miles, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
224.	For a railway from Fredericton to the village of Prince William in the province of New Brunswick, twenty-two miles, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
225.	To the St. John Valley and Rivière du Loup Railway Company, for twenty-two miles of their railway from the village of Prince William towards the town of Woodstock, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
226.	To the Témiscouata Railway Company, for sixteen miles of their railway, from the west end of the twenty miles of their branch railway from Edmundston, subsidized by the Act 51 Victoria, chapter 3, towards the St. Francis River, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200
227.	For a railway from the north end of the fourteen miles for which a subsidy was granted by the Act 50 and 51 Victoria, chapter 24, to the Tobique Valley Railway Company, from Perth Centre towards Plaister Rock Island, eleven miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	35,200
228.	To the Orford Mountain Railway Company, for thirty one miles of their railway, between Eastman and Kingsbury, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	99,200
229.	For a railway from Lachine Bank, on a line of the Grand Trunk Railway, to a point at or near Rivière des Prairies, a distance of fifteen miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose, shall be granted to such companies respectively; the other subsidies,

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including subsidies granted for railways over a line extending beyond a point to which any company hereinbefore mentioned by name is authorized to construct its railway, shall be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively. All the lines for the construction of which subsidies are granted shall be commenced within two years from the first day of July next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council,—except the Erie and Huron Railway, which shall be completed within two years from the first day of July next. And they shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specifying an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make. The location, also, of every such line of railway shall be subject to the approval of the Governor in Council. And all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as regards the Erie and Huron Railway Company, upon which payment shall be made only upon the completion of the work—except, also as regards the subsidies to the Inverness and Richmond Railway, which shall be paid on the completion of each ten mile section, in accordance, as nearly as practicable, with the agreement between the company and the municipality of Inverness, and with section four of the Act of the Legislature of Nova Scotia, 1890, intituled: An Act to enable the county of Inverness to borrow money—except, also, as regards the subsidies to the Great Eastern Railway Company for bridges over the Nicolet and St. Francis Rivers, and to the Quebec and Lake St. John Railway for the bridge over the St. Charles River, upon which shall be paid fifteen per cent of the value of work done, on monthly progress estimates certified by the Chief Engineer and upon the approval of the Minister of Railways and Canals—and except also the subsidy granted to the Quebec Central Railway Company, the first annual payment upon which shall be made at the end of twelve months from the date of the Chief Engineer's certificate of the completion of the work, and each subsequent payment at the end of each twelve months thereafter, for the term of twenty years.

“The granting of such subsidies to the companies mentioned, respectively, shall be subject to such conditions for securing running powers or traffic arrangements or other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those subsidized, as the Governor in Council determines.”

By the special Act 53 Vic., ch. 5, 1890 (*Assented to 16th May, 1890*):—

230. In order to enable the Calgary and Edmonton Railway Company to construct so much of their railway as reaches from a point on the line of the Canadian Pacific Railway Company within the town of Calgary to a point on the North Saskatchewan River near Edmonton, the Governor in Council may enter into a contract with such company for the transport of men, supplies, materials and mails for twenty years, and may pay for such services during the said term, eighty thousand dollars per annum, in manner following, that is to say: the sum of eighty thousand dollars to be paid annually on the construction of the railway from Calgary to a point on the North Saskatchewan River near Edmonton,—such payment to be computed from the date of the completion of the railway between such points: Provided that the Governor General in Council may order such sums to be paid in semi-annual instalments, and may permit the company to assign the same by way of security for any bonds or securities which may be issued by the company in respect of the company's undertaking.

By 54-55 Victoria, ch. 8, 1891 (*Assented to 30th Sept., 1891*):—

231. To the Great Northern Railway Company, for a railway from a point at or near New Glasgow or St. Lin to or near to Montcalm, in the province of Quebec, eighteen miles, the balance

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	remaining unpaid of the subsidy, not exceeding \$3,200 per mile, granted by the Act forty-ninth Victoria, chapter ten, nor exceeding in the whole	\$ 28,100 00
232.	To the Quebec and Lake St. John Railway Company, for the railway bridge over the St. Charles River to give access to the city of Quebec, the difference between the amount already paid to the company and the sum of \$30,000 mentioned as not to be exceeded by the Act fifty-third Victoria, chapter two, a subsidy not exceeding	5,250 00
233.	To the Oshawa Railway Company, for seven miles of their railway from Port Oshawa towards Raglan, in lieu of the subsidy for a like amount granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	22,400 00
234.	To the St. Lawrence, Lower Laurentian and Saguenay Railway Company, for the section of their railway from Grand Piles, on the St. Maurice River to its junction with the Quebec and Lake St. John Railway, the balance remaining unpaid of the subsidy granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole	92,784 00
235.	To the Great Eastern Railway Company, for thirty-miles of their railway, from the River St. Francis to the Arthabaska Railway at St. Grégoire station, the balance remaining unpaid of the subsidy, not exceeding \$3,200 per mile, granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole	79,700 00
236.	To the South Ontario Pacific Railway Company, for forty-nine and one-half miles of their railway from Woodstock to Hamilton, in the province of Ontario, in lieu of the subsidy for a like amount granted by the Act fifty-second Victoria, chapter three, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	158,400 00
237.	To the Montreal and Ottawa Railway Company (formerly the Vaudreuil and Prescott Railway Company), for thirty miles of their railway from Vaudreuil towards Hawkesbury, the balance remaining unpaid of the subsidy granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, not exceeding in the whole	46,040 00
238.	To the Tobique Valley Railway Company, for fourteen miles of their railway from Perth Centre station towards Plaister Rock Island, in lieu of the subsidy for a like amount granted by the Act passed in the session held in the fiftieth and fifty-first years of Her Majesty's reign, chapter twenty-four, a subsidy not exceeding \$6,400 per mile, nor exceeding in the whole	89,600 00
239.	To the Kingston, Smith's Falls and Ottawa Railway Company for fifty-six miles of their railway from the city of Kingston to Smith's Falls, in lieu of the subsidies, not to exceed \$179,200, granted by the Acts fifty-second Victoria, chapter three, and fifty-third Victoria, chapter two, a subsidy not exceeding \$12,534 per annum, to be paid in semi-annual instalments of \$6,267 each, for twenty years, which represents a grant in cash of	179,200 00

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“ Provided, that upon the completion of twenty-eight miles of the said railway a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole fifty-six miles ; Provided also, that the company may deposit with the Minister of Finance and Receiver General a sum not exceeding \$1,170,000, in consideration whereof there shall be paid to the company, for twenty years, a semi-annual annuity calculated on a basis of three and one-half per cent on the amount so deposited ; Provided further, that the Governor in Council may permit the company to assign the said subsidy and annuity to trustees by way of security for any bonds or securities which may be issued by the company in respect of their undertaking.”

240. To the Brockville, Westport and Sault Ste. Marie Railway Company, for twenty miles of their railway, from a point at or near Newboro' towards Palmer's Rapids, in the province of Ontario, in lieu of a subsidy for a like amount granted by the Act fifty-second Victoria, chapter three, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$64,000 00

“ Provided that the subsidy hereby granted to the Brockville, Westport and Sault Ste. Marie Railway Company may be paid by instalments, on the completion of each section of the railway as follows, that is to say :—

Sections.	Length in miles.
From, at or near Newboro' to Westport.....	4
From Westport towards Palmers Rapids.....	16

“ The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall be granted to such companies respectively ; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council ; and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals and specified in an agreement to be made in each case by the company with the Government, and which the Government is hereby empowered to make ; the location, also of every such line of railway, shall be subject to the approval of the Governor in Council ; and all the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as to the subsidy granted to the Kingston, Smith's Falls and Ottawa Railway Company, the first semi-annual payment upon which shall be made at the end of six months from the date of the Chief Engineer's certificate of the completion of twenty-eight miles of the railway, and each subsequent payment at the end of each six months thereafter, for the term of twenty years,—except also as to the Quebec and Lake St. John Railway Company, the subsidy to which shall be paid upon the completion of the work,—except also as to the Brockville, Westport and Sault Ste. Marie Railway Company, the subsidy to which shall be paid as follows : on the completion of that portion of the said road from, at or near Newboro' to Westport, a distance of four miles, the sum of twelve thousand eight hundred dollars, and on the completion of the remaining sixteen miles from Westport towards Palmer's Rapids, the sum of fifty-one thousand two hundred dollars.

“ Within one month after the commencement of each session of Parliament, whilst any of the said moneys are being paid out, there shall be laid before Parliament a statement showing all payments of such moneys during the then next preceding year, the names of the respective persons to whom such payments have been made, and the amounts paid them respectively, together with the engineer's report upon which pay-

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ments have been recommended, and copies of all contracts between the Government and the company under which the said subsidies are authorized to be paid.

"The granting of such subsidies respectively shall be subject to such conditions for securing such running power or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

By the Act 55-56 Victoria, chap. 5, 1892 (*Assented to 9th July, 1892*):—

241.	To the Lake Erie and Detroit River Railway Company, for fifty-eight miles of their railway from a point at or near Cedar Creek to the town of Ridgetown, in lieu of the subsidies granted to the Lake Erie and Detroit River Railway Company by the Act 53 Victoria, chapter 2, and to the Amherstburg, Lake Shore and Blenheim Railway Company by the Act 52 Victoria, ch. 3.	\$224,000 00
242.	To the Ottawa, Arnprior and Parry Sound Railway Company, for fifty-five miles of their railway from Barry's Bay towards the Northern Pacific Junction Railway, a subsidy not exceeding \$6,400 per mile on the first twenty-seven and a half miles out from Barry's Bay, and not exceeding \$3,200 per mile on the second twenty-seven and a half miles, nor exceeding in the whole.	264,000 00
243.	To the Canadian Pacific Railway Company or to the Columbia and Kootenay Railway and Navigation Company, for a railway from a point on the Canadian Pacific Railway at or near Revelstoke to the head of Arrow Lake, for twenty-five miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	80,000 00
244.	To the Tobique Valley Railway Company, for a railway from the north end of the eleven miles for which a subsidy was granted by the Act 53 Victoria, chapter 2, to Plaister Rock Island, for 3 miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	9,600 00
245.	To the Monfort Colonization Railway Company, for twenty-one miles of their railway from Lachute, St. Jérôme or a point at or near St. Sauveur, on the line of the Montreal and Western Railway, to Monfort and westward, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	67,200 00
246.	To the Ontario, Belmont and Northern Railway Company, for ten miles of their railway from the Belmont iron mines to the Canadian Pacific Railway and the Central Ontario Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	32,000 00
247.	To the Montreal and Champlain Junction Railway Company, the balance remaining unpaid of the subsidies granted by the Acts 50-51 Victoria, chapter 24, and 51 Victoria, chapter 3, a subsidy of.	15,100 00
248.	To the Buctouche and Moncton Railway Company, for thirty-two miles of their railway from Moncton to Buctouche, the balance remaining unpaid of the subsidy, not exceeding \$3,200 per mile, granted by the Acts 49 Victoria, chapter 10, and 50-51 Victoria, chapter 24, not exceeding in the whole.	35,480 00
249.	To the Cobourg, Northumberland and Pacific Railway Company, for nineteen miles of their railway from Cobourg to the Ontario and Quebec Railway (in addition to the subsidy granted by the Act 53 Victoria, chapter 2), a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	60,800 00

250.	For a railway from the parish of St. Rémi, in the county of Napierville, to St. Cyprien in the said county, for twelve miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 38,400 00
251.	To the Inverness and Richmond Railway Company (or any other company undertaking the work), for twenty-five miles of their railway from a point on the Cape Breton Railway, at or near Orangedale, to Broadcove, a subsidy not exceeding \$3,200 per mile, in lieu of the subsidy of \$50,000 granted to the said railway company by 53 Victoria, chapter 2, and on the same conditions, not exceeding in the whole.....	80,000 00
252.	To the Nicola Valley Railway Company, for twenty-five miles of their railway from a point on the Canadian Pacific Railway at or near Spence's Bridge towards Nicola Lake	80,000 00
253.	To the Lotbinière and Megantic Railway Company, for fifteen miles of their railway from a point at or near St. Jean Deschailons towards Glen Lloyd, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	48,000 00
254.	To the Stewiacke and Lansdowne Railway Company, for a railway from a point on the Intercolonial Railway, through the Stewiacke Valley, on a line which will afford facilities of communication with the iron mines at Springside, Upper Stewiacke and Musquodoboit settlements, twenty-five miles, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000 00
255.	To the Philipsburg Junction Railway and Quarry Company, for six and seven-hundredths miles of their railway from Stanbridge Station to Philipsburg, in the county of Missisquoi, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	21,600 00
256.	To the Kingston, Napanee and Western Railway Company, for three miles of their railway from a point at or near Harrowsmith to a point at or near Sydenham, in lieu of the subsidy granted for this section of road by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	9,600 00
257.	For a railway from Cape Tourmente towards Murray Bay, in the province of Quebec, twenty miles, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	64,000 00
258.	To the Stewiacke and Lansdowne Railway Company, for a railway from Truro, or a point between Truro and Stewiacke, to Newport or to Windsor, in the province of Nova Scotia, for forty-nine miles of such railway, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	156,800 00
259.	To the Restigouche and Victoria Railway Company, for fifteen miles of their railway from Campbellton towards Grand Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	48,000 00
260.	For a railway from St. Johns to Ste. Rosalie, thirty-two miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	102,400 00
261.	For a railway from St. Placide to St. Andrew's, eight miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..	25,600 00
262.	For a railway to complete the connection between Sydney and Louisburg, in the county of Cape Breton, for twenty-eight miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	89,600 00

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- 263.** To the Belleville and Lake Nipissing Railway Company, for thirty miles of their railway from Belleville to Tweed and thence to Bridgewater, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$ 96,000 00
- 264.** To the Kingston, Smith's Falls and Ottawa Railway Company, for fifty-six miles of their railway from the city of Kingston to Smith's Falls, in lieu of the subsidies, not to exceed \$179,200, granted by the Acts 52 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy calculated on a basis of three and a half per cent on the amount of such subsidies so granted, to be paid in semi-annual instalments for such period not exceeding twenty-one years, as the company may elect, which represents a grant in cash of..... 179,200 00

“ Provided, that upon the completion of twenty-eight miles of the said railway a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole fifty-six miles : Provided also, that the company may deposit with the Minister of Finance and Receiver General, a sum not exceeding \$1,170,000, in consideration whereof there shall be paid to the company for such period not exceeding twenty years as the company may elect, a semi-annual annuity calculated on a basis of three and a half per cent on the amount so deposited. Provided further, that the Governor in Council may permit the company to assign the said subsidy and annuity to trustees by way of security for any bonds or securities which may be issued by the company in respect of their undertaking.”

- 265.** To the St. Catharines and Niagara Central Railway Company, for thirty-four miles of their railway from the city of St. Catharines to the city of Hamilton, in lieu of the subsidies, not to exceed \$108,000, granted by the Acts 52 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy calculated on a basis of three and a half per cent on the amount of the said subsidies, to be paid in semi-annual instalments for such period, not exceeding twenty years, as the company may elect, representing a grant in cash of \$108,000 : Provided that, upon the completion of ten miles of said railway, a semi-annual subsidy may be paid proportionate to the value of the portion so completed in comparison with that of the whole thirty-four miles. Provided also, that the company may deposit with the Minister of Finance and Receiver General a sum not exceeding \$400,000, in consideration whereof there shall be paid by the Government to the company, for such period not exceeding twenty years, as the company may elect, a semi-annual annuity, calculated on a basis of three and a half per cent on the amount so deposited, or a guarantee of a like sum, as interest on the bonds of the company : Provided further, that the company, with the approval of the Governor in Council, may assign the said subsidy and annuity to trustees by way of security for principal, or interest of any bonds or securities which may be issued by the company in respect of their undertaking, and the subsidy last above mentioned to the St. Catharines and Niagara Central Railway Company shall be paid in instalments, the first semi-annual payment upon which shall be made at the end of the six months from the date of the Chief Engineer's certificate of the completion of the first ten miles of railway, and each subsequent payment at the end of six months thereafter, for the term of twenty years or less. It is a condition of this subsidy that the sum not exceeding \$400,000 above mentioned shall be deposited with the Finance Minister before January 1st, 1893.

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266.	To the Woodstock and Centreville Railway Company, for a railway from Woodstock towards Centreville, twenty miles, in lieu of the subsidy granted by 50-51 Victoria, chapter 24, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole. . . .	\$64,000 00
267.	To the Brockville, Westport and Sault Ste. Marie Railway Company, for the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding \$3,200 per mile, and also for the balance remaining unpaid of the subsidy granted by the Act 53 Victoria, chapter 2, nor exceeding in the whole.	96,800 00
268.	To the New Glasgow Iron, Coal and Railway Company, for a railway from Eureka Junction on the Intercolonial Railway to a point at or near Sunnybrae, including a branch line to the charcoal iron furnace at Bridgeville, for twelve and a half miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	40,000 00
269.	To the Thousand Island Railway Company, for an extension of their railway to connect with the Brockville, Westport and Sault Ste. Marie Railway, the Kingston, Napanee and Western Railway, the Kingston, Smith's Falls and Ottawa Railway, or the waters of the Rideau Canal, and an extension across the mouth of the Gananoque River, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole.	44,000 00
	Payable, \$14,000 on the completion of the last named or southern extension, and the balance of said subsidy, being \$30,000, on the completion of the first named or northern extension of their railway.	
270.	To the Manitoulin and North Shore Railway Company, for thirty miles of their railway from Little Current to the Algoma Branch of the Canadian Pacific Railway, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	\$96,000 00
271.	To the Lindsay, Bobcaygeon and Pontypool Railway Company, for sixteen miles of their railway from the end of the line subsidized by the Act 53 Victoria, chapter 2, at the junction with the Midland Railway, to Pontypool, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	51,200 00
272.	For seventy-five miles of the railway from Sand Point, Shelburne Harbour, in Nova Scotia, to Annapolis Royal, in the county of Annapolis and to a junction at or near New Germany on the Nova Scotia Central Railway, with a view to future construction to Liverpool, in lieu of the subsidy of a like amount granted by the Act 53 Victoria, chapter 2, for the same length of railway from Shelburne and from Liverpool, towards Annapolis, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	240,000 00
273.	To the Kingston, Napanee and Western Railway Company, for twenty miles of their railway, being extensions or branches in the counties of Peterborough, Hastings, Addington, Frontenac or Leeds, towards iron deposits, a subsidy not exceeding \$3,200 per mile, payable in instalments regulated by the length of each of the said extensions, additions or branches, the subsidy not exceeding in the whole.	64,000 00
274.	To the St. John Valley and Rivière du Loup Railway Company, for ten miles of their railway from the north end of the line subsidized by the Act 53 Victoria, chapter 2, towards the town of Woodstock, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	48,000 00

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275.	To the Cobourg, Northumberland and Pacific Railway Company, for thirty miles of their railway from Cobourg to the Ontario and Quebec Railway, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 96,000 00
276.	To the Ottawa, Arnprior and Parry Sound Railway Company, for thirty miles of their railway, from Eganville to Barry's Bay, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000 00
277.	To the Ottawa, Arnprior and Parry Sound Railway Company, for twenty-two miles of their railway from a point on the Canadian Pacific Railway to Eganville, in lieu of the subsidy granted by the Act 51 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400 00
278.	To the Lake Témiscamingue Colonization Railway Company, for thirty-five miles of their railway from Mattawa to the Long Sault, in lieu of the subsidies granted by the Acts 52 Victoria, chapter 3, and 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	112,000 00
279.	To the Témiscouata Railway Company, for twelve miles of their railway from the north end of the section of the St. François Branch subsidized by the Act 51 Victoria, chapter 3, being the first twelve miles on the section subsidized by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$1,800 per mile, in addition to the subsidy already granted, and not exceeding in the whole.....	21,600 00
280.	To the Tilsonburg, Lake Erie and Pacific Railway Company, for sixteen miles of their railway from Port Burwell to Tilsonburg, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	51,200 00
281.	To the Woodstock and Centreville Railway Company, for six miles of their railway from the west end of their twenty miles subsidized by the Act 50-51 Victoria, chapter 24, to the international boundary between the province of New Brunswick and the state of Maine, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	19,200 00
282.	To the Lake Témiscamingue Colonization Railway Company, for 15 miles of their railway from the Long Sault to the crossing of the Kippewa River, a subsidy not exceeding \$3,200 per mile—and a subsidy of fifteen per cent on the value of a wooden truss bridge over the Ottawa River near Mattawa, not exceeding \$15,000,—nor exceeding in the whole.....	63,000 00
283.	To the Goderich and Wingham Railway Company, for thirty-one miles of their railway from Goderich to Wingham, via Port Albert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	99,200 00
284.	To the Joliette and St. Jean de Matha Railway Company, for eight miles of their railway from St. Félix de Valois to St. Jean de Matha, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	25,600 00
285.	To the Bracebridge and Baysville Railway Company, for fifteen miles of their railway from Bracebridge towards Baysville, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
286.	To the Nipissing and James Bay Railway Company, for twenty-five miles of their railway from, at or near North Bay station on	

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	the Canadian Pacific Railway towards James Bay, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 80,000 00
287.	For a railway from a point on the Intercolonial Railway between Ste. Flavie and Little Métis station to Matane, for fifty miles of such railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	160,000 00
288.	To the Ontario and Pacific Railway Company, for fifty-three and eighty-seven hundredths miles of their railway from Cornwall to Ottawa, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	172,400 00
289.	For a railway from a point on the line of the Canadian Pacific Railway on the Isle Jésus, in the county of Laval, towards St. Eustache, for twelve miles of such railway, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, to the Carillon and Grenville Railway Company, for twelve miles of their railway, from St. Eustache to Sault au Récollet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400 00
290.	For a railway from St. Eustache to St. Placide, in the county of Two Mountains, for eighteen miles of such railway, in lieu of the subsidy granted by the Act 49 Victoria, chapter 10, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600 00
291.	To the Port Arthur, Duluth and Western Railway Company, the balance remaining unpaid of the subsidy granted by the Act 51 Victoria, chapter 3, not exceeding, with the amount already paid, \$3,200 per mile, nor exceeding in the whole.....	114,125 00
292.	To the Drummond County Railway Company for four and six-tenths miles of their railway from Bull's Wharf, on the St. Lawrence River, near Nicolet, to Ste. Rosalie Junction, an excess of distance by the constructed line over the subsidies heretofore voted for a railway between the said points, \$3,200 per mile, not exceeding in the whole.....	14,720 00
293.	To the St. Lawrence and Adirondack Railway Company, for five and forty-two hundredths miles of their railway, from Huntingdon towards the international boundary, which, with the distance between Valleyfield and Huntingdon, twelve and fifty-eight hundredths miles, makes up the distance of eighteen miles named in the 53 Vic., chap. 2, granting a subsidy to this company, and for five and forty-hundredths miles from the east end of the eighteen miles referred to to the international boundary, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	25,024 00

“The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively ; the other subsidies may be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively ; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications, and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make ; the location also of every such line of railway shall be subject to the approval of the Governor in Council ; and all the said subsidies respectively shall be payable out of the Consolidated

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Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as to subsidies with respect to which it is hereinbefore otherwise provided, and except also as to the subsidy granted to the Kingston, Smith's Falls and Ottawa Railway Company, and the subsidy granted to the St. Catharines and Niagara Central Railway Company, the first semi-annual payments upon both of which shall be made at the end of six months from the date of the Chief Engineer's certificate of the completion of their railways respectively, and each subsequent payment at the end of each six months thereafter, for the term of twenty years or less.

“The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.”

294. Notwithstanding the expiration of the time limited by the Act 47 Victoria, chapter 8, and by the contract entered into with the Pontiac Pacific Junction Railway Company, the Governor in council may pay the balance remaining unpaid of the subsidy granted by the said Act to the said company, according as it becomes due and payable in accordance with the said contract, and subject to the terms and conditions applicable to the said subsidy under the terms of the said Act.

295. Notwithstanding the expiration of the time limited by the Act 52 Victoria, chapter 3, and by the contract entered into with the Quebec and Lake St. John Railway Company, the Governor in Council may pay the balance remaining unpaid of the subsidy granted by the said Act to the said company, according as it becomes due and payable in accordance with the said contract, and subject to the terms and conditions applicable to the said subsidy under the terms of the said Act; and notwithstanding anything contained in the Act 50-51 Victoria, chapter 24, the Governor in Council may also pay to the said company the balance remaining unpaid of the subsidy granted to the company by the said Act, amounting to \$12,800, on the four miles of their road from the north end of the main line subsidized towards Roberval.

By the Act 56 Vic., chap. 2, 1893 (*Assented to 1st April, 1893*):—

296. To the Great Eastern Railway Company, for twenty miles of their railway, from the east end of the line subsidized by the Act 50-51 Victoria, chapter 24, at St. Grégoire, towards the Chaudière Junction station on the Intercolonial Railway, in the province of Quebec, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... \$ 64,000 00

297. To the United Counties Railway Company, for thirty-two miles of their railway, from a point at or near the town of Iberville to St. Hyacinthe, and thence towards Sorel, in lieu of the subsidy granted by the Act 55-56 Victoria, chapter 5, for a railway from St. Johns to Ste. Rosalie, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 102,400 00

298. To the Ontario, Belmont and Northern Railway Company, for ten miles of their railway, divided into two sections: first, from the Belmont Iron Mines to Marmoraville; second, from Marmoraville to the junction with the Ontario Central Railway, in lieu of the subsidy granted by the Act 55-56 Victoria, chapter 5, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole..... 32,000 00

299. To the Central Ontario Railway Company, for twenty miles of their railway, from Coe Hill or Gilmore, or some point between

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	Coe Hill and Gilmore, to Bancroft, via L'Amable, or as near thereto as practicable, in lieu of the subsidy granted by the Act 48-49 Victoria, chapter 59, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 64,000 00
300.	To the Quebec and Lake St. John Railway Company, for thirty miles of their railway, from Lake St. John towards Chicoutimi, the balance remaining unpaid of the subsidy granted by the Act 51 Victoria, chapter 3, not exceeding in the whole.....	81,040 00
301.	To the Irondale, Bancroft and Ottawa Railway Company, for fifty miles of their railway, from the Victoria branch of the Midland Railway to the village of Bancroft, in the county of Hastings, the balance remaining unpaid of the subsidy granted by the Act 47 Victoria, chapter 8, and again granted by the Act 52 Victoria, chapter 3, not exceeding in the whole.....	145,000 00
302.	To the Beaulharnois Junction Railway Company, for thirty miles of their railway, from Ste. Martine towards St. Anicet, the balance remaining unpaid of the subsidy granted by the Act 50-51 Victoria, chapter 24, not exceeding in the whole.....	3,500 00
303.	To the St. Stephen and Milltown Railway Company, for three and a half miles of their railway, from the town of St. Stephen to the town of Milltown, in lieu of the subsidy granted by the Act 53 Victoria, chapter 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	11,200 00
304.	To the Quebec, Montmorency and Charlevoix Railway Company, for thirty miles of their railway, from the east bank of the River St. Charles, to or near to Cape Tourmente, in the province of Quebec, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole..	30,400 00
305.	To the Ottawa and Gatineau Valley Railway Company, for sixty-two miles of their railway, from Hull station towards Le Désert, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole.....	89,248 00
306.	To the Grand Trunk, Georgian Bay and Lake Erie Railway Company, for fifteen miles of their railway, from the village of Tara, or some point between Tara and Hepworth, to the town of Owen Sound, in the province of Ontario, in lieu of the subsidy granted by the Act 52 Victoria, chapter 3, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000 00
307.	To the Nova Scotia Central Railway Company (or to such person or persons or company as in the opinion of the Minister or acting Minister of Justice are entitled to the same) for eighty miles of their railway, from Lunenburg, on the east coast of Nova Scotia, westward to a point in the district of New Germany, together with a spur about three-fourths mile long to Bridgewater railway wharf, and from a point thirty-three and a half miles from Lunenburg and running to Middleton on the Windsor and Annapolis Railway, of unpaid subsidies granted by the Acts 50-51 Victoria, chapter 24, and 51 Victoria, chapter 3, an amount not exceeding in the whole.....	4,500 00
308.	To the Great Northern Railway Company, for eighteen miles of their railway, from a point at or near New Glasgow or St. Lin, to or near to Montcalm, in the province of Quebec, the balance remaining unpaid of the subsidy granted by the Act 54-55 Victoria, chapter 8, not exceeding in the whole.....	25,600 00
309.	To the Great Northern Railway Company, for fifteen miles of their railway, from, at or near Montcalm to the Canadian Pacific	

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	Railway between Joliette and St. Félix de Valois, in lieu of the subsidy granted by the Act 53 Victoria, chap. 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 48,000 00
310.	To the Montfort Colonization Railway Company, for twenty-one miles of their three-feet gauge railway from Lachute, St. Jérôme, or a point at or near St. Sauveur, on the line of the Montreal and Western Railway, to Montfort and westward, in lieu of the subsidy granted by the Act 55-56 Victoria, chapter 5, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	67,200 00
311.	To the Maskinongé and Nipissing Railway Company, for fifteen miles of their railway, from a point on the Canadian Pacific Railway at or near Maskinongé or Louiseville, towards the parish of St. Michel des Saints, on the river Mattawa, in the province of Quebec, and for fifteen miles of their railway from the north end of the fifteen miles above referred to, towards the parish of St. Michel des Saints on the river Mattawa, in the province of Quebec, in lieu of the subsidies granted by the Acts 52 Victoria, chap. 3, and 53 Victoria, chap. 2, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000 00
312.	To the Parry Sound Colonization Railway Company, for forty miles of their railway, from the village of Parry Sound to the village of Sundridge, or some other point on the Northern Pacific Junction Railway, in the province of Ontario, the balance remaining unpaid of the subsidy granted by the Act 52 Victoria, chapter 3, not exceeding in the whole.....	97,600 00
313.	To the Jacques Cartier Union Railway Company, for extending and completing their railway, in lieu of the subsidy granted by the Act 50-51 Victoria, chapter 24, a subsidy of.....	20,000 00
314.	To the Oshawa Railway Company, for seven miles of their railway and branches as follows: from Port Oshawa to a point at or near Edmondson's Falls mill site, near Mill Street, in the town of Oshawa (this portion being known as the "Lake" section of the said railway); thence to a point at or near the town hall in the town of Oshawa, and thence to the Oshawa station of the Grand Trunk Railway Company of Canada (this portion being known as the "Town" or "Northern" section of the said railway)—in lieu of the subsidy granted by the Act 54-55 Victoria, chapter 8, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	22,400 00

"All the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make: the location, also, of every such line of railway shall be subject to the approval of the Governor in Council.

"The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

"All the said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed

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in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as follows:—

“(a.) The subsidy to the Ontario, Belmont and Ottawa Railway Company, which shall be paid as follows: on the completion of the first section, an instalment proportionate to the value of the said section in comparison with that of the ten miles hereby subsidized, to be established as aforesaid, and the balance of the said subsidy on the completion of the second section;

“(b.) The subsidy to the Oshawa Railway Company, which shall be paid as follows: on the completion of the “Town” or “Northern” section, an instalment proportionate to the value of the said section in comparison with that of the seven miles hereby subsidized, to be established as aforesaid, and the balance of the said subsidy, on the completion of the “Lake” section of the said railway.”

By the Act 57-58 Vic., cap. 4, 1894. (*Assented to, 23rd July, 1894*):—

315.	To the Bracebridge and Baysville Railway Company, for fifteen miles of their railway from Bracebridge towards Baysville, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	\$ 48,000
316.	To the Brockville, Westport and Sault Ste. Marie Railway, the balance remaining unpaid of the subsidy granted by chapter 3 of 1889, not exceeding \$3,200 per mile, and also the balance remaining unpaid of the subsidy granted by chapter 2 of 1890, which was re-granted by chapter 5 of 1892; the whole not exceeding	86,800
317.	To the Tilsonburg, Lake Erie and Pacific Railway Company, for sixteen miles of their railway, from Port Burwell to Tilsonburg, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole . . .	51,200
318.	To the Brantford, Waterloo and Lake Erie Railway Company, for eighteen miles of their railway, from the town of Brantford to the village of Hagarville or the village of Waterford, or some intermediate point on the Canada Southern Railway, the balance remaining unpaid of the subsidy granted by chapter 24 of 1887, not exceeding \$3,200 per mile, nor exceeding in the whole . . .	4,790
319.	To the St. Catharines and Niagara Central Railway Company, for 34 miles of their railway from the city of St. Catharines to the city of Hamilton, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	108,800
320.	To the Montreal and Ottawa Railway Company (formerly the Vaudreuil and Prescott Railway Company), for thirty miles of their railway from Vaudreuil towards Hawkesbury, the balance remaining unpaid of the subsidy granted by chapter 24 of 1887; and for 30 miles of their railway from the western end of the 30 miles first mentioned towards Ottawa, the balance remaining unpaid of the subsidy granted by chapter 2 of 1890, not exceeding \$3,200 per mile; the whole not exceeding	118,400
321.	Notwithstanding the expiration of the time limited by chapter 2 of 1890, and by the contract entered into with the Quebec Central Railway Company, and notwithstanding anything otherwise in the said chapter 2 contained, the Governor in Council may pay the subsidy granted by the said chapter to the said company at the present worth of the twenty annual payments mentioned in the said chapter (interest computed at four per cent), for and upon the completion of its railway extending from a point between the Chaudière River and Tring Station to a point on the International Railway at or near Lake Megantic, and upon the inspection and acceptance of the same by the Chief Engineer of Railways and Canals, the sum in all of	288,000

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322.	To the Philipsburg Junction Railway and Quarry Company, for $\frac{67}{100}$ mile of their railway from Stanbridge Station to Philipsburg, in the county of Missisquoi and a branch to Missisquoi Bay, the balance remaining unpaid of the subsidy granted by chapter 5 of 1892, not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 2,912
323.	To the Joliette and St. Jean de Matha Railway Company, for 8 miles of their railway from St. Félix de Valois to St. Jean de Matha, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	23,600
324.	To the Lake Temiscamingue Colonization Railway Company, for their railway from Mattawa to the foot of the Kippewa Lake, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$160,000,—also 15 per cent on the value of a wooden truss bridge over the Ottawa River near Mattawa, not to exceed \$15,000 in all, in lieu of the subsidies granted by chapter 5 of 1892,—also the balance remaining unpaid of the subsidy granted by chapter 24 of 1887, for their railway from Long Sault to Lake Kippewa, a subsidy not exceeding \$3,200 per mile of railway and 15 per cent on the value of the bridges,—also, a sum of \$1,750 additional per mile on their said railway from Mattawa to the foot of the Kippewa Lake; the whole not exceeding.....	274,940
325.	For a railway from St. Placide to St. Andrews, 8 miles, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	25,600
326.	For a railway from St. Eustache to St. Placide, in the county of Two Mountains, for 18 miles of such railway, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	57,600
327.	For a railway from a point on the line of the Canadian Pacific Railway on Isle Jésus, in the county of Laval, towards St. Eustache, for 12 miles of such railway, in lieu of the subsidy granted by chapter 5 of 1892, to the Carillon and Grenville Railway Company, for 12 miles of their railway, from St. Eustache to Sault au Récollet, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
328.	For a railway from the parish of St. Rémi, in the county of Napierville, to St. Cyprien, in the said county, for 12 miles of such railway, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
329.	To the Pontiac Pacific Junction Railway Company, for bridging the several channels of the Ottawa River at Culbute and west thereof, a subsidy of \$31,500, to be paid out monthly as the work progresses, upon the certificate of the chief engineer of government railways, in the proportion which the value of the work executed bears to the value of the whole work undertaken; and for 3 miles of their railway extending from a point 3 miles east of Pembroke to Pembroke, in the province of Ontario, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole \$9,600, in lieu of the subsidy granted by chapter 3 of 1888; provided that the entire work subsidized upon this railway shall be completed within 4 years from the passing of this Act; the subsidy granted by this Act not to exceed in the whole.....	41,100

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330. To the Pontiac Pacific Junction Railway Company, for the construction or acquisition of $7\frac{1}{2}$ miles of railway, from Hull to Aylmer, in lieu of the subsidy granted by chapter 2 of 1890, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	\$ 24,000
331. To the Pontiac Pacific Junction Railway Company, for 85 miles of their railway from Aylmer to Pembroke, the balance remaining unpaid of the subsidy granted by chapter 8 of 1884, less the subsidy granted for the line from Hull to Aylmer, provided the Ottawa River is crossed at some point not east of Lapasse, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole	73,172
332. To the Harvey Branch Railway Company, for 3 miles of their railway from the southern terminus of the Albert Railway to Harvey Bank, the balance remaining unpaid of the subsidy granted by chapter 24 of 1887, not exceeding \$3,200 per mile, nor exceeding in the whole.	4,046
333. For a railway from a point on the Intercolonial Railway near Newcastle via Douglastown, to a point on the River Miramichi opposite the town of Chatham, in the province of New Brunswick, 6 miles, in lieu of the subsidy granted by chapter 10 of 1886, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	19,200
334. For a railway from some point on the Joggins Railway, near the Hebert River, to Young's Mills, in the province of Nova Scotia, a distance of 5 miles, in lieu of the subsidy granted by chapter 3 of 1889, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	16,000
335. To the Woodstock and Centreville Railway Company, for a railway from Woodstock to the international boundary between the province of New Brunswick and the state of Maine, 26 miles, in lieu of the subsidies granted by chapter 24 of 1887 and chapter 2 of 1890 a subsidy not exceeding \$3,200 per mile nor exceeding in the whole.	83,200
336. For 90 miles of the railway from Newport or Windsor to Truro, or to a point between Truro and Stewiacke, and from a point on the said railway to a point at or near Eastville, and from Eastville through the valley of the Musquodoboit River towards a point on the proposed Dartmouth branch of the Intercolonial, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile; and also for a railway bridge over the Shubenacadie River on the line of the said railway, a subsidy of 15 per cent on the value of the structure; the whole not exceeding	300,000
337. To the Nipissing and James Bay Railway Company, for 25 miles of their railway from, at or near North Bay Station on the Canadian Pacific Railway towards James Bay, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile; also for 43 miles of their railway from North Bay towards Lake Tanagaming, a subsidy not exceeding \$3,200 per mile; the whole not exceeding	217,000
338. To the Lotbinière and Mégantic Railway Company, for 15 miles of their railway, in addition to the 15 miles already subsidized and built, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	48,000
339. To the Drummond County Railway Company, for 30 miles of their railway from St. Leonard northerly towards a junction with the Intercolonial Railway at Chaudière Junction, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	96,000

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340.	For a railway from Lime Ridge, in the county of Wolfe, in the province of Quebec, northerly through the county of Wolfe and into the county of Megantic, a distance not exceeding 50 miles from Lime Ridge, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 160,000
341.	To the Strathroy and Western Counties Railway Company, for 25 miles of their railway from St. Thomas through the counties of Elgin and Middlesex, towards Forest Station or Park Hill, on the Grand Trunk Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
342.	To the Parry Sound Colonization Railway Company, for 20 miles of their railway east from Parry Sound, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
343.	To the Manitoulin and North Shore Railway Company, for 10 miles of their railway from Little Current to Nelson, on the Algoma Branch of the Canadian Pacific Railway, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	32,000
344.	To the United Counties Railway Company for 32 miles of their railway from Iberville to Sorel, in addition to the 32 miles already subsidized, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	102,400
345.	To the Joliette and St. Jean de Matha Railway Company, for 12 miles of their railway from St. Jean de Matha to Ste. Emelie de L'Energie, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	38,400
346.	To the Great Northern Railway Company, for 22 miles of their railway, from the eastern end of the 15 miles subsidized by chapter 2 of 1893 to a point between Joliette and St. Felix de Valois, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
347.	To the Quebec and Lake St. John Railway Company, for 2 miles of the Chicoutimi branch of their railway, from the east end of the 50 miles already subsidized and built eastward to deep water at Chicoutimi, a subsidy not exceeding \$3,200 per mile; also for 12 miles from the 52nd mile on the Chicoutimi branch to Ha Ha Bay, a subsidy not exceeding \$3,200 per mile; the whole not exceeding.....	44,800
348.	To the Pontiac and Ottawa Railway Company, for 23 miles of their railway from the point of divergence from the Pontiac Railway to Ferguson's Point, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	73,600
349.	To the Ottawa and Gatineau Valley Railway Company, for 20 miles of their railway from the eastern end of the 62 miles already subsidized towards Désert, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000
350.	To the Canada Eastern Railway Company for 6 miles of their railway from the town of Chatham to Black Brook, a subsidy not exceeding \$3,200 per mile; also for 4 miles of their railway for a branch to the village of Nelson, a subsidy not exceeding \$3,200 per mile; the whole not exceeding.....	32,000
351.	For a railway from Cross Creek Station, on the Canada Eastern Railway to Stanley village, in the county of York, in the province of New Brunswick, 6 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	19,200
352.	To the Restigouche and Victoria Railway Company, for 20 miles of their railway from the western end of the 15 miles subsidized by chapter 5 of 1892, towards Grand Falls, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	64,000

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353.	To the Central Railway Company of New Brunswick, for 15 miles of their railway from Chipman station to the Newcastle coal fields, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 48,000
354.	To the Tobique Valley Railway Company, for 15 miles of their railway from the present terminus at Plaister Rock easterly, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	48,000
355.	Towards the restoration or renewal of the railway bridge on the South-eastern Railway over the Yamaska River at Yamaska, a subsidy equal to one-third of the actual cost of the renewal of the bridge, but the grant not to exceed in the whole.....	50,000
356.	To the Boston and Nova Scotia Coal and Railway Company, for 10½ miles of their railway from the north end of the section already subsidized to Broad Cove, a subsidy not exceeding \$3,200 per mile; also for 25 miles of their railway from a point on the Cape Breton Railway at or near Orangedale towards Broad Cove, in lieu of the subsidy granted by chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile; the whole not exceeding	113,600
357.	For a railway from Port Hawkesbury towards Cheticamp, 25 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	80,000
358.	To the Manitoba North-western Railway Company, for 100 miles of the extension of their main line from its present western terminus towards Prince Albert,—the company relinquishing 3,200 acres of the land grant per mile, and the whole road to be operated as a continuous line of railway under one management, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	320,000
359.	For a line of railway from the junction of the Elk and Kootenay Rivers to Coal Creek, a distance of 34 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	108,800
360.	For a railway from Abbotsford Station on the Mission Branch of the Canadian Pacific Railway to the town of Chilliwack, 21 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	67,200
361.	To the Nicola Valley Railway Company, for 28 miles of their railway from the western end of the section of their road subsidized by chapter 5, of 1892, towards Nicola Lake, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	89,600
362.	To the Nakusp and Slocan Railway Company, for 38 miles of their railway from the town of Nakusp to a point at or near the Forks of Carpenter Creek, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	121,600
363.	To the Pontiac and Kingston Railway Company, for 22 miles of a railway from Portage du Fort to Upper Thorne Centre, via Shawville, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	70,400
364.	To the New Glasgow Iron, Coal and Railway Company, for 5 miles of their railway, from Sunnybrae to Kerrogare, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole....	16,000 00
365.	To the South Shore Railway Company, for 35 miles of their railway from Yarmouth towards Shelburne and Lockport, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	112,000 00
366.	To the Cape Breton Railway Extension Company, for 30 miles of railway from Port Hawkesbury to St. Peter's, on their line of railway from Port Hawkesbury to Louisbourg, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	96,000 00

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367. For a railway from a point on the Intercolonial Railway between Norton and Sussex Stations towards Havelock, 20 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	\$ 64,000 00
368. For a railway from St. John to Barneville, for a distance of 10 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	32,000 00
369. For a line of railway from Cap de la Magdeleine to connect with the Piles Branch of the Canadian Pacific Railway, 3 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	9,600 00
370. To the Canada Eastern Railway Company, for an extension of one mile from the western end of their railway, to connect with the Canadian Pacific Railway, a subsidy not exceeding.	3,200 00
371. To the Great Northern Railway Company, for 30 miles of their railway from its junction with the Lower Laurentian Railway near St. Tite, in the vicinity of the River St. Maurice, westward, in lieu of the subsidy granted to the Maskinongé and Nipissing Railway Company by chapter 2 of 1893, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	96,000 00
372. To the Lindsay, Bobcaygeon and Pontypool Railway Company, for 16 miles of their railway from Bobcaygeon to the Midland Railway, and for another 16 miles from the end of the first mentioned 16 miles to Pontypool, in lieu of the subsidies granted by chapter 2 of 1890, and chapter 5 of 1892, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	102,400 00
373. To the Montfort Colonization Railway Company, for 12 miles of their railway from the end of the 21 miles already subsidized westward to a point on the Rouge River, in the county of Argenteuil, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	38,400 00
374. For a railway from a point on the Caraquet Railway, at or near Pokemouche siding, towards Tracadie village, 12 miles, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.	38,400 00

The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as shall be approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railway and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

The said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized,—except as to subsidies with respect to which it is hereinbefore otherwise provided, and except also as to the

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subsidy granted to the Great Northern Railway Company by chapter two of 1893, for fifteen miles from Montcalm to the Canadian Pacific Railway, which shall be paid as follows: on the completion of the eighteen miles from New Glasgow to Montcalm and of two miles out of the fifteen miles from Montcalm to the Canadian Pacific Railway, an instalment proportionate to the value of the ten miles out of the total mileage subsidized by chapter two of 1893, to be established as aforesaid, and the balance of the said subsidy on the completion of the remaining thirteen miles of the said railway.

No subsidies were authorized by 58-59 Vict. (1895), nor by 59 Vict. (1896).

By the Act 60-61, chapter 4, 1897 (*Assented to 29th June, 1897*).

1. In this Act, unless the context otherwise requires, the expression "cost" means the actual, necessary and reasonable cost, and includes the amount expended upon any bridge up to and not exceeding twenty-five thousand dollars, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway, nor the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated), which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

375. To the Ottawa and New York Railway Company, for $53\frac{8.7}{100}$ miles of their railway from Cornwall to Ottawa, in lieu of the subsidy granted by chapter 5 of the statutes of 1892;

376. To the Kingston, Smith's Falls and Ottawa Railway Company, for 101 miles of their railway from Kingston, or a junction with the Grand Trunk Railway at Rideau or some other point near Kingston, to Ottawa, in lieu of the subsidy granted by chapter 5 of 1892;

377. For a railway from a point on the Canadian Pacific Railway, at or near either Welsford or Westfield, or between the said two points, to Gagetown, in the county of Queen's, New Brunswick, not exceeding 30 miles, in lieu of the subsidy granted by chapter 2 of 1890;

378. To the Cobourg, Northumberland and Pacific Railway Company, for 50 miles of their railway from Cobourg to the Ontario and Quebec Railway, in lieu of the subsidies granted by chapter 5 of 1892;

379. To the Ottawa and Gatineau Railway Company, for 20 miles of their railway from the end of the 62nd mile subsidized towards Désert, in lieu of the subsidies granted by chapter 4 of 1894;

380. To the Great Northern Railway Company, for 9 miles of their railway, being shortage in distance between Montcalm and St. Tite;

381. To the St. Gabriel de Brandon and Ste. Emélie de l'Energie Railway Company, for 15 miles of their railway from St. Gabriel to Ste. Emélie de l'Energie, and 5 miles from a point on the main line to St. Jean de Matha, making in all 20 miles, in lieu of the subsidy granted by chapter 4 of 1894;

382. To the Central Railway Company of New Brunswick, for 15 miles of their railway from Chipman Station to Newcastle Coal Fields, county of Queen's, in lieu of the subsidy granted by chapter 4 of 1894;

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- 383.** To the Gulf Shore Railway Company, for $5\frac{1}{2}$ miles of their railway from the end of the section subsidized to Tracadie and thence to Big Tracadie, New Brunswick ;
- 384.** For a railway from Campbellton, on the Intercolonial Railway, towards Grand Falls, New Brunswick, a distance of 20 miles, commencing at Campbellton, in lieu of the subsidy granted by chapter 4 of 1894 ;
- 385.** To the Pontiac Pacific Junction Railway Company, for $7\frac{1}{2}$ miles of their railway from Hull to Aylmer, in lieu of the subsidy granted by chapter 2 of 1890 ;
- 386.** To the Schomberg and Aurora Railway Company, for 15 miles of their railway from a point on the Grand Trunk Railway between King and Newmarket to Schomberg, in the province of Ontario ;
- 387.** To the Tilsonburg, Lake Erie and Pacific Railway Company, for $3\frac{50}{100}$ miles of their railway from the present terminus, through Tilsonburg to the Michigan Central Railway, in the province of Ontario.
- 388.** To the Ottawa, Arnprior and Parry Sound Railway Company, for 52 miles of their railway, from the crossing of the Northern Pacific Junction Railway to 55 miles west of Barry's Bay, and also for 4 miles of their railway across Parry Island ;
- 389.** To the Pembroke Southern Railway Company, for 20 miles of their railway from Pembroke to Golden Lake, in the province of Ontario ;
- 390.** To the Ontario and Rainy River Railway Company, for 80 miles of their railway from the Port Arthur, Duluth and Western Railway to Rainy Lake, in the province of Ontario ;
- 391.** To the Strathroy and Western Counties Railway Company, for 7 miles of their railway, commencing at a point at or near Caradoc Station on the Canadian Pacific Railway and extending to the town of Strathroy ;
- 392.** To the Phillipsburg Railway and Quarry Company, for $\frac{66}{100}$ mile of their railway from the end of the subsidized section to the government wharf at Phillipsburg ;
- 393.** To the United Counties Railway Company, for 1 mile of their railway from Johnson to St. Grégoire Station, in the province of Quebec ;
- 394.** To the St. Lawrence and Adirondack Railway Company, for $13\frac{1}{2}$ miles of their railway from Beauharnois to Caughnawaga, in the province of Quebec ;
- 395.** To the East Richelieu Valley Railway Company, for 24 miles of their railway from Iberville to St. Thomas, boundary of Missisquoi County, in the province of Quebec ;
- 396.** To the Portage du Fort and Bristol Branch Railway Company, for 15 miles of their railway to a point at or near Shawville, in the county of Pontiac ;
- 397.** For a railway from a point at or near Windsor Junction, on the Intercolonial Railway, to Upper Musquodoboit, for a distance of 40 miles ;
- 398.** To the St. Stephens and Milltown Railway Company, for $1\frac{4}{100}$ mile of their railway from Milltown to St. Stephen, in the province of New Brunswick ;
- 399.** For a railway from Sunny Brae to Country Harbour, and from a point at or near Country Harbour Cross Roads to Guysboro', in the province of Nova Scotia, a distance of 65 miles ;
- 400.** For a railway from Port Hawkesbury, Nova Scotia, to Port Hood and Broad Cove, 53 miles, in lieu of the subsidy granted by chapter 4 of 1894 ;
- 401.** For a railway from a point on the Central Railway in the county of Lunenburg, Nova Scotia, to the town of Liverpool, via the village of Caledonia, or to the village of Caledonia via Liverpool, or for any part thereof, the whole distance not exceeding 62 miles ;
- 402.** For a railway from Indian Garden on the line of the Central Railway, to Shelburne, in the province of Nova Scotia, a distance of 35 miles ;
- 403.** To the Coast Railway Company of Nova Scotia, for 61 miles of their railway from Yarmouth to Port Clyde, in the province of Nova Scotia ;
- 404.** For a railway from Brookfield Station on the Intercolonial Railway to Eastville, 30 miles ;

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- 405.** To the Great Northern Railway Company, for 35 miles of their railway from St. Jérôme, in the province of Quebec, to Hawkesbury, in the province of Ontario ;
- 406.** To the Drummond County Railway Company, for 42½ miles of their railway from Moose Park to Chaudière River, provided that the amount of the said subsidy shall be refunded to the Government of Canada in the event of the company's railway from Ste. Rosalie to Chaudière River being purchased or leased for a term of years by the government.

3. The Governor in Council may grant the subsidies hereinafter mentioned to the railway companies and towards the construction of the railways also hereinafter mentioned, that is to say :—

407. To the Great Northern Railway Company, for 67 miles of their railway between Montcalm and its junction with the Lower Laurentian Railway near St. Tite, in the vicinity of the St. Maurice River, the balance remaining unpaid of the subsidies granted by chapter 2 of 1893, and by chapter 4 of 1894, between these points, a subsidy not exceeding \$3,200 per mile, nor exceeding in the whole.....	\$ 182,400 00
408. To the Pontiac Pacific Junction Railway Company, for 85 miles of their railway from Aylmer to Pembroke, also for bridging the Ottawa River, the balance remaining unpaid of the subsidy granted by chapter 8 of 1884, and by chapter 4 of 1894, not exceeding.....	114,272 00
409. To the Ottawa and Gatineau Railway Company, for 62 miles of their railway from Hull towards Désert, in the province of Quebec, the balance remaining unpaid of the subsidy granted by chapter 2 of 1893, not exceeding in the whole.....	35,872 00
410. To the Grand Trunk Railway Company of Canada, for a subsidy towards the rebuilding and enlargement of the Victoria Bridge at Montreal over the St. Lawrence River, 15 per cent upon the amount expended thereon, not exceeding.....	300,000 00
411. To the Montfort Colonization Railway Company, for 33 miles of their railway from Montfort Junction to Arundel, in the province of Quebec, a subsidy not exceeding \$2,000 per mile, nor exceeding in the whole.....	66,000 00
412. To the Irondale, Bancroft and Ottawa Railway Company, the balance remaining unpaid of the subsidy for the last five miles of the company's railway ; the eastern terminus to be either at the village of Bancroft or at some point near the Hastings Road, in the township of Herschell, in lieu of the subsidy granted by chapter 2 of 1893, not exceeding in the whole.....	16,000 00
413. To the Great Northern Railway Company, towards the construction of a railway bridge over the Ottawa River at Hawkesbury, 15 per cent upon the amount expended thereon, not exceeding.....	52,500 00
414. For a railway and traffic bridge over the Ottawa River at Nepean Point, between the city of Ottawa and the city of Hull, 15 per cent upon the amount expended thereon, not exceeding.....	112,500 00

4. The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively ; the other subsidies may be granted to such companies as are approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively ; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and

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upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

5. The granting of such subsidies respectively shall be subject to such conditions for securing such running powers or traffic arrangements and other rights as will afford all reasonable facilities and equal mileage rates to all railways connecting with those so subsidized, as the Governor in Council determines.

6. The said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as to subsidies with respect of which it is hereinbefore otherwise provided.

7. Any company receiving a subsidy as aforesaid, in excess of \$3,200 per mile, shall be bound to carry Her Majesty's mails for a term of ten years free of charge over the portion of railway subsidized.

By the Special Act 60-61 Victoria, Chapter 5, 1897. (*Assented to 29th June, 1897.*)

1. Subject to the conditions hereinafter mentioned, the Governor in Council may grant to the Canadian Pacific Railway Company a subsidy towards the construction of a railway from Lethbridge, in the district of Alberta, through the Crow's Nest Pass to Nelson, in the province of British Columbia (which railway is hereinafter called "the Crow's Nest Line,") to the extent of eleven thousand dollars per mile thereof, and not exceeding in the whole the sum of three million six hundred and thirty thousand dollars, payable by instalments on the completion of each of the several sections of the said railway of the length respectively of not less than ten miles, and the remainder on the completion of the whole of the said railway; provided that an agreement between the Government and the company is first entered into in such form as the Governor in Council thinks fit, containing covenants to the following effect, that is to say:—

On the part of the company:

(a.) That the company will construct or cause to be constructed, the said railway upon such route and according to such descriptions and specifications and within such time or times as are provided for in the said agreement, and, when completed, will operate the said railway for ever;

(b.) That the said line of railway shall be constructed through the town of Macleod, and a station shall be established therein, unless the Governor in Council is satisfied by the company that there is good cause for constructing the railway outside the limits of the said town, in which case the said line of railway shall be located and a station established at a distance not greater than five hundred yards from the limits of the said town;

(c.) That so soon as the said railway is opened for traffic to Kootenay Lake, the local rates and tolls on the railway and on any other railway used in connection therewith and now or hereafter owned or leased by or operated on account of the company south of the company's main line in British Columbia, as well as the rates and tolls between any point on any such line or lines of railway and any point on the main line of the company throughout Canada, or any other railway owned or leased by or operated on account of the company, including its lines of steamers in British Columbia, shall be first approved by the Governor in Council or by a railway commission, if and when such commission is established by law, and shall at all times thereafter and from time to time be subject to revision and control in the manner aforesaid;

(d.) That a reduction shall be made in the general rates and tolls of the company as now charged, or as contained in its present freight tariff, whichever rates are now the lowest, for carloads or otherwise, upon the classes of merchandise hereinafter mentioned, westbound, from and including Fort William and all points east of Fort

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William on the company's railway to all points west of Fort William on the company's main line, or on any line of railway throughout Canada owned or leased by or operated on account of the company, whether the shipment is by all rail line or by lake and rail, such reduction to be to the extent of the following percentages respectively, namely :—

- Upon all green and fresh fruits, 33 $\frac{1}{3}$ per cent ;
- Coal oil, 20 per cent ;
- Cordage and binder twine, 10 per cent ;
- Agricultural implements of all kinds, set up or in parts, 10 per cent ;
- Iron, including bar, band, Canada plates, galvanized, sheet, pipe, pipe-fittings, nails, spikes and horse shoes, 10 per cent ;
- All kinds of wire, 10 per cent ;
- Window glass, 10 per cent ;
- Paper for building and roofing purposes, 10 per cent ;
- Roofing felt, box and packing, 10 per cent ;
- Paints of all kinds and oils, 10 per cent ;
- Live stock, 10 per cent ;
- Wooden ware, 10 per cent ;
- Household furniture, 10 per cent ;

And that no higher rates than such reduced rates or tolls shall be hereafter charged by the company upon any such merchandise carried by the company between the points aforesaid ; such reductions to take effect on or before the first of January, one thousand eight hundred and ninety-eight ;

(e.) That there shall be a reduction in the company's present rates and tolls on grain and flour from all points on its main line, branches or connections, west of Fort William to Fort William and Port Arthur and all points east, of three cents per one hundred pounds, to take effect in the following manner :—One and one-half cent per one hundred pounds on or before the first day of September, one thousand eight hundred and ninety-eight, and an additional one and one-half cent per one hundred pounds on or before the first day of September, one thousand eight hundred and ninety-nine ; and that no higher rates than such reduced rates or tolls shall be charged after the dates mentioned on such merchandise from the points aforesaid ;

(f.) That the Railway Committee of the Privy Council may grant running powers over the said line of railway and all its branches and connections, or any portions thereof, and all lines of railway now or hereafter owned or leased by or operated on account of the company in British Columbia south of the company's main line of railway, and the necessary use of its tracks, stations and station grounds, to any other railway company applying for such grant upon such terms as such committee may fix and determine, and according to the provisions of The Railway Act and of such other general Acts relating to railways as are from time to time passed by Parliament ; but nothing herein shall be held to imply that such running powers might not be so granted without the special provision herein contained ;

(g.) That the said railway, when constructed, together with that portion of the company's railway from Dunmore to Lethbridge, and all lines of railway, branches, connections and extensions in British Columbia south of the main line of the company in British Columbia shall be subject to the provisions of The Railway Act and of such other general Acts relating to railways as are from time to time passed by Parliament ;

(h.) That if the company or any other company with whom it shall have any arrangement on the subject shall, by constructing the said railway or any part of it, as stipulated for in the said agreement, become entitled to and shall get any land as a subsidy from the Government of British Columbia, then such lands, excepting therefrom those which in the opinion of the Director of the Geological Survey of Canada (expressed in writing) are coal-bearing lands, shall be disposed of by the company or by such other company to the public according to regulations and at prices not exceeding those prescribed from time to time by the Governor in Council, having regard to the then existing provincial regulations applicable thereto ; the expression "lands" including all mineral and timber thereon which shall be disposed of as aforesaid, either with or without the land, as the Governor in Council may direct :

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(i.) That if the company or any other company with whom it shall have any arrangement on the subject shall, by constructing the said railway or any part of it as stipulated for in the said agreement, become entitled to and shall get any lands as a subsidy from the Government of British Columbia which in the opinion of the Director of the Geological Survey of Canada (expressed in writing) are coal-bearing lands, then the company will cause to be conveyed to the Crown, in the interest of Canada, a portion thereof to the extent of fifty thousand acres, the same to be of equal value per acre as coal lands with the residue of such lands. The said fifty thousand acres to be selected by the Government in such fair and equitable manner as may be determined by the Governor in Council, and to be thereafter held or disposed of or otherwise dealt with by the Government as it may think fit on such conditions, if any, as may be prescribed by the Governor in Council, for the purpose of securing a sufficient and suitable supply of coal to the public at reasonable prices, not exceeding two dollars per ton of two thousand pounds free on board cars at the mines.

And on the part of the Government, to pay the said subsidy by instalments as aforesaid.

2. The company shall be bound to carry out in all respects the said agreement, and may do whatever is necessary for that purpose.

3. In order to facilitate such financial arrangements as will enable the company to complete the railway as aforesaid without delay and to acquire and consolidate with it the railway from Dunmore to Lethbridge, hereinafter called "the Alberta Branch," which, under the authority of chapter thirty-eight of the statutes of 1893, it now operates as lessee, and is under covenant to purchase, the company may issue bonds which will be a first lien and charge and be secured exclusively upon the said Alberta Branch and Crow's Nest Line together in the same way and with the same effect as if both the said pieces of railway to be so consolidated were being built by the company as one branch of its railway within the meaning of section one of chapter fifty-one of the statutes of 1888, and that section shall apply accordingly, such first lien to be subject to the payment of the purchase money of the Alberta Branch, as provided for in the said covenant to purchase.

By the Act 63-64 Vic., chapter 8 (*Assented to July 18, 1900*).

1. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost and shall include the amount expended upon any bridge, up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway nor the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

415. To the Central Ontario Railway Company, for an extension of their railway from, or from near, either Coe Hill or Rathbun Station on the company's railway to, or near to Bancroft, not exceeding 21 miles, in lieu of the subsidy granted by chapter 5 of 1892;

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- 416.** To the Great Northern Railway Company, for a railway between Montcalm and St. Tite Junction, on the Lower Laurentian Railway, Quebec, not exceeding $53\frac{1}{2}$ miles; and for a branch from their main line to Shawenegan Falls, Quebec, not exceeding $6\frac{1}{2}$ miles.
- 417.** To the Phillipsburg Railway and Quarry Company; shortage in the extension of their railway from a point on the company's line at or near the end of the subsidized section, to the government wharf at Phillipsburg, Quebec, not exceeding $\frac{66}{100}$ of a mile;
- 418.** To the Strathroy and Western Counties Railway Company, for a line from Strathroy, Ontario, via Adelaide and Arkona, to either Forest, Tedford, or Park Hill, not exceeding 24 miles, in lieu of the subsidy granted by chapter 4 of 1894;
- 419.** To the St. John Valley and Rivière du Loup Railway Company, for a line of railway from Fredericton, in the county of York, New Brunswick, to Woodstock, in the county of Carleton, not exceeding 59 miles;
- 420.** For a railway from Port Hawkesbury, on the Strait of Canso, Nova Scotia, to St. Peter's, not exceeding thirty miles;
- 421.** For a railway from Windsor, Nova Scotia, to Truro, via the township of Clifton, not exceeding 58 miles, in lieu of the subsidy granted by chapter 4 of 1894;
- 422.** For a railway from a point at or near Brookfield Station, Nova Scotia, on the Intercolonial Railway, to Eastville, not exceeding 25 miles, in lieu of the subsidy granted by chapter 4 of 1897;
- 423.** For a railway from Cross Creek Station, on the Canada Eastern Railway, to Stanley Village, New Brunswick, not exceeding 6 miles;
- 424.** For a railway from the village of St. Rémi to Stottville or some point on the Delaware and Hudson Railway (Grand Trunk) in the parish of St. Paul de l'Île aux Noix, not exceeding 19 miles;
- 425.** For a railway between Pontypool and Bobcaygeon, via Lindsay, Ontario, not exceeding 40 miles.
- 426.** To the Pontiac Pacific Junction Railway Company, for a railway from Aylmer to Hull, Quebec, not exceeding 9 miles, in lieu of the subsidy granted by chapter 4 of 1897;
- 427.** To the Portage du Fort and Bristol Branch Railway Company, for a branch line from a point on the Pontiac Pacific Junction Railway at or near the village of Quyon, towards the village of Portage du Fort, Quebec, not exceeding 15 miles, in lieu of the subsidy granted by chapter 4 of 1897;
- 428.** To the Orford Mountain Railway Company, for a branch from their railway from a point between Lawrenceville and Eastman to Waterloo, not exceeding 13 miles;
- 429.** To the Atlantic and Lake Superior Railway Company, for an extension of their railway from Caplin to Paspebiac, Quebec, not exceeding 30 miles;
- 430.** To the United Counties Railway Company, for a railway from St. Robert Junction to Sorel, $6\frac{1}{2}$ miles, (this subsidy to be payable only in the event of adequate running rights over the South-eastern Railway between the two points above mentioned not being granted to the first mentioned Company on terms to be approved by the Railway Committee of the Privy Council,) and from Mount Johnson to St. Grégoire Station, 1 mile, not exceeding $7\frac{1}{2}$ miles.
- 431.** For a railway from a point on the Central Railway in the county of Lunenburg, Nova Scotia, to the town of Liverpool, via the village of Caledonia, or to the village of Caledonia, via Liverpool, or for any part thereof, the whole distance not exceeding 62 miles;
- 432.** For a railway from Indian Gardens, Queen's County, Nova Scotia, to Shelburne, in the said province, a distance of 35 miles;
- 433.** The subsidy which the Ontario and Rainy River Railway Company is entitled to receive under chapter 4 of 1897, shall be \$6,400 per mile for the 80 miles mentioned in the said Act; not exceeding in all \$512,000.

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- 434.** To the Bay of Quinté Railway Company, for such extensions, branches or additions to their system as will enable the said Company to connect their lines of railway or connecting lines with iron or other mines or mineral or wood lands in the counties of Peterborough, Northumberland, Hastings, Lennox and Addington, Frontenac or Leeds, payable in instalments regulated by the length of each of the said extensions or branches or additions, as the case may be, in lieu of part of the balance remaining unpaid of the subsidy granted to the Kingston, Napanee and Western Railway Company, by chapter 5 of 1892, but not exceeding \$3,200 per mile for 10 miles, nor exceeding in the whole \$32,000 ;
- 435.** To the Quebec and Lake St. John Railway Company, for 12 miles of their railway from the end of their line at deep water on the Chicoutimi branch of their railway, to Ha Ha Bay, in the lieu of the subsidy for the 12 miles granted by chapter 4 of 1894 ;
- 436.** For a line of railway from Hawkesbury, Ontario, to South Indian, not exceeding 35 miles ;
- 437.** For a railway from Sault Ste. Marie, Ontario, towards Michipicoten River and harbour and towards the main line of the Canadian Pacific Railway, not exceeding 40 miles ;
- 438.** For a branch line of railway from the main line of the Ottawa, Arnprior and Parry Sound Railway to the town of Parry Sound, Ontario, not exceeding 5 miles ;
- 439.** For a railway from the village of Haliburton, via the village of Whitney, towards the town of Mattawa, Ontario, not exceeding 20 miles ;
- 440.** For an extension of the Tilsonburg, Lake Erie and Pacific Railway, from Tilsonburg to Ingersoll or Woodstock, Ontario, not exceeding 28 miles ;
- 441.** To the South Shore Railway Company, from Sorel Junction along the South Shore to Lotbinière, Quebec, a distance not exceeding 82 miles ;
- 442.** To the Massawippi Valley Railway Company for an extension of their railway to the village of Stanstead Plain, Quebec, not exceeding $2\frac{1}{2}$ miles ;
- 443.** For a railway from Port Hawkesbury on the Strait of Canso, to Caribou Cove, Nova Scotia, a distance of 10 miles ;
- 444.** For a railway from Fort Frances, Ontario, westerly to a point at or near the mouth of Rainy River, a distance not exceeding 70 miles ;
- 445.** To the Central Railway Company of New Brunswick, for an extension of their line of railway from Newcastle Coal Fields to Gibson, New Brunswick, not exceeding 30 miles ;
- 446.** To the Canadian Northern Railway Company, for a railway from a point on the present line of the Winnipeg Great Northern Railway north of Swan River to Prince Albert, North-west Territories, not exceeding 100 miles ;
- 447.** For a railway from some point near Antler Station to a point near Moose Mountain, Manitoba, not exceeding 50 miles ;
- 448.** For a railway from Sunnybrae to Country Harbour, and from a point at or near Country Harbour Cross Roads to Guysborough, Nova Scotia, to make up the deficiency in mileage between points mentioned and subsidized by chapter 4 of 1897, additional mileage not exceeding 15 miles ;
- 449.** For a railway from Port Clyde towards Lockeport, in the province of Nova Scotia, not exceeding 20 miles ;
- 450.** For a railway from a point on the Intercolonial Railway at or near Halifax towards the Central Railway in the county of Lunenburg, not exceeding 20 miles ;
- 451.** For a railway from Labelle, in the province of Quebec, in a north-westerly direction, to Nomingue, via Notre Dame de l'Annonciation, a distance not exceeding 22 miles ;
- 452.** For a railway from Owen Sound, in the province of Ontario, to Meaford, not exceeding 21 miles ;
- 453.** To the Ottawa and Gatineau Railway Company, for their line of railway in and through the city of Hull, Quebec, not exceeding 4 miles ;

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- 454.** To the Western Alberta Railway Company, from a point on the United States boundary, west of Range 27, north-westerly towards Anthracite, in the district of Alberta, not exceeding 50 miles ;
- 455.** To the Edmonton, Yukon and Pacific Railway Company, for a railway from the town of South Edmonton, North-west Territories, to North Edmonton, and thence westerly towards the Yellow Head Pass, a distance not exceeding 50 miles ;
- 456.** To the Restigouche and Western Railway Company, in addition to the 20 miles subsidized by chapter 4 of 1897, and in continuation from the westerly end of the said 20 miles towards the St. John River, a further distance not exceeding 15 miles, and for the company's railway from a point on the St. John River, New Brunswick, at or near Grand Falls, or St. Leonard, or between Grand Falls and St. Leonard, and extending easterly towards Campbellton, such point to be approved by the Governor in Council, a distance of 12 miles ; in all not exceeding 27 miles ;
- 457.** For a railway in extension of the St. Francis branch of the Temiscouata Railway to the mouth of the St. Francis River, a distance not exceeding 3 miles ;
- 458.** To the Canada Eastern Railway Company, for a line of railway from Nelson, New Brunswick, to connect with the company's main line running into Chatham, to complete the connection from Nelson to such main line, not exceeding in the whole $2\frac{1}{4}$ miles ;
- 459.** To the Bay of Quinté Railway Company, for an extension of their line in a westerly direction from a point at or near Richmond boundary road near Deseronto for a distance not exceeding 2 miles ; also for an extension of their line from its present terminus at Tweed in a northerly direction for a distance of 2 miles, and for an extension of their line from the end of the last 2 miles mentioned in a northerly direction for a distance not exceeding 3 miles—in all 7 miles ; subsidies payable on each of the sections mentioned as each of such sections is completed ;
- 460.** To the Ontario, Belmont and Northern Railway Company, for an extension of their railway from its present terminus at Iron Mines in a north-westerly direction, a distance not exceeding 5 miles ; and also for an extension of the company's railway southerly, from the present southern terminus thereof to the Central Ontario Junction of the Canadian Pacific Railway, a distance not exceeding 2 miles ; but the last mentioned aid for the said 2 miles of railway shall not be granted in case the Railway Committee of the Privy Council finds that adequate running powers on fair terms can be secured to the company over that portion of the line of the Central Ontario Railway between the present southerly end of the Ontario, Belmont and Northern Railway and the Canadian Pacific Railway Company's line at Central Ontario Junction ; subsidies payable on each of the sections mentioned as each of such sections is completed ;
- 461.** For a line of railway from a point on the Pembroke Southern Railway at or near Golden Lake, Ontario, towards a point on the Irondale, Bancroft and Ottawa Railway at or near Bancroft, not exceeding 20 miles ;
- 462.** For a line of railway from Paspébiac, Quebec, to Gaspé in the said province, a distance not exceeding 82 miles ;
- 463.** To the Lake Erie and Detroit River Railway Company, for a line of railway from Ridgetown, Ontario, to St. Thomas, in the said province, a distance not exceeding 44 miles ; this subsidy to be payable only in the event of adequate running rights over the Canada Southern Railway between the two points above mentioned not being granted to the first mentioned company on terms to be approved by the Railway Committee of the Privy Council ;
- 464.** To the Kingston and Pembroke Railway Company, for the construction of branches from the Company's main line to the iron mine at Bluff Point and to the Martele mine in the county of Renfrew, not exceeding 5 miles ;

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465. For a railway from the town of Parry Sound extending northerly towards Sudbury, a distance not exceeding 20 miles.

3. The Governor in Council may grant the subsidies hereinafter mentioned towards the construction of the railways also hereinafter mentioned, that is to say :—

466. The Ontario and Rainy River Railway Company, for a railway from a point 80 miles west of Stanley Station, on the Port Arthur, Duluth and Western Railway, to Fort Frances, for a distance of 140 miles, at \$6,400 per mile, not exceeding in the whole	\$ 896,000 00
467. To the Quebec Bridge Company, towards the construction of a railway bridge over the St. Lawrence River, at Chaudière Basin, near Quebec, one million dollars, 40 per cent of which amount may be paid on monthly progress estimates, approved by the Government engineers, of materials delivered and work done . . .	1,000,000 00
468. To the South Shore Railway Company, towards the restoration and renewal of the railway bridge over the Yamaska River at Yamaska, Quebec	50,000 00
469. Towards the construction of a bridge over the Richelieu River at Sorel, 15 per cent upon the amount expended thereon, not exceeding	35,000 00
470. Towards the construction of a bridge across the St. Francis River, 15 per cent of the amount expended thereon, not exceeding . . .	50,000 00
471. Towards the construction of a bridge across the Nicolet River, 15 per cent upon the amount expended thereon, not exceeding	15,000 00
472. To the Midland Railway Company, Limited, towards the construction of a bridge across the Shubenacadie River, 15 per cent upon the amount expended thereon, not exceeding	33,750 00
473. To the Great Northern Railway Company, towards the construction of a bridge across the St. Maurice River, 15 per cent upon the amount expended thereon, not exceeding	16,425 00
474. Also towards the construction of a bridge across the Rivière du Loup, 15 per cent upon the amount expended thereon, not exceeding	15,000 00
475. Also towards the construction of a steel bridge and viaduct at the Maskinongé River, 15 per cent upon the amount expended thereon, not exceeding	15,600 00

4. The subsidies granted to the Ontario and Rainy River Railway Company, the Canadian Northern Railway Company and the Edmonton, Yukon and Pacific Railway Company are granted upon the condition, and, if received and paid under the authority of this Act to the above mentioned companies respectively, shall be received upon the condition, that the said companies shall not, nor shall any of them, at any time amalgamate with, or lease its line or lines to, any railway company other than those mentioned in this section, except as may be authorized by Parliament; nor shall any of the said railways be leased to or operated by any other company; nor shall any of the said companies make an agreement for a common fund or for pooling its receipts with any other railway company; and any such lease, amalgamation or agreement shall be absolutely void, excepting in so far as such agreement may extend to traffic or running arrangements which have been approved by the Governor in Council.

5. The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as are approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively; all the lines for the construction of

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which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the Government, which agreement the Government is hereby empowered to make; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

6. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with those so subsidized reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the Governor in Council shall have absolute control at all times over the rates and tolls to be levied and imposed by any of the companies or upon any of the railways hereby subsidized.

7. The said subsidies respectively shall be payable out of the Consolidated Revenue Fund of Canada, by instalments, on the completion of each section of the railway of not less than ten miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the said Minister, or upon the completion of the work subsidized—except as to subsidies with respect to which it is hereinbefore otherwise provided.

8. Every company receiving a subsidy under this Act, its successors or assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, material and mails over the portion of its line in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars, properly equipped, for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the Government for which such service is being performed and the company performing it, and in case of disagreement, then at such rates as are approved by the Governor in Council; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of subsidy received by the company under this Act.

9. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the said railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

By the Act 62-63 Vic., chapter 7 (*Assented to 11th August, 1899*).

1. In this Act, unless the context otherwise requires, the expression "cost" means the actual, necessary and reasonable cost and shall include the amount expended upon any bridge, up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of equipping the railway, nor the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his

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opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile :—

- 476.** For a railway from a point at or near the junction of the Irondale, Bancroft and Ottawa Railway and the Grand Trunk Railway to the village of Minden, in the county of Haliburton, Ontario, not exceeding 12 miles.
- 477.** To the Strathroy and Western Counties Railway Company, for a railway commencing at a point at or near Caradoc station, on the Canadian Pacific Railway, and extending to the town of Strathroy, Ontario, not exceeding 7 miles.
- 478.** For a line of railway from a point on the Pembroke Southern Railway at or near Golden Lake, towards a point on the Irondale, Bancroft and Ottawa Railway at or near Bancroft, Ontario, for the further extension of such railway westerly from the western terminus of the 20 miles subsidized by chapter 4 of 1897, for a distance not exceeding 20 miles.
- 479.** To the Algoma Central Railway Company for 25 miles of its line of railway from its terminus at Michipicoten Harbour, Lake Superior, towards the main line of the Canadian Pacific Railway, and for a further extension of this company's line of railway from Sault Ste. Marie towards Michipicoten River and Harbour, Ontario, towards the main line of the Canadian Pacific Railway, 25 miles in all, not exceeding 50 miles.
- 480.** To the Central Ontario Railway Company, for a further extension of their railway from, at or near Bancroft to a point on the Canada Atlantic Railway between Whitney and Barry's Bay, Ontario, not exceeding 20 miles.
- 481.** To the Manitoulin and North Shore Railway Company, for a line of railway between Little Current, on Manitoulin Island, and Sudbury, Ontario, on the Canadian Pacific Railway, the company undertaking to bridge between Little Current and the main land, the bridge to be so constructed and maintained as to afford suitable facilities, in the opinion of the Minister of Railways and Canals, for free vehicular and passenger traffic, the same as upon a public highway, the work to be begun and prosecuted from Little Current and Sudbury, one-half of the subsidy to be applicable, as earned, in respect of the work beginning at Little Current and carried on towards Sudbury, and one-half thereof to be applicable, as earned, in respect of the work beginning at Sudbury and carried on towards Little Current, the course of the line of railway to cross the Sault Ste. Marie branch of the Canadian Pacific Railway, not exceeding 66 miles.
- 482.** For a railway from Bracebridge, in Muskoka, to a point at or near Baysville, Ontario, not exceeding 15 miles.
- 483.** For a railway beginning at a point northerly 20 miles from Parry Sound, and extending from that point to the French River, Ontario, not exceeding 35 miles.
- 484.** For a railway from a point 20 miles north-easterly from the village of Haliburton, via the village of Whitney, towards the village of Mattawa, Ontario, not exceeding 40 miles.
- 485.** To the Kingston and Pembroke Railway Company, for a branch line of railway to iron mines in Bedford township, Ontario, not exceeding 12 miles.
- 486.** To the Thousand Islands Railway Company for an extension of their railway from the present northerly terminus to a point easterly thereof, not exceeding 2 miles ;

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And also for an extension from a point on the railway to connect their railway with the Brockville, Westport and Sault Ste Marie Railway, the Bay of Quinté Railway, the Kingston, Smith's Falls and Ottawa Railway, or the waters of the Rideau Canal, the balance remaining of the subsidy granted by chapter 5 of 1892, not exceeding $9\frac{1}{2}$ miles.

- 487.** For a railway from Dymont, on the Canadian Pacific Railway, to the New Klondike mining district, Ontario, not exceeding 7 miles.
- 488.** To the Schomberg and Aurora Railway Company, for an extension of their line from its easterly terminus to a point at or near Bond's Lake, Ontario, not exceeding 4 miles.
- 489.** To the Nipissing and James Bay Railway Company, for a railway from, at or near North Bay station, on the Canadian Pacific Railway, towards James Bay, or Lake Tamagaming, Ontario, not exceeding 20 miles.
- 490.** In aid of the Ottawa and New York Railway Company's bridge over the St. Lawrence River, and for the Canadian portion of such bridge, a sum not exceeding \$90,000.
- 491.** To the Grand Trunk Railway Company of Canada, towards the cost of the rebuilding and enlargement of the Victoria Bridge over the St. Lawrence River, Quebec, in addition to the amount received by the company on account of the subsidy granted by chapter 4 of 1897, viz: \$270,000, to make up the grant in aid of the undertaking to \$500,000, upon condition that the tolls upon the bridge for passenger and vehicular traffic shall be subject to the approval of the Governor in Council, a sum not exceeding \$230,000.
- 492.** For a railway and traffic bridge over the Ottawa River at Nepean Point, between the city of Ottawa, Ontario, and the city of Hull, Quebec, upon condition that the bridge be so constructed as to provide suitable facilities, to the satisfaction of the Minister of Railways and Canals, for free vehicular and foot passenger traffic, the same as upon a public highway, in addition to the \$112,500 already granted,—and, notwithstanding anything in the said Act, the subsidy hereby granted, together with the grant of \$112,500 under chapter 4 of 1897, shall be paid upon the completion of the bridge and its approaches, upon the Chief Engineer's report of such completion, and the recommendation of the Minister,—a sum not exceeding \$100,000.
- 493.** To the Canadian Northern Railway Company, in further extension of their railway north of Swan River towards Prince Albert, North-west Territories, in addition to the grant by chapter 7 of 1899, a further mileage not exceeding 100 miles.
- 494.** For a railway from the westerly end of the Waskada branch of the Canadian Pacific Railway, Manitoba, further westward, not exceeding 20 miles.
- 495.** For a railway from a point on the Alberta Railway and Coal Company's Railway towards Cardston, Alberta, N.W.T., for 30 miles of railway at \$2,500 per mile.
- 496.** To the Kaslo and Lardo-Duncan Railway Company, for a railway from Duncan Lake towards Lardo or Arrow Lake, British Columbia, or from Lardo to Arrow Lake, not exceeding 30 miles.
- 497.** To the Restigouche and Western Railway Company, for the company's railway, in addition to the 15 miles subsidized by chapter 7 of 1899, on the easterly section of the line, and in continuation from the westerly end of the said 15 miles, a further distance of 15 miles towards the St. John River; and for the said railway, in addition to the 12 miles subsidized by the said chapter on the westerly section of the said line, a further distance from the easterly end thereof of 15 miles, towards Campbellton, N.B., not exceeding 30 miles.
- 498.** For a line of railway from St. Charles Junction on the Intercolonial Railway towards the St. Francis branch of the Temiscouata Railway, Quebec, not exceeding 45 miles, and from the mouth of the St. Francis River, N.B., westerly towards St. Charles Junction, 15 miles, in all not exceeding 60 miles.
- 499.** For a line of railway from Bristol, in the county of Carleton, New Brunswick, on the Canadian Pacific Railway, easterly, a distance not exceeding 17 miles.

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- 500.** For a line of railway from Shediac, county of Westmorland, New Brunswick, to Shemogue, and towards Cape Tormentine, in the said county, a distance not exceeding 38 miles.
- 501.** For a railway from Lockeport, Nova Scotia, to Sable River, or other convenient point of railway connection, not exceeding 20 miles.
- 502.** To the Inverness and Richmond Railway Company, for a railway in extension of the company's line northward from Broad Cove to Cheticamp, C.B., Nova Scotia, not exceeding 40 miles.
- 503.** For a railway from Bridgetown to Victoria Beach, Nova Scotia, not exceeding 30 miles.
- 504.** For a railway from a point on the Intercolonial Railway, Pictou branch, to Kempt Town, county of Colchester, Nova Scotia, not exceeding $4\frac{1}{2}$ miles.
- 505.** For a railway from Brazil Lake, on the Dominion Atlantic Railway, to Kemptville, Nova Scotia, not exceeding 11 miles.
- 506.** To the Montfort and Gatineau Colonization Railway Company, to enable it to extend its railway from Arundel to a point in the municipality of the united townships of Preston and Hartwell, province of Quebec, not exceeding 30 miles.
- 507.** To the Chateauguay and Northern Railway Company, for a railway from a point in Hochelaga ward, Montreal, to a point on the Great Northern Railway, in or near the town of Joliette, passing near the town of L'Assomption, Quebec, together with a spur into the said town, not exceeding 42 miles.
- 508.** To the Chateauguay and Northern Railway Company, for a single-track standard railway bridge, with two roadways 10 feet wide, for free vehicular and foot passenger traffic, the same as upon a public highway, from Bout L'Isle to Charlemange, at the junction of the Ottawa and St. Lawrence rivers, \$150,000.
- 509.** To the Chateauguay and Northern Railway Company, towards the construction of a bridge across the Lac Ouareau River, \$15,000.
- 510.** To the Arthabaska Railway Company, for a railway from Victoriaville to West Chester, province of Quebec, a distance not exceeding 12 miles.
- 511.** To the Great Northern Railway Company, for a branch line from the town or from near the town of Joliette towards Ste. Emélie, touching the parishes of Ste. Beatrix and Ste. Jean de Matha, not exceeding 20 miles.
- 512.** For a railway from Farnham, province of Quebec, to Frelighsburg and the International Boundary Line, not exceeding 21 miles.
- 513.** Towards the construction of a railway bridge over the St. Francis River, in lieu of the grant under chapter 7 of 1899, at St. François du Lac, on the condition that the bridge, with approaches, be built so as to allow the municipalities to make use thereof, to establish and maintain a suitable roadway for the free passage of foot passengers, vehicles and animals, to be approved by the Minister of Railways and Canals, \$50,000.
- 514.** Towards the construction of a railway bridge over the Nicolet River at Nicolet, in lieu of the grant under chapter 7 of 1899, \$15,000.
- 515.** For a line of railway from Halifax towards a point on the Central Railway of Nova Scotia, in the county of Lunenburg, in addition to and in extension of the 20 miles subsidized by chapter 7 of 1899, not exceeding 20 miles.

3. The subsidies hereby granted and any subsidies heretofore granted under any Act of the Parliament of Canada, still in force, but not fully paid, towards the construction of any railway or bridge, shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless in this Act otherwise expressly provided, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows :

(a) upon the completion of the work subsidized ; or

(b.) by instalments on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken or

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(c.) upon progress estimates on the certificate of the Chief Engineer of Railways and Canals, that in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than sixty thousand dollars ; or

(d.) with respect to (b) and (c), part one way, part the other.

4. The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively ; the other subsidies may be granted to such companies as are approved by the Governor in Council as having established to his satisfaction their ability to construct and complete the said railways respectively ; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August next, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by Order in Council, and shall also be constructed according to descriptions and specifications and upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways and Canals, and specified in an agreement to be made in each case by the company with the government, which agreement the government is hereby empowered to make ; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

5. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide and secure to other companies such running powers, traffic arrangements and other rights as will afford to all railways connecting with those so subsidized reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways ; and the Governor in Council shall have absolute control at all times over the rates and tolls to be levied and imposed by any of the companies or upon any of the railways hereby subsidized.

6. The Governor in Council may make it a condition of the subsidies hereby granted, or of any heretofore granted by any Act of Parliament as to which a contract has not yet been entered into between Her Majesty and the company for the construction of the railway, that the company shall lay its road with new steel rails made in Canada, if such rails are procurable in Canada of suitable quality upon terms as favourable as other rails can be obtained upon, of which the Minister of Railways and Canals shall be the judge.

7. Every company receiving a subsidy under this Act, its successors or assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the government of Canada transportation for men, supplies, material and mails over the portion of its line in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars, properly equipped, for such mail service ; and such transportation and service shall be performed at such rates as are agreed upon between the minister of the department of the government for which such service is being performed and the company performing it, and in case of disagreement then at such rates as are approved by the Governor in Council ; and in or towards payment for such charges the government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of subsidy received by the company under this Act.

8. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the said railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

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9. Paragraph 20 of section 2 of chapter 7 of the statutes of 1899 is amended by inserting after the word 'railway,' in the third line, the words 'or to connect the said lines.'

10. The subsidy provided for by chapter 7 of the statutes of 1899 towards the construction of a railway bridge over the St. Lawrence River at Chaudière Basin, near Quebec, shall be deemed to be applicable, as to one-third thereof, to the substructure and approaches, and as to two-thirds thereof to the superstructure, and the said subsidy may be paid upon that basis by authority of the Governor in Council, upon progress estimates to be furnished from time to time by the Chief Engineer of Government Railways and Canals, so that one-third of such subsidy, and no more, may be paid in respect of and upon completion of the masonry of the substructure and approaches of the said bridge, one-third, and no more, upon the work and material of one-half of the superstructure being done and supplied, in respect of such work and material, and the remaining one-third upon the completion of the whole work.

By the Act 1st Edward VII., chapter 7 (*Assented to May 23, 1901.*)

1. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge, up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile;—

516. For a line of railway from a point on the Intercolonial Railway at or near New Glasgow to Country Harbour, Nova Scotia, and from a point at or near Country Harbour Cross Roads to Guysborough, in lieu of the subsidies granted by 1897, cap. 4, and 1899, cap. 7, sec. 2, paragraph 34, not exceeding 80 miles.

517. To the Quebec and New Brunswick Railway Company, for a line of railway from a point at or near St. Charles or at or near Chaudière Junction or a point on the Quebec Central Railway, near St. Anselme, Quebec, towards the present terminus of the St. Francis Branch of the Témiscouata Railway, New Brunswick, not exceeding 45 miles, and for a line of railway from the mouth of the St. Francis River, New Brunswick, westerly towards Chaudière Junction, not exceeding 15 miles, in lieu of the subsidy granted by 1900, cap. 8, sec. 2, paragraph 23; also for a line of railway in extension of the St. Francis Branch of the Témiscouata Railway to the mouth of the St. Francis River, New Brunswick, in lieu of the subsidy granted by 1899, cap. 7, sec. 2, paragraph 43, not exceeding 3 miles; in all not exceeding 63 miles.

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- 518.** To the Montreal and Province Line Railway Company, for a line of railway from Farnham, Quebec, to Frelighsburg, in lieu of the subsidy granted by 1900, cap. 8, sec. 2, paragraph 37, not exceeding 19 miles.
- 519.** For a line of railway from a point on the Intercolonial Railway at or near Windsor Junction to Upper Musquodoboit, in lieu of 1897, cap. 4, sec. 2, paragraph 23, not exceeding 40 miles.
- 520.** For a line of railway from Pubnico, Nova Scotia, to Port Clyde or Clyde River, in lieu of the unexpended balance of subsidy granted by 1897, cap. 4, sec. 2, paragraph 29, not exceeding 31 miles.
- 521.** To the Toronto, Lindsay and Pembroke Railway Company, for a line of railway from the western terminus of the 20 miles subsidized by 1899, cap. 7, sec. 2, paragraph 47, westerly towards Bancroft, not exceeding 20 miles, in lieu of the subsidy granted by 1900, cap. 8, sec. 2, paragraph 3; also from the terminus of previously subsidized lines at a point about 40 miles west of Golden Lake, westerly to Bancroft, not exceeding 11 miles; in all not exceeding 31 miles.
- 522.** For a line of railway from Chipman Station, New Brunswick, to Gibson, in lieu of the subsidies granted by 1897, cap. 4, and 1899, cap. 7, sec. 2, paragraph 31, not exceeding 45 miles.
- 523.** To the Inverness and Richmond Railway Company, for a line of railway from a point at or near Point Tupper on the Intercolonial Railway, to Broad Cove and Cheticamp, Nova Scotia, in lieu of the subsidies granted by 1897, cap. 4, 1899, cap. 7, sec. 2, paragraph 29, and 1900, cap. 8, sec. 2, paragraph 27, not exceeding 98 miles.
- 524.** For a line of railway from Caplin to Paspébiac, Quebec, in lieu of the subsidy granted by 1899, cap. 7, sec. 2, paragraph 15, the subsidy contract to be entered into with the trustees or receivers under mortgage from the Atlantic and Lake Superior Railway Company, and to contain the conditions that the subsidy when earned shall be paid in the following manner:—
- 1st. To the Hamilton Bridge Works Company in payment for bridge superstructures on the said section of railway, when furnished and erected by that company, not to exceed \$35,000;
 - 2nd. For the completion of the road-bed and works incidental thereto;
 - 3rd. Towards payment of overdue balances, pro rata, in settlement of claims for labour, boarding-house claims, and material and supplies furnished in connection with the construction of the said section of railway; in all not exceeding 30 miles.
- 525.** To the Schomberg and Aurora Railway Company, for a line of railway from a point on the Grand Trunk Railway between King and Newmarket, Ontario, to Schomberg, in lieu of the subsidy granted by 1897, cap. 4, not exceeding 15 miles.
- 526.** To the Ottawa and Gatineau Railway Company, for a line of railway from the end of the 62nd mile subsidized, towards Désert, in lieu of the subsidy granted by 1897, cap. 4, sec. 2, paragraph 5, not exceeding 20 miles.
- 527.** To the Restigouche and Western Railway Company, for its line of railway from Campbellton on the Intercolonial Railway, New Brunswick, towards Grand Falls, in lieu of the subsidy granted by 1897, cap. 4, sec. 2, paragraph 10, not exceeding 20 miles.
- 528.** To the Pontiac Pacific Junction Railway Company, for 36 miles of its railway from a point at or near Shawville, crossing the Ottawa River via Calumet Island to Pembroke, including the bridging of both channels of the Ottawa River at Calumet Island, 14 miles of which shall be in lieu of the unexpended balance of subsidy granted by 1897, cap. 4, sec. 3, paragraph 2, not exceeding \$115,200.
- 529.** To the Manitoulin and North Shore Railway Company, for its line of railway, from a point on its line of railway between Sudbury and Little Current to its junction with the line of the Algoma Central and Hudson Bay Railway, at or

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near Goulais River, in addition to and in further extension of its railway subsidized by 1900, cap. 8, sec. 2, paragraph 6, an additional mileage not exceeding 130 miles.

- 530.** For a line of railway from Grandique Ferry, Nova Scotia, to Arichat, not exceeding 8 miles.
- 531.** To the Central Ontario Railway Company, for a further extension of its line of railway, subsidized by 1900, cap. 8, sec. 2, paragraph 5, northward, to a junction with the Canada Atlantic Railway, at or near Whitney, Ontario, not exceeding 20 miles.
- 532.** To the Kingston and Pembroke Railway Company, for a line of railway from a point at or near Sharbot Lake, Ontario, via Lanark, to Carelton Place, not exceeding 41 miles.
- 533.** To the Norwood and Apsley Railway Company, for a line of railway from Norwood, Ontario, to the village of Apsley, not exceeding 30 miles.
- 534.** For a line of railway from a point on the Dominion Atlantic Railway at or near Wolfville, Nova Scotia, to the Government pier on the Basin of Minas, not exceeding one mile.
- 535.** To the Algoma Central and Hudson Bay Railway Company, for a line of railway from Sault Ste. Marie to a point on the Canadian Pacific Railway at or near White River, in the district of Algoma, in extension of the subsidy granted to the Algoma Central Railway by 1899, cap. 8, sec. 2, paragraph 23, and by 1900, cap. 8, sec. 2, paragraph 4, a further and additional mileage not exceeding 135 miles.
- 536.** For a line of railway from Bridgetown, Nova Scotia, to Middleton, in extension of the line subsidized by 1900, cap. 8, sec. 2, paragraph 28, not exceeding 11 miles.
- 537.** For a line of railway from a point on the Grand Trunk Railway at or near Burk's Falls, Ontario, to the Maganetawan River, not exceeding two miles.
- 538.** For a line of railway between Halifax and the Central Railway, Nova Scotia, from the end of the 40th mile from Halifax, subsidized by 1900, cap. 8, sec. 2, paragraph 40, to a junction with the Central Railway, Nova Scotia, not exceeding 30 miles.
- 539.** For a line of railway from a point on the Algoma branch of the Canadian Pacific Railway at or near Bruce Lake Station, northerly to a point at or near Rock Lake, in the district of Algoma, not exceeding 9 miles.
- 540.** For a line of railway from Roberval, Quebec, westward towards James Bay, not exceeding 60 miles.
- 541.** For a line of railway from a point upon the Stonewall branch or the Selkirk branch of the Canadian Pacific Railway to Icelandic River by way of Gimli, not exceeding 35 miles.
- 542.** To the Restigouche and Western Railway Company, for an extension of its line of railway from the 50th mile from Campbellton already subsidized, westward, to effect a junction with its line of railway subsidized 27 miles east from the St. John River, not exceeding 33 miles.
- 543.** For a line of railway from Duncan Lake towards Lardo or Arrow Lake, British Columbia, or from Lardo to Arrow Lake, in lieu of the subsidy granted by 1900, cap. 8, sec. 2, paragraph 21, not exceeding 30 miles.

3. The Governor in Council may grant to the Ottawa and Gatineau Railway, for its unearned balance of subsidy upon the 62 miles of its line of railway from Hull towards Désert, granted by 1897, chap. 4, sec. 3, paragraph 3, a sum not exceeding \$35,872.

4. The subsidies hereby authorized, and any subsidies heretofore authorized under any Act of Parliament of Canada still in force but not fully paid, towards the construction of any railway or bridge, shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the

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Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows:—

(a.) upon the completion of the work subsidized; or

(b.) by instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken; or

(c.) upon progress estimates on the certificate of the Chief Engineer of Government Railways, that, in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than sixty thousand dollars; or

(d.) with respect to (b.) and (c.), part one way, part the other.

5. The subsidy of 66 miles granted to the Manitoulin and North Shore Railway Company for a line of railway between Little Current, on Manitoulin Island, and Sudbury, Ontario, by paragraph 6 of section 2 of chapter 8 of the statutes of 1900, may be contracted for with the company and paid, and the work may be begun and prosecuted in two sections, the first beginning at or near Victoria Mines, in the township of Denison, and extending to Sudbury, and thence north-easterly towards Lake Wahnapiatae, not exceeding 33 miles; the second section beginning at Little Current and extending to and connecting with the Canadian Pacific Railway at or near Stanley, in the township of Baldwin, on the Canadian Pacific Railway, not exceeding 31 miles; subject, however, to the company carrying out the undertakings contained in paragraph 6 of section 2 of chapter 8 of the statutes of 1900.

6. The subsidies hereinbefore authorized to be granted to companies named, shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August, 1901, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed upon a location, and according to descriptions, conditions, and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make.

7. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide and secure to other companies such running powers, traffic arrangements, and other rights, as will afford to all railways connecting with those so subsidized, reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways; and the Governor in Council shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways hereby subsidized.

8. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, materials and mails over the portion of the line in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the Department of the Government for which such service is being performed and the company performing it, and, in case of disagreement, then at such rates as are approved by the Governor in Council; and in or towards payment for such charges the Government of Canada shall

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be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy received by the company under this Act.

9. As respects all railways for which subsidies are granted by this Act, the company at any time owning or operating any of the railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers, showing the cost of constructing the railway, the cost of operating it, and the earnings thereof.

10. The Governor in Council may make it a condition of the grant of the subsidies herein provided, or any heretofore authorized by any Act of Parliament as to which a contract has not yet been entered into with the company for the construction of the railway, that the company shall lay its road with new steel rails, made in Canada, if they are procurable in Canada of suitable quality, upon terms as favourable as other rails can be obtained, of which the Minister of Railways and Canals shall be the judge.

By the Act 3rd Edward VII., chap. 57 (assented to 24th October, 1903.)

1. In this Act, unless the context otherwise requires, the expression 'cost' means the actual, necessary and reasonable cost and shall include the amount expended upon any bridge, up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway.

2. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as is in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

- 544. To the Tilsonburg, Lake Erie and Pacific Railway Company, for a line of railway from the present terminus at Ingersoll to Woodstock, not exceeding 9 miles, in lieu of the subsidy granted by item 26 of section 2 of chapter 7 of 1899.
- 545. To the Lindsay, Bobcaygeon and Pontypool Railway Company, for a line of railway from Burketon to Bobcaygeon, not exceeding 40 miles, in lieu of the subsidy granted by item 11 of section 2 of chapter 7 of 1899.
- 546. To the Toronto, Lindsay and Pembroke Railway Company, for a line of railway from Golden Lake to Bancroft, not exceeding 51 miles, in lieu of the subsidy granted by item 6 of section 2 of chapter 7, 1901.
- 547. To the Central Ontario Railway, for a further extension of its railway from a point at or near Bancroft to a point on the Canada Atlantic Railway at or near Whitney, not exceeding 40 miles, in lieu of the subsidies granted by item 5 of section 2 of chapter 8 of 1900, and item 16 of section 2 of chapter 7 of 1901, respectively.

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- 548.** To the Strathroy and Western Counties Railway Company, for a line of railway from a point at Lambeth to Strathroy, via the villages of Delaware, Mount Brydges and Caradoc Station on the Canadian Pacific Railway, and from Strathroy northerly to Forest, Thedford or Parkhill, not exceeding in all 31 miles, in lieu of subsidies granted by item 4 of section 2 of chapter 7, 1899, and item 2 of section 2 of chapter 8 of 1900, respectively.
- 549.** To the Montfort and Gatineau Colonization Railway Company, to extend its railway from Arundel to a point in the municipality of the united townships of Preston and Hartwell, not exceeding 30 miles, in lieu of the subsidy granted by item 31 of section 2 of chapter 8 of 1900.
- 550.** For a line of railway from Jonquières to La Baie des Ha Ha, not exceeding 20 miles, in lieu of the subsidy of 12 miles granted by item 21 of section 2 of chapter 7 of 1899.
- 551.** For a line of railway from Lime Ridge northerly through the county of Wolfe in the county of Megantic, not exceeding 50 miles, being a revote of the subsidy granted by chapter 4 of 1894.
- 552.** For a line of railway from Joliette to or near Lake Manuan, a distance not exceeding 60 miles, being a revote and in lieu of subsidies granted by chapter 4 of 1897 and chapter 8 of 1900.
- 553.** For a line of railway from St. Eustache to St. Placide in the county of Two Mountains, not to exceed 18 miles; from St. Eustache to Sault au Recollet, 12 miles; and from St. Placide to St. Andrews, 8 miles—not exceeding in all 38 miles; being a revote of subsidies granted by chapter 24 of 1887 and chapter 5 of 1892, respectively.
- 554.** For a line of railway from Roberval westward towards James Bay, not exceeding 60 miles, in lieu of the subsidy granted by item 25 of section 2 of chapter 7 of 1901.
- 556.** For a line of railway from Yamaska to Lotbinière, a distance not exceeding 70 miles, in lieu of the subsidy granted by item 27 of section 2 of chapter 7 of 1899.
- 557.** To the Ottawa, Northern and Western Railway Company, for that portion of its line from a point at the east end of the Hull station yard of the Canadian Pacific Railway to a point of junction with the Interprovincial Bridge approach in the city of Hull, not exceeding one mile; and for a line of railway to the boundary line of the city of Hull from a point on the Ottawa and Gatineau Railway, now the Ottawa, Northern and Western Railway, not exceeding one-quarter of a mile; in lieu of any balance of mileage subsidized by items 12 and 39 respectively of section 2 of chapter 7 of 1899.
- 558.** To the International Railway Company of New Brunswick (formerly the Restigouche and Western Railway Company), for a line of railway from the western end of the ten miles of its railway, as already constructed from Campbellton towards a point on the St. John River between Grand Falls and Edmundston, not exceeding 67 miles, being a revote, and in lieu of subsidies granted by chapter 4 of 1897, item 42 of section 2 of chapter 7 of 1899, and item 22 of section 2 of chapter 8 of 1900.
- 559.** For a line of railway from Woodstock to the International Boundary, not exceeding 26 miles, being a revote of the subsidy granted by chapter 4 of 1894.
- 560.** To the St. John Valley Railway Company, for a line of railway from a point on the Canadian Pacific Railway at or near Welsford or Westfield, or between the said two points, to Gagetown, not exceeding 30 miles, being a revote of the subsidy granted by chapter 4 of 1897.
- 561.** To the Shediac and Coast Railway Company, for a line of railway from Shediac to Shemogue and towards Cape Tormentine, in Westmoreland County, not exceeding 38 miles, in lieu of the subsidy granted by item 25 of section 2 of chapter 8 of 1900.

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- 562.** To the Mabou and Gulf Railway Company, Limited, for a line of railway from Mabou Coal Mines to a point at or near Glendyer, thence to Orangedale on the Intercolonial Railway, not exceeding 34 miles, a revote of the subsidy granted by chapter 4 of 1894, and in substitution of the 25 miles subsidized thereby from Orangedale to Broad Cove.
- 563.** To the Nova Scotia Eastern Railway Company, Limited, for a line of railway from New Glasgow to Cross Roads, Country Harbour, thence to the town of Guysborough, and thence to the Strait of Canso; with a branch from Cross Roads, Country Harbour, aforesaid, down the Country Harbour River to the Deep Waters thereof, not exceeding 116 miles; in lieu of subsidies for 40 and 80 miles granted by items 4 and 1, respectively, of section 2 of chapter 7 of 1901.
- 564.** For a line of railway from Debert Station on the Intercolonial Railway to Debert Coal Mine, not exceeding $4\frac{1}{2}$ miles, in lieu of the subsidy granted by item 29 of section 2 of chapter 8 of 1900.
- 565.** For a line of railway from a point on the Joggins Railway near River Hebert Railway Bridge to the village of Minudie, not exceeding 6 miles, being a revote and in substitution of subsidy granted by chapter 4 of 1894.
- 566.** To the Middleton and Victoria Beach Railway Company, Limited, for a line of railway from Victoria Beach to Middleton, not exceeding 41 miles, in lieu of subsidies granted by item 28 of section 2 of chapter 8 of 1900, and by item 21 of section 2 of chapter 7 of 1901.
- 567.** To the Halifax and South-western Railway Company, for the following lines of railway:—
- (a.) A line of railway from a point at or near Halifax to a point on the Central Railway at or near Mahone Bay, not exceeding 68 miles.
 - (b.) A line of railway from a point on the Central Railway at or near Bridgewater towards Barrington Passage, not exceeding 77 miles.
 - (c.) A line of railway from a point at or near New Germany on the Central Railway to a point at or near Caledonia, not exceeding 22 miles.
 - (d.) A line of railway from a point at or near Caledonia to Liverpool, not exceeding 29 miles.
- The subsidies to the said lines of railway being granted in lieu of subsidies granted by items 17, 18, 35 and 36 of section 2 of chapter 7, 1899 by items 26 and 40 of section 2 of chapter 8 of 1900, and items 5 and 23 of section 2 of chapter 7 of 1901, respectively.
- 568.** To the Inverness Railway and Coal Company, formerly the Inverness and Richmond Railway Company, Limited, for 8 miles of railway between Point Tupper and Broad Cove; and for a line of railway not exceeding 37 miles, from Cheticamp to a point on the line already built between Broad Cove and Point Tupper, being a revote and in substitution of the subsidy granted by chapter 4 of 1897.
- 569.** For a line of railway from a point at or near Wolfville on the Dominion Atlantic Railway to the Government pier on the Basin of Minas, not exceeding one mile, in lieu of the subsidy granted by item 19 of section 2 of chapter 7 of 1901.
- 570.** To the Nicola, Kamloops and Similkameen Coal and Railway Company, for a line of railway from a point at or near Spence's Bridge on the Canadian Pacific Railway to Nicola Lake, not exceeding 45 miles, being a revote of subsidies granted by chapter 5 of 1892 and chapter 4 of 1894.
- 571.** For a line of railway from Winnipeg Beach or Teulon to a point on Icelandic River, by way of Gimli, not exceeding 35 miles, in lieu of the subsidy granted by item 26 of section 2 of chapter 7 of 1901.

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- 572.** To the Edmonton, Yukon and Pacific Railway Company, for a line of railway from the town of Strathcona to Edmonton, and thence westerly towards the Yellow Head Pass, a distance not exceeding 50 miles, in lieu of the subsidy granted by item 41 of section 2 of chapter 7 of 1899.
- 573.** To the St. John Valley and Rivière du Loup Railway Company, for a line of railway from Fredericton to Woodstock, not exceeding 59 miles, in lieu of the subsidy granted by item 5 of section 2 of chapter 7 of 1899.
- 574.** For a line of railway from Hawkesbury, Ontario, to South Indian, not exceeding 35 miles, in lieu of the subsidy granted by item 22 of section 2 of chapter 7 of 1899.
- 575.** To the Tilsonburg, Lake Erie and Pacific Railway Company, for a line of railway from Woodstock northerly to a point on the Grand Trunk Railway at Berlin, or from Ingersoll to Stratford, or to any point on the Grand Trunk Railway between these places, not exceeding 35 miles, being in addition to and continuation of the 9 miles mentioned in item 1 of this section (544).
- 576.** To the Irondale, Bancroft and Ottawa Railway Company, for a line of railway from the present terminus of its railway, near Baptiste, easterly to a point at or near Renfrew, not exceeding 75 miles.
- 577.** To the Nepigon Railway Company, for a line of railway from Lake Superior to Lake Nepigon, and from a point on the north shore of Lake Nepigon northerly, not exceeding 80 miles.
- 578.** To the Manitoulin and North Shore Railway Company, for a line of railway from Little Current on its present line, to Sudbury, and thence towards the main line of the Canadian Pacific Railway Company, not exceeding 30 miles, in lieu of the subsidy for 21 miles granted by item 38 of section 2 of chapter 7 of 1899.
- 579.** To the Thunder Bay, Nepigon and St. Joe Railway Company, for a line of railway from Port Arthur north-easterly, not exceeding 50 miles.
- 580.** To the Timagami Railway Company, for a line of railway from a point at or near Sturgeon Falls in a north-westerly direction to a point on the westerly shore of Lake Timagami in the district of Nipissing, not exceeding 50 miles.
- 581.** To the Bay of Quinté Railway Company, for further extension of its line of railway, from the northern terminus thereof, commencing from a point at or near Actinolite, thence in a north-westerly direction, via the villages of Queensboro' and Bannockburn, to a point in the township of Marmora or Lake in Hastings County, not exceeding 20 miles in all.
- 582.** To the Bruce Mines and Algoma Railway Company, for 21 miles from the end of its line, as subsidized by chapter 7 of 1901, northward, not exceeding 21 miles.
- 583.** To the James Bay Railway Company, for a line of railway from Toronto, via the east side of Lake Simcoe, to a point at, near, or beyond Sudbury, through Parry Sound, not exceeding 265 miles, in lieu of two subsidies granted by chapter 8 of 1900, for 35 and 20 miles, respectively, from Parry Sound towards James Bay.
- 584.** To the Quebec and Lake St. John Railway Company, for one mile of railway from Roberval to the Government wharf at Lake St. John.
- 585.** To the Montfort and Gatineau Colonization Railway Company, for the extension of its line of railway from Morin Flats to St. Jerome, to connect with the Great Northern Railway, not exceeding 22 miles.
- 586.** To the Interprovincial and James Bay Railway Company, for a line of railway from Lake Timiskaming at the present terminus of the Canadian Pacific Railway line, in a northerly direction, not to exceed 50 miles.
- 587.** For a line of railway from Waltham Station to Ferguson Point, in the county of Pontiac, not exceeding 20 miles.
- 588.** For a line of railway from Lake Nominigou to Le Lièvre, not exceeding 35 miles.

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- 589.** For a line of railway in extension of the line from Lime Ridge into the county of Mégantic to the bridge over the St. Lawrence at or near Quabou, not exceeding 30 miles.
- 590.** To the Quebec Central Railway Company, for an extension of its line of railway from St. François to St. George, not exceeding 9 miles; also for a railway from Scott Junction to the Quebec bridge, not exceeding 22 miles.
- 591.** For a line of railway from the station of Lac Bouchette on the Quebec and Lake St. John Railway to St. André, not exceeding 13 miles.
- 592.** For a line of railway from Quebec towards Seven Islands, including branches to Murray Bay and Baie St. Paul, not exceeding 200 miles.
- 593.** For a branch line from a point at or near the intersection of the Canadian Pacific Railway and the Great Northern Railway between St. Philippe d'Argenteuil and Lachute, thence in a northerly direction, passing through the village of Brownsburg, not exceeding 3 miles.
- 594.** To the Orford Mountain Railway Company, for a line of railway from a point on its main line between Lawrenceville and Eastman to Lake Bonella, 5 miles; from Kingsbury to Windsor Mills, 10 miles; and from Eastman to the town line between the township of Bolton, east part, and the township of Potton, 12 miles—not exceeding in the whole 27 miles.
- 595.** To the Atlantic, Quebec and Western Railway Company, for a line of railway from Gaspé to a point at or near Causapscal on the Intercolonial Railway, and from that point to Edmundston, not exceeding 260 miles; and for a line of railway from Paspébiac to Gaspé as near the shore as practicable, not exceeding 102 miles.
- 596.** For a line of railway, in addition to and in extension of the line mentioned in item 11 (554) of this section, from Roberval towards James Bay, not exceeding 40 miles.
- 597.** For a branch line from a point near the bridge at Trois Pistoles River on the Intercolonial Railway in a south-easterly direction to Mackenzie and Renouf Falls, on the Trois Pistoles River, not exceeding 24 miles.
- 598.** To the Matane and Gaspé Railway Company, for a line of railway from a point at or near St. Octave on the Intercolonial Railway to Matane, not exceeding 30 miles.
- 599.** To the Chateauguay and Northern Railway Company, for a line of railway from a point on its main line at or near L'Épiphanie, passing by way of the parish of St. Jacques de l'Acadian to the village of Rawlin, not exceeding 16 miles.
- 600.** For a line of railway from the line of the Montreal and Atlantic Railway Company at St. Guillaume to the River Yamaska to join with the South Shore Railway, a distance not exceeding 12 miles.
- 601.** For a line of railway from La Tuque on the St. Maurice River to a point on the Lake St. John Railway near the River Jeannotte, not exceeding 35 miles.
- 602.** To the Montreal Northern Railway Company, for a line of railway from a point at or near Ste. Agathe des Monts station towards the township of Howard, in the county of Argenteuil, passing near Lakes St. Joseph and Ste. Marie, in a southerly direction, a distance not exceeding 15 miles.
- 603.** To the International Railway Company of New Brunswick, for a line of railway, in addition to and in extension of the line of 67 miles mentioned in item 14 of this section, to a point on the St. John River between Grand Falls and Edmundston, not exceeding 33 miles.
- 604.** To the Beersville Coal and Railway Company, for a line of railway from Adamsville on the Intercolonial Railway to a point at or near Brown's Landing or Beersville, not exceeding 7 miles.

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- 605.** To the York and Carleton Railway Company, for a line of railway from its present terminus westerly, not exceeding 5 miles.
- 606.** To the Mabou and Gulf Railway Company, Limited, for a line of railway from a point on the Intercolonial Railway at or near Mine's Road Station to the wharf at Caribou Cove, not exceeding 4 miles, being in addition to subsidy mentioned in item 18 (562) of this section.
- 607.** To the Nova Scotia Eastern Railway Company, Limited, for a line of railway from Dartmouth through the Musquodoboit Valley to a point at or near Melrose to connect there with the railway mentioned in item 19 (563) of this section, not exceeding 120 miles.
- 608.** To the Midland Railway Company, Limited, for a line of railway from Truro northerly towards Brule, not exceeding 34 miles.
- 609.** For a line of railway from St. Peters to Louisburg, not exceeding 50 miles.
- 610.** To the Koetenay Central Railway Company, for a line of railway from Golden to the International Boundary Line, via Windermere and Fort Steele, and crossing the Crow's Nest Railway at or near Elko, not exceeding 186 miles.
- 611.** To the Kettle River Valley Railway Company, for a line of railway from Grand Forks to a point 50 miles up the North Fork and West Fork of the North Fork of Kettle River, not exceeding 50 miles.
- 612.** For a line of railway from Wellington to Union Bay, not exceeding 55 miles.
- 613.** For a line of railway from Midway to Vernon, not exceeding 150 miles.
- 614.** To the St. Mary's River Railway Company, for a line of railway from Spring Coulee, crossing St. Mary's River to Cardston, 16 miles, and from a point on this line to or near the intake of the irrigation canal, about 16 miles, in all not exceeding 32 miles.
- 615.** For a line of railway from Dawson to Stewart River, passing at or near Grand Forks, not exceeding 84 miles.
- 616.** To the Canadian Pacific Railway Company, for a branch line from a point on the main line between Moosomin and Elkhorn, north-westerly to a point in the neighbourhood of the Pheasant Hills, not exceeding 136 miles.
- 617.** For a line of railway from a point at or near Medicine Hat on the Canadian Pacific Railway to the coal fields in or near townships 12 and 13, range 6, west of the fourth principal meridian, not exceeding 8 miles.
- 618.** To the Great Northern Railway of Canada, for a line of railway from Garneau Junction to the Quebec bridge, not exceeding 70 miles.
- 619.** To the Halifax and South-western Railway Company, for a line of railway to Barrington Passage, in addition to and in continuation of the 77 miles mentioned in paragraph (b) of item 23 (567) of this section, not exceeding 35 miles.
- 620.** To the Lake Superior, Long Lake and Albany Railway Company, for a line of railway from Peninsula Harbour in a northerly direction, not exceeding 10 miles.
- 621.** To the Cumberland Railway and Coal Company, for a line of railway from Parrsboro' Station to Riverside Wharf, not exceeding 1 mile.
- 622.** To the Indian River Railway Company, for a line of railway from a point at or near the north end of Lake Megantic, thence southerly along the said lake to a point on the International Boundary, not exceeding 19 miles.

3. The Governor in Council may grant the subsidies hereinafter mentioned towards the construction of the bridges also hereinafter mentioned, that is to say:—

623. Towards the construction and completion of a railway bridge and approaches over the Nicolet River at Nicolet, in lieu of the grant under item 39 of section 2 of chapter 8 of 1900, \$15,000.

624. Towards the construction of the steel superstructure of a railway bridge on the St. Francis River, in the county of Yamaska, in lieu of the grant under item 38 of section 2 of chapter 8 of 1900, but subject to the same conditions as expressed therein, payable to the Canadian Bridge Company of Walkerville, as their claim may appear for work already done on the said bridge, \$50,000.

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625. To the Canadian Bridge Company of Walkerville, to strengthen and complete the foundation and approaches to the bridge over the St. Francis River subsidized in favour of the South Shore Railway Company by section 3 of chapter 7 of 1899, \$35,000, which amount shall remain the first charge on the road, and shall be recouped to the Treasury out of subsidies earned or to be earned, \$35,000.

626. To the Chateauguay and Northern Railway Company, in addition to the subsidy for the Bout de l'Île bridge granted by item 33 of section 2 of chapter 8 of 1900, \$50,000.

4. The subsidies hereby authorized towards the construction of any railway or bridge shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows :—

(a.) upon the completion of the work subsidized ; or

(b.) by instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken ; or

(c.) upon the progress estimates on the certificate of the Chief Engineer of the Department of Railways and Canals, that, in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars ; or

(d.) with respect to (b) and (c), part one way, part the other.

5. The subsidies hereinbefore authorized to be granted to companies named shall, if granted by the Governor in Council, be granted to such companies respectively ; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railways and bridges respectively ; all the lines and bridges for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August, 1903, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the Company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make. The location also of such subsidized lines and bridges shall be subject to the approval of the Governor in Council.

6. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide and secure to other companies such running powers, traffic arrangements and other rights, as will afford to all railways connecting with the railways and bridges so subsidized, reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways ; and the Governor in Council shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways and bridges hereby subsidized.

7. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transportation for men, supplies, materials and mails over the portion of the line in respect of which it has received such subsidy, and whenever required, shall furnish mail cars properly equipped for such mail service ; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the department of the Government for which such service is being performed and the company performing it, and, in case of disagreement, then at such rates as are approved by the Governor in

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Council; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of the subsidy received by the company under this Act.

8. As respects all railways and bridges for which subsidies are granted by this Act, the company at any time owning or operating any of the railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers, showing the cost of constructing the railway or bridge, the cost of operating it, and the earnings thereof.

9. The Governor in Council may make it a condition of the grant of the subsidies herein provided, or any heretofore authorized by any Act of Parliament as to which a contract has not yet been entered into with the company for the construction of the railway, that the company shall lay its road with new steel rails, made in Canada, if they are procurable in Canada of suitable quality, upon terms as favourable as other rails can be obtained, of which the Minister of Railways and Canals shall be judge.

By Special Act 4 Edward VII Chap. 34, 1904.

1. In this Act, unless the context otherwise requires, the expression "cost" means the actual, necessary and reasonable cost, and shall include the amount expended upon any bridge, up to and not exceeding \$25,000, forming part of the line of railway subsidized not otherwise receiving any bonus, but shall not include the cost of terminals and right of way of the railway in any city or incorporated town; and such actual, necessary and reasonable cost shall be determined by the Governor in Council, upon the recommendation of the Minister of Railways and Canals, and upon the report of the Chief Engineer of Government Railways, certifying that he has made or caused to be made an inspection of the line of railway for which payment of subsidy is asked, and careful inquiry into the cost thereof, and that in his opinion the amount upon which the subsidy is claimed is reasonable, and does not exceed the true, actual and proper cost of the construction of such railway,

2. The Governor in Council may grant a subsidy of \$3,200 per mile towards the construction of each of the undermentioned lines of railway (not exceeding in any case the number of miles hereinafter respectively stated) which shall not cost more on the average than \$15,000 per mile for the mileage subsidized, and towards the construction of each of the said lines of railway not exceeding the mileage hereinafter stated, which shall cost more on the average than \$15,000 per mile for the mileage subsidized, a further subsidy beyond the sum of \$3,200 per mile of fifty per cent on so much of the average cost of the mileage subsidized as in excess of \$15,000 per mile, such subsidy not exceeding in the whole the sum of \$6,400 per mile:—

627. To the Bracebridge and Trading Lake Railway Company, for a railway from Bracebridge, in Muskoka, to a point at or near Baysville, Ontario, in lieu of the subsidy granted by item 7 of section 2 of chapter 8 of 1900, not exceeding 15 miles.

628. To the Bruce Mines and Algoma Railway Company, for the following lines of railway:—

- (a.) For that portion of its line of railway from Bruce Mines Junction southerly to the town of Bruce Mines, on Lake Huron, a distance not exceeding 3 miles;
 - (b.) For the 6 miles of railway constructed from Gordon Lake Station, being the end of its line as subsidized by chapter 7 of 1901, northward to Rock Lake, a distance of 6 miles;
 - (c.) For 12 miles from Rock Lake northward, a distance not exceeding 12 miles;
- The subsidies to the said lines being granted in lieu of the subsidy granted by item 38 of section 2 of chapter 57 of 1903, not exceeding 21 miles.

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- 629.** To the Nepigon Railway Company, for the following lines of railway :—
- (a.) From a point at or near Nepigon Station on the line of the Canadian Pacific Railway to Nepigon Lake, not exceeding 30 miles ;
 - (b.) From a point on Nepigon Bay of Lake Superior to a point on the west of Lake Helen on the line of the Nepigon Railway, not exceeding $3\frac{1}{2}$ miles ;
 - (c.) From a point on the line of the Nepigon Railway at or near the crossing of the Fraser River, to a point on Lake Jesse, by way of Cameron's Falls, not exceeding $1\frac{1}{2}$ mile ;
 - (d.) From a point on the north shore of Lake Nepigon northerly, not exceeding 45 miles ;
- The subsidies to the said lines being granted in lieu of the subsidy granted by item 33 of section 2 of chapter 57 of 1903, not exceeding 80 miles.
- 630.** For the construction of a branch line of railway beginning at the Canadian Pacific Railway Company's main line at St. Philippe d'Argenteuil Station, or at a point between there and Grenville, thence in a northerly direction, in lieu of the subsidy granted by item 49 section 2 of chapter 57 of 1903, not exceeding 3 miles.
- 631.** To the Chateauguay and Northern Railway, for a railway from a point in Hochelaga ward, Montreal, to a point on the Great Northern Railway in or near the Town of Joliette, passing at or near the Town of L'Assomption, Quebec, together with a spur line into the said town, in lieu of the subsidy granted by item 32 of section 2 of chapter 8 of 1900, not exceeding 42 miles.
- 632.** To the Great Northern Railway Company of Canada, to enable it to extend its railway from Arundel to a point in the municipality of the united Townships of Preston and Hartwell, Province of Quebec, in lieu of the subsidy granted to the Montford and Gatineau Colonization Railway by item 6 of section 2 of chapter 57 of 1903, not exceeding 30 miles.
- 633.** To the Chateauguay and Northern Railway Company, for a branch line from a point on its main line at or near Charlemagne, thence northerly and westerly to a point on the Montford and Gatineau Railway at or near Morin Flats, in lieu of the Subsidy granted to the Montford and Gatineau Colonization Railway by item 41 of section 2 of chapter 57 of 1903, not exceeding 22 miles.
- 634.** To the Ottawa River Railway Company, for a line of Railway from a point at or near St. Agathe des Monts Station towards the Township of Howard in the County of Argenteuil, passing near Lakes St. Joseph and St. Marie, in a southerly direction, in lieu of the subsidy granted to the Montreal Northern Railway Company by item 58 of section 2 of chapter 57 of 1903, not exceeding 15 miles.
- 635.** To the Ottawa River Railway Company, for a line of railway between a point in the Parish of St. Andrews, in the County of Argenteuil, and a point in the Parish of St. Lawrence, in the County of Jacques Cartier, passing through the Parishes of St. Placide, St. Eustache and St. Martin, in lieu of the subsidy granted by item 10 of section 2 of chapter 57 of 1903, not exceeding 38 miles.
- 636.** For a line of railway from Lardo towards Upper Arrow Lake, British Columbia, in lieu of the subsidy granted by item 28 of section 2 of chapter 7 of 1901, not exceeding 30 miles.
- 637.** To the Western Alberta Railway Company, from a point on the United States boundary, west of range 27, northwesterly towards Anthracite, in the district of Alberta, in lieu of the subsidy granted by item 40 of section 2 of chapter 7 of 1899, not exceeding 50 miles.

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3. The Governor in Council may grant the subsidy hereinafter mentioned towards the construction of the bridge also hereinafter mentioned, that is to say :—

638. To the Chateauguay and Northern Railway Company, the balance remaining unpaid of the subsidy granted by item 33 of section 2 of chapter 8 of 1900, for a single-track standard railway bridge, with two roadways 10 feet wide, for free vehicular traffic, the same as upon a public highway, from Bout de L'Île to Charlemagne at the Junction of the Ottawa and St. Lawrence Rivers, a sum not exceeding \$51,000.

4. The subsidies hereby authorized towards the construction of any railway or bridge shall be payable out of the Consolidated Revenue Fund of Canada, and may, unless otherwise expressly provided in this Act, at the option of the Governor in Council, on the report of the Minister of Railways and Canals, be paid as follows :—

(a.) Upon the completion of the work subsidized ; or

(b.) By instalments, on the completion of each ten-mile section of the railway, in the proportion which the cost of such completed section bears to that of the whole work undertaken ; or

(c.) Upon the progress estimates on the certificate of the Chief Engineer of the Department of Railways and Canals, that, in his opinion, having regard to the whole work undertaken and the aid granted, the progress made justifies the payment of a sum not less than thirty thousand dollars ; or

(d.) With respect to (b) and (c), part one way, part the other.

5. The subsidies hereinbefore authorized to be granted to companies named shall, if granted by the Governor in Council, be granted to such companies respectively ; the other subsidies may be granted to such companies as establish to the satisfaction of the Governor in Council their ability to construct and complete the said railways and bridges for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within two years from the first day of August, 1904, and completed within a reasonable time, not to exceed four years from the said first day of August, to be fixed by the Governor in Council, and shall also be constructed according to descriptions, conditions and specifications approved by the Governor in Council on the report of the Minister of Railways and Canals, and specified in each case in a contract between the Company and the said Minister, which contract the Minister, with the approval of the Governor in Council, is hereby empowered to make. The location also of such subsidized lines and bridges shall be subject to the approval of the Governor in Council.

6. The granting of such subsidies, and the receipt thereof by the respective companies, shall be subject to the condition that the Board of Railway Commissioners for Canada may at all times provide and secure to other companies such running powers, traffic arrangements and other rights, as will afford to all railways connecting with the railways and bridge so subsidized, reasonable and proper facilities in exercising such running powers, fair and reasonable traffic arrangements with connecting companies, and equal mileage rates between all such connecting railways ; and the said Board shall have absolute control, at all times, over the rates and tolls to be levied and taken by any of the companies, or upon any of the railways and the bridge hereby subsidized. Provided always that any decision of the said Board made under this section may be at any time varied, changed, or rescinded by the Governor in Council as he deems just and proper.

7. Every company receiving a subsidy under this Act, its successors and assigns, and any person or company controlling or operating the railway or portion of railway subsidized under this Act, shall each year furnish to the Government of Canada transpor-

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tation for men, supplies, materials and mails over the portion of the lines in respect of which it has received such subsidy, and, whenever required, shall furnish mail cars properly equipped for such mail service; and such transportation and service shall be performed at such rates as are agreed upon between the Minister of the Department of the Government for which such service is being performed, and the company performing it, and, in case of disagreement, then at such rates as are approved by the Board of Railway Commissioners for Canada; and in or towards payment for such charges the Government of Canada shall be credited by the company with a sum equal to three per cent per annum on the amount of subsidy received by the company under this Act.

8. As respects all railways and the bridge for which subsidies are granted by this Act, the company at any time owning or operating any of the railways shall, when required, produce and exhibit to the Minister of Railways and Canals, or any person appointed by him, all books, accounts and vouchers, showing the cost of constructing the railway or bridge, the cost of operating it, and the earnings thereof.

9. The Governor in Council may make it a condition of the grant of the subsidies herein provided, or any heretofore authorized by any Act of Parliament as to which a contract has not yet been entered into with the company for the construction of the railway, that the company shall lay its road with new steel rails, made in Canada, if they are procurable in Canada of suitable quality, upon terms as favourable as other rails can be obtained, of which the Minister of Railways and Canals shall be the judge.

10. Whenever a contract has been duly entered into with a company for the construction of any line of railway hereby subsidized, the Minister of Railways and Canals, at the request of the company, and upon the report of the Chief Engineer of Government Railways, and his certificate that he has made careful examination of the surveys, plans and profile of the whole line so contracted for, and has duly considered the physical characteristics of the country to be traversed and the means of transport available for construction, naming the reasonable and probable cost of such construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the Chief Engineer, and providing that the company shall be entitled to be paid, as the minimum, the ordinary subsidy of \$3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said \$3,200 per mile, if any; and the balance, forty per cent, shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the Chief Engineer, entitles the company thereto: Provided always—

(a.) that the estimated cost, so certified, is not less on the average than \$18,000 per mile for the whole mileage subsidized:

(b.) that no payment shall be made except upon a certificate of the Chief Engineer that the work done is up to the standard specified in the company's contract:

(c.) that in no case shall the subsidy exceed the sum of \$6,400 per mile.

11. Whenever a contract has been duly entered into with a company for the construction of any line of railway subsidized by either of the Acts mentioned in the preamble, the Minister of Railways and Canals, at the request of the Company and upon the report of the chief engineer of government railways, and his certificate that he has made careful examination of the surveys, plans and profiles of the whole line so contracted for and has duly considered the physical characteristics of the country to be traversed and the means of transport available for construction, naming the probable and reasonable cost of such construction, may, with the authorization of the Governor in Council, enter into a supplementary agreement, fixing definitely the maximum amount of the subsidy to be paid, based upon the said certificate of the chief engineer,

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and providing that the company shall be entitled to be paid, as the minimum, the ordinary subsidy of \$3,200 per mile, together with sixty per cent of the difference between the amount so fixed and the said \$3,200 per mile, if any; and the balance, forty per cent, shall be paid only on completion of the whole work subsidized, and in so far as the actual cost, as finally determined by the chief engineer, entitles the company thereto: Provided always—

(a.) that the estimated cost, so certified, is not less on the average than eighteen thousand dollars per mile for the whole mileage subsidized;

(b.) that no payment shall be made except upon a certificate of the chief engineer that the work done is up to the standard specified in the Company's contract;

(c.) that in no case shall the subsidy exceed the sum of six thousand four hundred dollars per mile.

2. In construing this Act the word "cost" shall have the meaning assigned to it by the Act authorizing the granting of the subsidy.

PART IV

MISCELLANEOUS STATEMENTS

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No.

SUBSIDY AGREEMENTS for the Construction of Railways

No. of Contract.	Date of Signature.	Name of Railway.	Line of Railway to be Constructed.	AUTHORITY FOR EXECUTION.	
				Act of Parliament.	Order in Council.
15303	Jan. 23, 1904	Bay of Quinté Ry. Co.	Extension of railway from point near Actinolite to a point in tp. of Marmora, Hastings Co.	Can. 1903, c. 57.	Dec. 24, 1903.
15519	June 24, 1904	Beersville Coal & Railway Co.	From Adamsville to point near Brown's Landing or Beersville.	Can. 1903, c. 57.	April 26, 1904.
15163	July 29, 1903	Canadian Northern Ry. Co.	From Grand View to Edmonton. 620 miles, and Prince Albert branch, 100 miles east from Prince Albert.	3 Edw. VII, c. 7.	Aug. 1, 1903.
15272	Dec. 12, 1903	Chateauguay and Northern.	From pt. on main line near L'Epiphanie to village of Rawdon.	3 Edw. VII, c. 57.	Nov. 28, 1903.
15280	" 7, 1903	Canadian Northern Ry. Co.	From point on line of Winnipeg Great Northern Ry., north of Swan River to Prince Albert, N.W.T.	1899, c. 7.	Nov. 4 and 26, 1903.
15281	" 7, 1903	Canadian Northern Ry. Co.	In further extension north of Swan River towards Prince Albert, N.W.T.	1900, c. 8.	Nov. 4 and 26, 1903.
15283	" 21, 1903	Canadian Bridge Co.	St. Francis River bridge.	1903, c. 57.	Nov. 12, 1903.
15284	" 21, 1903	Canadian Bridge Co. <i>et al.</i>	For completion of foundation and approaches of St. Francis River bridge.	1903, c. 57.	Nov. 14, 1903.
15286	" 26, 1903	Central Counties Ry. Co.	From Hawkesbury, Ont., to South Indian.	1903, c. 57.	Dec. 12, 1903.
15300	Jan. 14, 1904	Canadian Pacific Ry. Co.	From point on main line between Moosomin and Elkhorn, north-westerly to point in neighbourhood of Pheasant Hills.	1903, c. 57.	Nov. 17, 1903. Jan. 12, 1904.
15520	June 24, 1904	Edmonton, Yukon & Pacific Ry. Co.	From Strathcona to Edmonton, &c.	Can. 1903, c. 57.	Mch. 10, 1904. June 13, 1904.
15164	July 29, 1903	Grand Trunk Pacific Railway Co.	From Winnipeg to Port Simpson (W. Div.) and providing for construction by Govt. of E. Div. from Winnipeg to Moncton; to be leased to the Co.		July 30, 1903.
15432	Feb. 18, 1904	Grand Trunk Pacific Railway Co.	Varying agreement, No. 15164.		
15244	Nov. 9, 1903	Halifax & S. Western Railway Co.	From Halifax to Malone Bay.	Can., 1903, c. 57.	Nov. 4, 1903.
15245	" 9, 1903	" "	From Bridgewater toward Barrington Passage; also a line to Barrington Passage in addition.	Can., 1903, c. 57.	Nov. 4, 1903.
15246	" 9, 1903	" "	From New Germany to Caledonia	Can., 1903, c. 57.	Nov. 4, 1903.
15247	" 9, 1903	" "	From Caledonia to Liverpool.	Can., 1903, c. 57.	Nov. 4, 1903.
15248	" 9, 1903	Inverness Railway & Coal Co.	From Cheticamp to point between Broad Cove and Point Tupper.	Can., 1903, c. 57.	Nov. 4, 1903.
15249	" 9, 1903	" "	From Point Tupper to Broad Cove.	Can., 1903, c. 57.	Nov. 4, 1903.

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1.

entered into during the Fiscal Year ended June 30, 1904.

AMOUNT OF SUBSIDY.		Number of Miles Subsidized.	Maximum Grade, Feet per Mile.	Radius of Curvature Not less than.	Width of Clearing Each Side.	Width of Cutting.	Embankment.	Steel Rails, lbs. per Linear Yard.	Date for Completion.
Per Mile.	Not exceeding.								
\$	\$		Feet.	Feet.	Feet.	Feet.	Fect.	Lbs.	
3,200	6,400 p. mile.	20	74	955	50	20	15	56	Aug. 1, 1905.
3,200	6,400 "	7	79.2	573	50	20	15	56	Jan. 1, 1905.
Guarantee of principal and interest of Co.'s securities to the extent of \$13,000 per mile.		720	53	955	50	20	14	56	Oct. 1, 1905.
3,200	6,400 p. mile.	16	53	1,433	50	20	15	56	Oct. 31, 1904.
3,200	6,400 "	100	53	955	50	20	14	56	Aug. 1, 1904.
3,200	6,400 "	100	53	955	50	20	14	56	Aug. 1, 1904.
..... 50,000 "		.....						
..... 35,000 "		.....						
3,200	6,400 "	35	52.80	1,433	50	20	15	56	Aug. 1, 1905.
3,200	6,400 "	136	52.80	1,433	50	20	14	56	Oct. 31, 1905.
3,200	6,400 "	50	52.8	955	50	20	15	56	Dec. 1, 1906.
Guarantee of bonds to extent of \$13,000 per mile on prairie section and of \$30,000 per mile on Mountain section.									
3,200	6,400 p. mile.	68	80	717	50	20	15	56	Aug. 1, 1895.
3,200	6,400 "	77.35	80	495 & 764.49	50	20	15	56	Aug. 1, 1905.
3,200	6,400 "	22	80	764.49	50	20	15	56	Aug. 1, 1905.
3,200	6,400 "	29	80	64.49	50	20	15	56	Aug. 1, 1905.
3,200	6,400 "	37	80	955	50	20	15	56	Aug. 1, 1905.
3,200	6,400 "	8	80	955	50	20	15	56	Aug. 1, 1905.

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SUBSIDY Agreements for the Construction of Railways

Number of Contract.	Date of Signature.	Name of Railway.	Line of Railway to be Constructed.	AUTHORITY FOR EXECUTION.	
				Act of Parliament.	Order in Council.
15301	Jan. 15, 1904	International Ry. Co. of N.B.	From west end of its 10 miles towards point on St. John Riv., between Grand Falls and Edmundston.	Cancelled by agreement.	Jan. 13, 1904.
15415	Mch. 14, 1904	Lindsay, Bobcaygeon & Pontypool.	Between Burketon and Bobcaygeon.	Can., 1903, c. 57.	Feb. 19, 1904.
15316	Dec. 28, 1903	Middleton & Victoria Beach.	From Victoria Beach to Middleton.	Can., 1903, c. 57.	Nov. 4, 1903.
15417	Apl. 15, 1904	Nova Scotia, Eastern	(1). New Glasgow to Cross Roads, 116 miles. (2). Dartmouth to Melrose through Musquodoboit Valley, 120 miles.	Can., 1903, c. 57.	Nov. 4, 1903, & Mch. 23, 1904
15039	July 10, 1903	Ottawa, Northern & Western Ry. Co.	From Aylmer to Hull, Quebec.	62-3 Vic., c. 7.	Dec. 5, 1902.
15177	Aug. 25, 1903	" "	From end of 62nd Mile toward Desert.	1 Edw. VII, c. 7.	Feb. 3, 1903.
15178	" 25, 1903	" "	Unearned balance of subsidy upon the 62 miles from Hull towards Desert, 1897, c. 4., sec. 3, Par. 3	1 Edw. VII, c. 7.	Feb. 3, 1903.
15234	Oct. 19, 1903	Quebec Bridge & Ry Co.	Quebec Bridge, approaches and terminals.		
15338	Feb. 17, 1904	Restigouche & Western Ry. Co.	From Campbellton on I. C. Ry., N.B., towards Grand Falls.	Can., 1901, c. 7.	Feb. 12, 1904.
15283	Dec. 21, 1903	South Shore Ry. Co. <i>et al.</i>	St. Francis River Bridge.	Can., 1903, c. 7.	Nov. 12, 1903.
15284	" 21, 1903	" "	For completion of foundation and approaches of St. Francis River Bridge.	Can., 1903, c. 57.	Nov. 12, 1903.
15386	Mch. 14, 1904	St. Mary's River,	From Spring Coulee to Cardston, 16 miles, and from point on this line near intake of Irrigation Canal, 16 miles.	Can., 1903, c. 57.	Nov. 26, 1903 & Jan. 21, 1904

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, November 8, 1904

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entered into during the Fiscal Year ending June 30, 1904—*Continued.*

AMOUNT OF SUBSIDY.			Number of Miles Subsidized.	Maximum Grade. Feet per Mile.	Radius of Curvature not less than.	Width of Clearing each side.	Width of Cutting.	Embankment.	Steel Rails, lbs., per Lineal Yard.	Date for Completion.
Per Mile.	Not exceeding.									
\$	\$		Feet.	Feet.	Feet.	Feet.	Feet.	Feet.	Lbs.	
3,200	6,400	"	67	52.80	955	50	20	15	56	Dec. 31, 1904.
3,200	6,400	"	40	52.80	1,433	50	20	15	56	Jan. 1, 1905.
3,200	6,400	"	41	63.36	955	50	20	15	56	Aug. 1, 1905.
3,200	6,400	"	236	80	955	50	20	15	56	Dec. 31, 1906.
3,200	6,400	"	9	80	717.574	50	20	15	56	Jan. 31, 1903.
3,200	6,400	"	20	89	573	50	20	15	56	Jan. 1, 1904.
	35,872	"	0	105.6	573	50	20	15	56	Jan. 1, 1904.
Guarantee of principal and interest of securities of the Co. to the extent of \$6,678,200.										Dec. 1, 1906.
3,200	6,400 p. mile.		20	80	819	50	20	15	56	Dec. 1, 1904.
	50,000	"								
	35,000	"								
3,200	3,200	"	32	52.8	819	50	18	10	35	Aug. 1, 1905.

HAZEN HANSARD,
Law Clerk

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CONTRACTS entered into during the Fiscal Year ended June 30, 1904—*Continued.*1.—INTERCOLONIAL RAILWAY—*Concluded.*

No. of Contract.	Date of Signature.	Contractors.	General Description.
1904.			
15504	June 10	J. Arthur Matte	Station and drain at Kempt.
15505	" 24	Joseph Gosselin	Machine shop, &c., at Chaudière Jct., Que.
15512	April 26	City of Halifax	Water at Richmond, &c., Halifax, N.S.
15517	June 10	Robb Engineering Co., Ltd.	Heating plant at Lévis, Que.
15521	" 24	Rhodes Curry Co., Ltd	7 baggage cars.
15541	May 31	Zephirin Gagnon	Extension to station, &c., at St. Michel.
15555	June 15	Simon Benoit	Improvements to station at Tracadie, N.S.
15558	" 15	Willard Kitchen	Extend I.C.R. at Pictou Landing.
15586	" 8	Honoré Huard	Combined station and dwelling at Amqui.
15588	" 24	La Cie d'Aqueduc de (St. Pierre) Montmagny	Supply water at St. Pierre.
15590	" 7	Canadian Loco. Co., Ltd	Deliver 25 Simple Consol. Locos.

2.—PRINCE EDWARD ISLAND RAILWAY.

1903			
15213	Sept. 29	Can. Loco. Co., Ltd.	4 narrow gauge locomotives.
15292	Dec. 26	Hugh McDonald	Transportation of 12 spans and erection of 11 spans. Hillsboro Bridge.
1904			
15409	Mar 21	John W. McLennan	Station at Fredericton, P.E.I.
15416	April 12	J. M. Clark & Co.	Stations at Northam, Richmond, Albany and Kinkora, P.E.I.
15468	" 11	Dominion Bridge Co	1 deck turntable.
15523	June 24	J. M. Clark & Co.	Erect coal shed at Summerside.
15557	" 1	McLean Bros.	Moving and enlarging station at Hunter River.
15604	" 20	J. M. Clark & Co. & D. R. Morrison	Excavating and pipe laying at Georgetown, &c.

3.—CHAMBLY CANAL.

1904			
15397	Mar. 14	J. E. Hebert	Supply crushed stone.
15471	May 7	Phenix Bridge and Iron Works, Ltd.	Bridges at Chambly Canton and Chambly Basin, Que.

4.—CORNWALL CANAL.

1903			
15199	Sept. 16	Bellhouse, Dillon & Co.	Supply 1,500 barrels Portland cement.
1904			
15335	Feb. 6	Joseph J. Fallon	Wharf at foot of Pitt St., Cornwall, Ont.
1903			
15343	Aug. 13	M. P. Davis and Quebec Bank	Varying lease, No. 12,336 and contract No. 13975.
1904			
15408	Apl. 6	M. P. Davis	Supply 11 sets of winches, &c.
15494	May 17	J. C. Johnstone	Repair north bank of canal.
15591	June 16	"	Repair shop at Cornwall, Ont.

5.—GALOPS CANAL.

1904			
15501	June 4	Owen Sound Wire Fence Co.	Supply wire fencing.

4-5 EDWARD VII., A. 1905

CONTRACTS entered into during the Fiscal Year ended June 30, 1903—*Continued.*

6.—GRENVILLE CANAL.

No. of Contract.	Date of Signature.	Contractors.	General Description.
	1904.		
15345	Feb. 22	Fraser & Driscoll	Agreement extending time, within which \$150,000 shall be expended under terms of lease No. 14,375 of Dec. 1901.
15361	" 29	The Phoenix Bridge and Iron Works, Ltd.	Erect swing bridge at Stonefield.

7.—LACHINE CANAL.

	1903.		
15277	Nov 26	Dominion Bridge Co., Ltd.	Erect bridge at Cote St. Paul.
15287	Dec. 30	Bellhouse, Dillon & Co.	Supply 6,000 barrels cement.
15294	" 21	Coulson, Quinlan & Robertson.	Substructure of Cote St. Paul bridge.
	1904.		
15346	Feb. 10	John Quinlan.	Substructure of Brewster's bridge.
15347	" 13	"	Crushed stone and stone blocks.
15437	May 6	E. A. Manny.	Deliver lock gate protection appliances.
15462	Apr. 7	Dominion Bridge Co., Ltd.	Superstructure of Brewster's bridge.
15484	May 9	Sicily Asphaltum Paving Co., Ltd.	Pave west end of Mill street, Montreal.
15497	" 23	Ahearn & Soper, Ltd.	1=60 K. W. 550 volt. D. C. generator and switchboard for Mill St. station.
15525	June 24	Bellhouse, Dillon & Co.	5,000 barrels Portland cement.

8.—MURRAY CANAL.

	1904		
15395	Mar. 23	The McGregor, Banwell Fence Co., Ltd.	Supply wire fencing, &c.
15396	" 19	T. D. Sandford.	Supply cedar fence and brace posts.
15498	June 7	Norman Button.	Erect wire fence along both sides of canal.

9.—RIDEAU CANAL.

	1903.		
15232	Oct. 14	Hamilton Bridge Works Co., Ltd.	Erect swing bridge at Hog's Back Lock Station.
	1904.		
15353	Feb. 22	Thomas McLaughlin.	Substructure, Concession Street Bridge.
15388	Mar. 14	Ottawa Lumber Company.	Supply timber for 1904-05.
15453	April 7	Dominion Bridge Co., Ltd.	Concession Street Bridge, Ottawa.

10.—SAULT STE. MARIE CANAL.

	1903.		
15273	Nov. 17	Henry and John H. Hickler.	Deepen and widen channel way at upper entrance of canal.
	1904.		
15352	Feb. 22	William Benningham.	Extension to South Mooring pier of lower entrance of canal.
15455	April 22	J. E. Murphy Lumber Co.	Timber for year 1904.
15524	June 24	Mason, Gordon & Co.	" "

SESSIONAL PAPER No. 20

CONTRACTS entered into during the Fiscal Year ended June 30, 1903—*Continued.*

11.—SOULANGES CANAL.

No. of Contract.	Date of Signature.	Contractors.	General Description.
	1903.		
15266	Dec. 1	Thomas Prefontaine, jr.	Erect buildings at Cascade Point and Coteau du Lac, Que.
15467	May 31	Provincial Light, Heat & Power Co	Extend time for submission of plans.

12.—TRENT CANAL.

No. of Contract.	Date of Signature.	Contractors.	General Description.
	1903.		
15200	Sept. 16	Bellhouse, Dillon & Co.	Supply 1,500 brls. Portland cement.
15201	" 16	" " " " " " " " " "	" 10,000 " "
15206	" 23	The Sun Portland Cement Co., Ltd	" 2,000 " "
15228	" 29	The Lakefield Portland Cement Co	Agreement to determine amount of water power to be taken by company at Young's Point Dam.
15239	Oct. 10	D. Conroy ...	Raise and widen roads on section) Simcoe Balsam Lake Division.
15382	Feb. 22	Brown & Aylmer	Varying contract No. 13936, Sept. 6th, 1900, <i>re</i> concrete piers at entrance of canal, Lake Simcoe.
15451	May 4	The Lakefield Portland Cement Co	Deliver 7,000 brls. Portland cement.
15474	" 6	Canadian Portland Cement Co., Ltd.	" 14,000 " "
15490	" 16	Owen Sound Portland Cement Co., Ltd.	" 7,000 " "

13.—WELLAND CANAL.

No. of Contract.	Date of Signature.	Contractors.	General Description.
	1903.		
15196	Sept. 4	Joseph Battle	Substructures of Welland and Port Robinson Bridges, Ontario.
15297	" 23	Hamilton Bridge Works Co.	Superstructures of Welland and Port Robinson Bridges, Ontario.
15233	Oct. 14	Joseph Battle	Supply 600 cedar poles.
	1904.		
15296	Jan. 8	"	Setting of 2,000 electric light poles between Port Dalhousie and Port Colborne.
15348	Feb. 22	McCleary & McLean.	Supply timber, lumber, &c., for 1904.
15349	" 22	Weddell, Battle & Manley.	Deepen rock cut at Ramey's Bend, north of village of Humberstone.
15350	" 22	Magann & Phin.	Removal of centre pier, &c., of Port Robinson, Quaker and Welland Bridges.
15356	" 29	Mason, Gordon & Co.	Supply timber for the year 1904.
15362	" 29	John Stuart	Iron castings for the year 1904.
15389	" 25	Cunningham & Cuthbert.	Supply iron and brass castings for 1904.
15454	May 6	Northern Aluminum Co.	Supply aluminum conductors.
15459	April 22	Hamilton Bridge Works Co., Ltd	200 steel poles.
15460	" 14	Wire & Cable Co.	Copper conductors.
16487	May 7	Thomas Riley.	Supply weir in west bank at Allanburg.
15526	June 30	Packard Electric Co., Ltd.	Arc lamps, regulators, &c.
15548	May 23	Can. Westinghouse Co., Ltd.	" "
15559	June 15	Ahearn & Soper, Ltd.	Submarine cables for electric transmission.

HAZEN HANSARD,
Law Clerk.

4-5 EDWARD VII., A. 1905

No.

WATER POWER and other Public Property leased by the Department

1.—INTERCOLONIAL

No. of Lease.	Date of Signature.	Lessee.	Property Leased.
1903.			
15230	Sept. 24..	Town of Fraserville..	Privilege to lay and maintain two water pipes across property and under tracks of I. C. Ry. at Fraserville, Que.
15267	Dec. 1..	City of Moncton	Privilege to lay 12-inch pipe under tracks at the Irish Town Road Crossing.
15271	Nov. 10..	Kamouraska Telephone Co	Privilege to place telephone boxes in stations along line of I. C. Ry. in Quebec, where company has telephone in operation.
15275	Oct. 2..	D. Rodrigue	Land at St. Simon, Que
15302	Nov. 16..	His Majesty	Rooms 6, 7, 8, 9 and 10, in ground story of the Board of Trade building, Montreal.
15310	Dec. 21..	F. Belziles	Privilege to lay a 1½-inch water pipe west of St. Fabien Station.
15311	" 31..	Town of Montmagny	Privilege to lay a 6-inch water pipe at Montmagny, Que.
1904.			
15312	Jan. 20..	Town of Stellarton	Privilege to lay a 12-inch sewer pipe at Bridge St. Crossing, N.S.
15313	" 20..	A. C. Thompson Co., Ltd.	Privilege to lay a 6-inch pipe at N. Sydney, N.S..
1903.			
15314	Aug. 15..	His Majesty	Office No. 51 King St. East, Toronto, Ont.
*15325	June 5..	"	Office No. 143 St. James St., Montreal.
1901.			
15326	Jan. 21..	Can. Automatic Scale Co.	Privilege to place weighing scales in stations.
15327	Feb. 6..	Acadia Coal Co.	" lay 4-inch pipe in Stellarton, N.S.
15328	Jan. 22..	Town of North Sydney	" lay a 12-inch pipe near North Sydney station.
15332	Feb. 1..	Dept. of Indian Affairs.	Privilege to lay 6-inch sewer pipe 1½ mile west of Sydney station, N.S.
15337	" 6..	Dept. of Agriculture	Land at Gilbert's Island, St. John, N.B.
15379	" 24..	Railway Automatic Sales Co	License to place vending machines in station houses.
15381	" 22..	D. N. Lutes	Land at New Mills, Restigouche, N.B.
15394	Mar. 23..	Xavier Dumond	Land at Isle Verte station, Temiscouata, Que.
15405	April 7..	Dominion Express Co.	Express freight business between St. John and Halifax, &c.
15411	Mar. 30..	Alex. A. Jones	Land at Amherst, N.S.
15419	April 12..	Sam. Fields.	Land at Foley Station, N.S.
15427	Mar. 29..	Dominion Molasses Co.	Privilege to lay pipe under tracks at Dartmouth, N.S.
15430	April 25..	C. A. Atkinson	Land at Charlo Station, N. B.
15439	Mar. 23..	Town of Shediac	Privilege to lay water pipes at Shediac, N.B.
15440	" 23..	"	Land at Shediac, N.B.
15486	June 11..	E. H. Peeples.	Privilege to lay 2-inch water pipe at Pirate Harbour
15516	" 30..	Jude Melanson.	Land at Springhill Junction, N.S.

* Too late for last year's report.

SESSIONAL PAPER No. 20

3.

of Railways and Canals during the Fiscal Year ended June 30, 1904.

RAILWAY.

Area.	Amount of Water Power.	Term.	Commencement of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each year.	First Instalment due.
				\$ cts.		
		During pleasure.	Sept. 1, 1903	1 00	July 1.	July 1, '03
		"	Oct. 1, 1903	1 00	Oct. 1.	Oct. 1, '03
		"				
2.19 acres.		3 years	Sept. 1, 1903 May 1, 1903	1 00 2,000 00	Sept. 1. Quarterly.	Sept. 1, '03 Quarterly.
		During pleasure.	June 30, 1903	1 00	June 30.	June 30, '03
		"	Oct. 1, 1903	1 00	Oct. 1.	Oct. 1, '03
		"	June 30, 1903	1 00	June 30.	June 30, '03
		"	July 1, 1903	1 00	July 1.	July 1, '03
		5 years.	Sept. 1, 1903	1,800	Quarterly.	Quarterly.
		1 year.	May 1, 1903	1,800	"	"
		1 "	Jan. 25, 1904	25 p.c. of gross receipts to railway and 10 p.c. to agent monthly.		
		During pleasure.	July 1, 1903	1 00	July 1.	July 1, '03
		"	" 1, 1903	1 00	" 1.	" 1, '03
		"	" 1, 1903	1 00	" 1.	" 1, '03
5.75 acres.		"	" 1, 1903	1 00	" 1.	" 1, '03
		3 years.	Mar. 1, 1904	25 p.c. of gross receipts to railway and 10 p.c. to agent monthly.		
583 sq. ft.		During pleasure.	July 1, 1903	1 00	" 1.	" 1, '03
22,208 "		"	Jan. 1, 1904	5 00	Jan. 1.	Jan. 1, '04
		5 years.	Dec. 1, 1899	40 per cent of gross receipts, monthly.		
240 sq. ft.		During pleasure.	April 1, 1904	5 00	April 1.	April 1, '04
0.09 acres.		"	July 1, 1903	1 00	July 1.	July 1, '03
		"	" 1, 1903	1 00	" 1.	" 1, '03
427 sq. ft.		"	" 1, 1903	1 00	" 1.	" 1, '03
		"	" 1, 1903	1 00	" 1.	" 1, '03
1,500 sq. ft.		"	" 1, 1903	1 00	" 1.	" 1, '03
		"	" 1, 1903	1 00	" 1.	" 1, '03
0.58 acres.		"	May 1, 1904	5 00	May 1.	May 1, '04

4-5 EDWARD VII., A. 1905

No. 3.—Water Power and other Public Property leased by the Department of

2.—BEAUHARNOIS

No. of Lease.	Date of Signature.	Lessee.	Property Leased.
	1903.		
15037	July 2..	James H. Ross..	Land on S. side of Canal at Melocheville, Que., with water power, &c.
15172	Aug. 14..	Thos. Prefontaine.....	Pt. of lot 1 in Valleyfield, Que.....
15198	July 1..	Jessie R. McDonald, tutrix estate Jas. McDonald.	Pt. cad. lot 830, Valleyfield, Que
15219	Oct. 6..	David F. Smith.....	Pt. lot No. 1 in Valleyfield, Que.
15221	" 9..	The Montreal Cotton Co	540 sq. ft. of land, pt. of lot No. 830 in Valleyfield, Que.
	1904		
15406	Mar. 30..	G. Leduc.....	Pt. lot 531, Valleyfield, Que.....
15418	April 20..	A. Lalonde.....	Pt. lot 160, Ste. Cecile, Que.....
15479	May 16..	S. A. Brodeur	" "

3.—CARILLON

	1904.		
15511	June 24..	Fogarty Bros..	Privilege to erect and maintain an electrical line across old canal and Ottawa River at Carillon.

4.—LACHINE

	1903.		
15036	July 8..	John C. McDiarmid.....	Storage lots 5 and 10, between St. Gabriel Basins 3 and 4, Ste. Anne's Ward, Montreal.
15156	" 25..	Farquhar Robertson.....	Storage lot No. 16, St. Gabriel Basin, No. 3, Ste. Anne's Ward, Montreal.
15169	Aug. 5..	Jos. Decarie Fils & Cie.....	Privilege to lay a 2-in. pipe and draw water from canal between St. Ambroise St. and canal, Montreal.
15170	" 11..	Grand Trunk Ry. Co. of Canada..	Privilege to lay an additional siding 717 feet long along North bank, from Turgeon St. to John St., Montreal.
15173	" 14..	Farquhar Robertson.	Storage lot No. 17, St. Gabriel Basin, No. 3, Ste. Anne's Ward, Montreal.
15202	Sept. 16..	Canadian Pacific Ry. Co	Privilege to lay a track line of railway along North bank of canal.
15211	" 28..	Ferdinand Tremblay.....	Storage lot No. 4, between St. Gabriel Basins, Nos. 3 and 4, Ste. Anne's Ward.
15214	" 28..	John McDougall, Caledonian Iron Works Co., Ltd.	Land West of new St. Gabriel Basin, No. 4, Ste. Anne's Ward.
15235	" 1..	Grand Trunk Ry. Co. of Canada.	Privilege to lay spur line along North bank at St. Henri.
	1904.		
15333	Feb. 6..	Canadian Pacific Ry. Co.	Lay single track on North bank of canal.
	1903.		
15268	Nov. 16..	Ogilvie Flour Mills Co.....	Cad. lot 1064 and pt. lot 1065 Ste. Anne's Ward, Montreal.
	1904.		
15384	Mar. 17..	Canadian Pacific Ry. Co	Lay two transfer sidings along North bank of canal.
15476	May 23	L. Leger.....	Land above regulating weir at Lachine.....
15477	" 25..	Ogdensburg Coal and Towing Co.	Privilege to erect elevator and conveyor, St. Henri.

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended June 30, 1904—*Continued.*

CANAL.

Area.	Amount of Water Power.	Term.	Commence-ment of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each year.	First Instalment due.
23,304 sq. ft.	75 h. p.	10 years	July 1, 1903	Land \$50, water \$2.50 per h. p.	July 1	July 1, '03
1,428 "	"	During pleasure	" 1, 1903	1 00	" 1	" 1, '03
15,300 "	"	21 years, renewable	" 1, 1902	20 00	Jan. and July 1	Jan. 1, '03
2,002 "	"	During pleasure	" 1, 1903	1 00	July 1	July 1, '03
540 "	"	13 years, renewable	" 1, 1902	4 00	" 1	" 1, '02
3 arp.	"	During pleasure	April 1, 1904	4 50	April 1	April 1, '04
8 " 25 per.	"	"	" 1, 1904	4 00	" 1	" 1, '04
28 " 13 "	"	21 years	May 1, 1904	30 00	May 1	May 1, '04

CANAL.

		During pleasure	June 1, 1904	5 00	June 1	June 1, '04
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CANAL.

23,214 sq. ft.		During pleasure	July 1, 1903	348 25	July 1	July 1, '03
16,921 "		"	" 1, 1903	211 40	" 1	" 1, '03
		"	June 1, 1903	20 00	June 1	June 1, '03
		"	July 1, 1903	50 00	July 1	July 1, '03
16,912 sq. ft.		"	Aug. 1, 1903	211 40	Aug 1	Aug. 1, '03
		21 years	June 1, 1903	100 00	June 1	June 1, '03
11,607 sq. ft.		During pleasure	Oct. 1, 1903	145 09	Oct. 1	Oct. 1, '03
32,670 "		"	June 1, 1903	650 00	June 1	June 1, '03
		21 years	Sept. 1, 1903	1 00	Sept. 1	Sept. 1, '03
		21 "	Jan. 1, 1904	100 00	Jan. 1	Jan. 1, '04
59,000 sq. ft.		During pleasure	Nov. 1, 1903	1,180 00	Nov. 1	Nov. 1, '03
		21 years	Jan. 1, 1904	1 00	Jan. 1	Jan. 1, '04
17,100 sq. ft.		During pleasure	May 1, 1904	34 00	May 1	May 1, 1904
		"	" 1, 1904	1 00	" 1	" 1, 1904

4-5 EDWARD VII., A. 1905

No. 3.—WATER POWER and other Public Property leased by the Department of

No. 4.—LACHINE

No. of Lease.	Date of Signature.	Lessee.	Property Leased.
	1903.		
15478	Dec. 23..	Jos. Touzin	Land on St. Gabriel Basin No. 1, Montreal
	1904.		
15482	May 23..	Canada Malting Co.....	Privilege to lay a 4 in. water pipe and grain elevator leg with conveyer at St. Henri.
15508	June 10..	Hugh F. Cumming.....	Land at St. Gabriel Basin No. 1
15518	" 18..	Grand Trunk Railway Co. of Canada.	Privilege to lay and maintain main track line and spur lines of railway along north bank.

No. 5.—RIDEAU

	1903.		
15151	July 21..	Ottawa Improvement Commission	Land in City of Ottawa, Ont.
15152	" 21..	Geo. L. Dickinson	Surplus water over bulkhead across west branch of canal at Long Island, &c.
15217	Oct. 6..	Canadian Express Co.	Land on north side of canal, under Sappers' Bridge, in Ottawa, Ont.
15307	Dec. 21..	Town of Perth.....	Privilege to lay a 15-in. sewer pipe
	1904.		
15380	Feb. 22..	Canada Atlantic Railway Co....	Parts lots F, G, Tp. of Nepean, Con. C.
15423	" 23..	Merrickville village.....	Privilege to lay water pipe across canal reserve at head of upper lock.
15483	May 31..	E. R. Cameron	Land on south side of canal opposite Rideauville...

No. 6.—SAULT STE.

	1904.		
15414	Mar. 23..	Algoma Central & H. B. Ry. Co.	Privilege to lay and maintain telephone cable under canal.

7.—TRENT

	1904		
15413	Apr. 6..	John J. McBain.....	Pt. lot 3, con. 11, Township of Douro, Peterboro. . .
15480	May 17..	The Lakefield Portland Cement Co.	Pt. lot 6, con. 5, Township of Smith, Peterborough, and surplus water.

8.—WELLAND

	1903.		
15150	July 21	Edward McArdle.....	Pt. lot No. 23 in 2nd con. of Township of Grantham, Co. of Lincoln, Ont.
15212	Sept. 28..	The Mutual Natural Gas Co., Ltd.	Privilege to lay and maintain a 2½-in. gas pipe under canal end of swing bridge between con. 4 and 5 Township of Humberstone, Ont.

SESSIONAL PAPER No. 20

Railways and Canals during the Fiscal Year ended June 30, 1904—Continued.

CANAL—Continued.

Area.	Amount of Water Power.	Term.	Commencement of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each year.	First Instalment due.
3,375 sq. ft.		During pleasure	July 1, 1903	\$ 50 00	July 1..	July 1, 1903
.....		"	May 1, 1904	41 00	May 1..	May 1, 1904
3,000 sq. ft.		"	June 1, 1903	45 00	June 1..	June 1, 1904
.....		21 years	July 1, 1904	1,086 00	July 1..	July 1, 1904

CANAL.

47 $\frac{3}{4}$ acres.	21 years.	June 1, 1903	1 00	June 1..	June 1, 1903
.....	"	Jan. 1, 1903	50 00	Jan. and July 1.	Jan. and July 1, 1903
760 sq. ft.	During pleasure	Oct. 1, 1903	5 00	Oct. 1..	Oct. 1, 1903
.....	"	Dec. 1, 1903	5 00	Dec. 1..	Dec. 1, 1903
1,678 acres.	"	Sept. 1, 1903	75 00	Sept. 1..	Sept. 1, 1903
.....	"	April 1, 1904	5 00	April 1..	April 1, 1904
1 $\frac{1}{2}$ acres.	"	May 1, 1904	5 00	May 1..	May 1, 1904

MARIE CANAL.

.....	During pleasure	July 1, 1903	5 00	July 1..	July 1, 1903
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CANAL.

18.54 acres.	During pleasure.	Mar. 1, 1904	18 54	Mar. 1..	Mar. 1, '04
0.5 "	21 years, renewable.	Nov. 1, 1903	1,210 00	Nov. and May 1.	Nov. 1, '03

CANAL.

4 acres.	During pleasure	July 1, 1903	8 00	July 1..	July 1, '03
.....	"	Oct. 1, 1903	10 00	Oct. 1..	Oct. 1, '03

4-5 EDWARD VII., A. 1905

No. 3.—WATER POWER and other Public Property leased by the Department

No. of Lease.	Date of Signature.	Lessee.	Property Leased.
1903.			
15220	Oct. 6..	Sarah Hanly.....	Land in Port Colborne, Ont.
15222	" 6..	Joseph Taylor.....	" " "
15223	" 6..	W. M. McCracken.....	" " "
15224	" 6..	Mary Kelly.....	" " "
15225	" 6..	Richard W. Boyle.....	" " "
15226	" 6..	Jacob Richards.....	" " "
15238	" 26..	Bell Telephone Co. of Canada.....	Privilege to lay and maintain a cable under canal at Niagara St., St. Catharines, Ont.
15259	Nov. 19..	James Wilson.....	Surplus water at Merrickville
15308	Dec. 21..	Provincial Natural Gas Co.....	Privilege to lay gas pipe across Welland River at Chippawa Creek.
15309	" 31..	Imperial Natural Gas Co.....	Privilege to lay a 2-in. pipe across feeder at Duanville, Ont.
1904.			
15412	Feb. 6..	Provincial Natural Gas Co.....	Privilege to lay gas pipe across canal in Humberstone Township.
15426	Apl. 15..	John M. Howell.....	Pt. lot 15, Township of Thorold, Ont.....
15435	May 4..	Niagara, St. Catharines & Toronto Ry. Co.	Land w. of w. pier at Port Dalhousie, &c.....
15503	June 11..	Canadian Association of Amateur Oarsmen.	Pts. lots 21 and 22, con. 1, and pt. lot 23, cons. 2 and 3, Township of Grantham, Ont., and privilege.
15510	" 22..	Phin & Co.....	Pt. lot 213, Township of Thorold, Ont.....
15542	" 30..	City of St. Catharines.....	Privilege to lay sewer from Carleton St. into the deep water of the Welland Canal.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, November 8, 1904.

SESSIONAL PAPER No. 20

of Railways and Canals during the Fiscal Year ended June 30, 1904—Continued.

Area.	Amount of Water Power.	Term.	Commencement* of Term.	TERMS OF PAYMENT.		
				Annual Rental.	Due each year.	First Instalment due.
				\$	cts.	
2.19 acres.....		During pleasure....	Sept. 1, 1903	1 00	Sept. 1..	Sept. 1, '03
0.83 ".....		".....	" 1, 1903	1 00	" 1..	" 1, '03
0.50 ".....		".....	" 1, 1903	1 00	" 1..	" 1, '03
0.17 ".....		".....	" 1, 1903	1 00	" 1..	" 1, '03
0.66 ".....		".....	" 1, 1903	1 00	" 1..	" 1, '03
0.16 ".....		".....	" 1, 1903	1 00	" 1..	" 1, '03
.....		".....	Oct. 1, 1903	5 00	Oct. 1..	Oct. 1, '03
.....	25 h.p.....	21 years, renewable..	July 12, 1902	135 00	Jan. and July 17, '02	
.....		During pleasure....	Jan. 1, 1904	5 00	Jan. 1..	Jan. 1, '04
.....		".....	Dec. 1, 1903	5 00	Dec. 1..	Dec. 1, '03
.....		".....	Dec. 1, 1903	5 00	Dec. 1..	Dec. 1, '03
8½ acres.....		".....	Mar. 1, 1903	25 00	Mar. 1..	Mar. 1, '03
5.14 acres.....		10 years.....	May 1, 1904	65 00	May 1..	May 1, '04
0.23, 2.33, 2.20 acres.....		During pleasure....	" 1, 1904	1 00	" 1..	" 1, '04
20 acres.....		To Dec. 31, 1904....				
.....		During pleasure....	July 1, 1904	2 00	July 1..	July 1, '04

HAZEN HANSARD,
Law Clerk.

4-5 EDWARD VII., A. 1905

No.

PROPERTY CONVEYED to the Department of Railways and Canals

1.—CANADIAN

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
15441	Mar. 29, '04	His Majesty to Canadian Pacific Ry. Co.	Pt. of main line of company's railway; station between Fort William and Manitoba.	
15442	" 29, '04	Can. Pac. Ry. Co.	<i>Re</i> above letters patent No. 15441.	

2.—PRINCE EDWARD

15544	May 12, '04	Neil Stewart <i>et ux</i> ...	Land at Curtis Creek	Tp. No. 32
15545	" 13, '04	William Stewart <i>et ux</i> ...	" "	"
15546	June 1, '04	Richard Stockman <i>et ux</i> ...	" "	"
15551	May 26, '04	C. E. McKinnon	" "	"
15574	" 20, '04	James Watts <i>et ux</i>	" "	"

3.—INTERCOLONIAL

15231	Aug. 4, '03	Elizabeth Veith <i>et al</i>	Land near Spring Hill Jct.	
15262	Nov. 3, '03	Fred. W. Sumner <i>et ux</i> ...	Land in parish of Bathurst...	
15304	" 13, '03	Alfred Girard	Pt. Lot 27, parish of Ste. Monique	
15319	Sept. 29, '03	Joseph E. Pouliot	Pt. Lot 613, Fraserville	Town of Fraserville.....
15320	" 14, '03	Dame Nap. Aubin	Lot No. 423, and Pt. Lot No. 421	Ste. Flavie Parish.....
15321	Nov. 3, '03	George Rioux	Pt. lots Nos. 484, 485, and 489....	"
15322	" 3, '03	D. Rioux	Pt. lots Nos. 486 and 487	"
15334	Jan. 27, '04	Jos. Turgeon	Pt. Lot 409, Lauzon Ward.	Lévis
15336	Feb. 4, '04	Allen McDonald <i>et ux</i> ...	Land at Dartmouth	
15342	Jan. 21, '04	His Majesty to Bethel Cemetery Co.	Land at Scotsburn	
15383	Feb. 23, '04	Railways and Canals to Public Works.	Pt. lot 427, Lévis, Que	Lévis
15402	Jan. 21, '04	B. H. Collins <i>et ux</i>	Land at	Halifax
15493	Feb. 9, '04	Jno. Greenway <i>et ux</i>	"	"
15420	April 5, '04	Jos. & Ed. Goulet.	Pt. Cad. Lot No. 7, St. Lawrence Ward.	Lévis
15421	July 15, '03	His Majesty to Dominion Iron and Steel Co., Ltd.	Land covered by water, Pt. of Mugaah's Creek.	Sydney
15422	April 11, '04	Sam. Malouin	Privilege to lay sewer pipes at Chaudière Jct., Que.	
15429	Nov. 9, '03	Esther McLean	Land at	Barrachois
15443	Feb. 27, '04	W'n. A. Patterson	Land near DeBert Stn	
15446	Mar. 25, '04	John W. Burton	Land at Halifax, N.S.	
15513	April 12, '04	Jane J. Morris	"	
15514	" 15, '04	Thos. W. Keating, <i>et ux</i> ...	"	
15515	" 13, '04	Davis & Fraser, <i>et ux</i>	"	

4.—BEAUHARNOIS

15424	" 19, '04	His Majesty to Denis Frère.	Parcel of Canal reserve at	Valleyfield
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4.

and Letters Patent granted during the Fiscal Year ended June 30, 1904.

PACIFIC RAILWAY.

County.	Area.	Amount.	Remarks.
		\$ cts.	
			Letters Patent supersedes Nos. 13554, 13555 and 13556.
			Release.

ISLAND RAILWAY.

Queen's	2.26 acres	226 00
"	0.91 "	91 00
"	3.28 "	377 20
"	1 "	100 00
"	1.70 "	170 00

RAILWAY.

Cumberland, N.S.	14.30 acres	180 28
Gloucester, N.B.	2.81 "	75 00
Nicolet, Que.	11,596 sq. ft.	100 00
Temiscouata	18½ arp.	11,100 00
Rimouski	5.39 "	1,617 00
"	5.36 "	536 00
"	4.14 "	414 00
Lévis	1,640 sq. ft.	2,296 00
Halifax, N.S. ....	.975 "	* 386 99
Pictou, N.S.		Letters Patent.
Lévis	6,500 "	O. C.
Halifax, N.S.	2,176 "	5,000 00
"	3,450 "	2,250 00
Lévis	1,622 "	4,873 09
Cape Breton, N.S.		Letters Patent.
		100 00
Cape Breton, N.S.		75 00
Colchester, N.S.		360 47
Halifax, N.S.	2,618 sq. ft.	5,000 00
"	4,350 "	3,200 00
"	1,000 "	700 00
"	7,200 "	5,000 00

CANAL.

Beauharnois	6,400 sq. ft.	2,240 60	Letters Patent.
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No. 4.—PROPERTY CONVEYED to the Department of Railways and Canals and

5.—CORNWALL

No. of Deed.	Date of Signature.	Grantor.	Lot.	District.
15241	Oct. 24, '03	Cornelius C. Miller.....	Pt. lots 1 and 2, Con. 1, Sheik's Id.	Tp. of Cornwall.....
15263	Nov. 19, '03	James A. Langelier.....	Pt. lot 3, Con. 1, Sheik's Island..	"
15264	" 11, '03	David Tilton	"	"
15433	April 4, '04	M. F. Sheets	Pt. lot 2, Con. 1	"
15434	" 4, '04	Jas S. Raymond, <i>et al.</i> ...	Pt. W $\frac{1}{2}$ lot 5, Con. 1	"
15450	" 4, '04	Alonzo S. Raymond, <i>et al.</i>	Pt. E $\frac{1}{2}$ lot 5, and E. $\frac{1}{2}$ lot 6, Sheik's Island.	"

6.—GALOPS

15331	Jan. 29, '04	Maggie R. Binion.	Pt. W $\frac{1}{2}$ lot 30, Con. 1.....	Tp. of Matilda.....
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7.—RAPIDE PLAT

15278	Oct. 19, '03	J. Sayean, <i>et ux</i>	Pt. lots 14 and 15 in Mariatown..	Tp. of Williamsburg
15282	Dec. 9, '03	Ruth Rose, <i>et al</i>	Lot 13 and adjoining St., Maria- town.	"

8.—SOULANGES

15265	Aug. 23, '03	Moise Boyer.....	Lot 74.....	Cascade Pt
15305	Nov. 20, '03	Alex. Leroux.....	Lots 44 to 47 & 64 to 67.....	St. Michel de Vandreuil..
15407	Mar. 29, '04	Honoré Leroux	Pt. lots 12 & 107	St. Ignace du Coteau du Lac.

9.—TRENT

15260	Sept. 30, '03	Esther Collins	Pt. W $\frac{1}{2}$ lot 27, Con. 2.....	Eldon.....
15261	Oct. 22, '03	Helen Sheehy, <i>et al</i>	Pt. lot 2, 6th Con	Carden
15270	Nov. 10, '03	H. Folliot <i>et ux</i>	Pt E $\frac{1}{2}$ lot H 1st Con	Eldon.....

10.—ST. LAWRENCE

15285	Oct. 26, '03	Alban Dawson, <i>et al.</i>	Pt. Isle au Galop, in St. Law- rence R.	Town of Lisbon
15285	Nov. 9, '03	Angus W. Fraser	"	"
15285	Oct. 26, '03	Alban Dawson, <i>et al</i>	Released for damages consequent upon construction of a dam from Adam's Island to Les Galops Island.	"

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Letters Patent granted during the Fiscal Year ended June 30, 1904—*Concluded.*

CANAL.

County.	Area.	Amount.	Remarks.
		\$ cts.	
Stormont.....	6.15 acres.....	\$403.31, \$142 55	
"	0.78 "	costs. \$130.64, \$78 03	
"	5.56 "	costs. \$735.60, \$171 72	
"	8.71 "	costs. \$873.89, \$152 00	
"	4.31 "	\$1,199.91, \$177 41	
"	1.17, 2.37 acres....	costs. \$1,828.04, \$141 13	

CANAL.

Dundas.....	1.43 acres.....	\$2,590 40	
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CANAL.

Dundas.....	0.12 acres.....	100 00	
"	0.20 "	75 00	

CANAL.

Vaudreuil.....	15 perches.....	Pr. \$65.00, Int. \$42.73.	
"		8 14	
Soulanges.....	0.67, 0.6 acres.....	424 80	

CANAL.

Victoria.....	0.65 acres.....	40 00	
"	9.20 "	200 00	
"	0.87 "	40 00	

RIVER.

St. Lawrence, U.S....	1 acre	4,000 00	
"	"	1 00	
.....	

HAZEN HANSARD,
Law Clerk.

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DAMAGES released to the Department of Railways and Canals during the Fiscal Year ended June 30, 1904.

1.—INTERCOLONIAL RAILWAY.

No. of Release.	Date of Signature.	Grantor.	Description.	Amount.
1903.				§ cts.
15289	Dec. 29	Ronald J. Nicholson.....	Damages to certain lands at Barachois Harbour, N.S.	70 00
15290	" 23	Carl White.....	Damages to lot 115 at College Bridge, N.B.....	25 00
15297	" 26	Mrs. M. Thibeault.....	Damages to lot 205 in Parish of St. Simon, Co. of Rimouski, Que.....	140 00
1904.				
15431	Mar. 15	Chas. McIntyre.....	Improving crossing at McIntyre Lake, Station, N.S.	35 00
15506	May 31	F. X. Deschamplain.....	Damages to land at Ste. Luce, Co. of Rimouski, Que.	150 00

2.—CULBUTE CANAL.

1904				
15363	Jan. 26	Alpheus Colton.....	Damages to land, lots 9 and 10, Tp. of Mansfield....	250 00
15364	Feb. 8	F. Hearty, <i>et al.</i>	" " lot 15, Tp. of Litchfield.....	125 00
15365	" 12	M. & F. Hearty.....	" " " 13, " " ".....	125 00
15366	Jan. 15	Azaire Pepin.....	" " " 25, " Grand Calumet.....	75 00
15367	" 19	" " " ".....	" " " 14, " Litchfield.....	150 00
15368	" 5	Henriette Belanger.....	" " " 2, " Grand Calumet.....	50 00
15369	" 28	Geo. Dufault.....	" " " 1, " ".....	20 00
15370	Feb. 17	Peter McCuaig.....	" " " 18, " ".....	87 00
15371	" 15	Norman McCuaig, <i>et al.</i>	" " " 7, " Litchfield.....	150 00
15372	Jan. 21	Chas. Barsalon.....	" " " 27, " Grand Calumet.....	15 00
15373	" 25	Jas. T. Pattison.....	" " " 3 & 4 " Litchfield.....	122 50
15374	" 12	Wm. Lett.....	" " " 11, " Grand Calumet.....	20 00
15375	" 13	Monique Bertrand.....	" " " 20, " ".....	200 00
15376	" 18	Jas. & Thos. Hanrahan.....	" " " 7, " ".....	180 00
15377	" 30	Joseph Pigeon.....	" " " 2, " ".....	50 00
15378	Feb. 22	James Lafferty, <i>et al.</i>	" " " 5, " Litchfield.....	100 00
15392	" 10	Jno. Lafferty.....	" " " 5, " ".....	100 00
15425	Apl. 15	Jno. Connolly, <i>et al.</i>	" " " 28, " Mansfield.....	175 00
15444	{ Mr. 22 Apl. 21	Patrick Sullivan.....	" " " 33, " Grand Calumet, Oak Island, Tp. of Westmeath, Co. of Renfrew, Ont.....	150 00
15533	June 18	George Rose.....	" " " 16, " Grand Calumet.....	60 00

3.—FARRAN'S POINT CANAL.

1903.				
15160	July 16	Ira Emry, <i>et al.</i>	Damages consequent upon deprivation of access to waters of St. Lawrence river.....	150 00
15291	Dec. 17	Margaret S. Brown.....	Damages to lots 13 and 14.....	75 00
1904.				
15330	Feb. 5	Cyrus Stata.....	" " " ".....	150 00
15341	Feb. 5	Geo. Pomeroy.....	Damages to lot 14, in Co. Stormont, Ont.....	35 00
15344	" 22	Mossin Dafoe, <i>et al.</i>	Damages to lots 11 and 12.....	200 00

and int. at
5 p.c. from
Mar. 27,
1900.

PART V

CANAL STATISTICS

FOR THE

SEASON OF NAVIGATION

1903

CANAL STATISTICS

FOR

SEASON OF NAVIGATION, 1903.

For the seasons of navigation of 1903 and 1904, all the canals were declared free, consequently no tolls were collected for the present year. The statistics as compiled show the revenue as it would appear if tolls had been collected.

Both the revenue and tonnage show a very large increase on all the canals for the present year, as per statements herewith presented.

REVENUE.

The total revenue, exclusive of hydraulic rents for two years, is as follows :—

For 1902.....	\$ 227,577 93
For 1903.....	333,096 86

By comparing the statistics of 1902 with 1903, it will be seen that the gross revenue has increased \$105,518.93.

The increases and decreases are as follows :—

	Increase.	Decrease.
On the Welland Canal.....	\$ 38,355 21	.....
" St. Lawrence Canals.....	58,860 54	.....
" Chambly Canal.....	2,048 93	.....
" Ottawa Canals.....	4,667 84	.....
" Rideau Canal.....	1,142 44	.....
" St. Peter's Canal.....	267 20	.....
" Trent Valley Canals.....	162 59	.....
" Murray Canal.....	64 18	.....
" Sault Ste. Marie Canal.....	.....	\$ 50 00
Total.....	\$105,568 93	\$ 50 00
Total increase.....	105,518 93	.....

STATEMENT of the Revenue, together with the increases and decreases of all the Canals for the seasons of Navigation from 1891 to 1903 inclusive.

Years.	Revenue.	Increase.	Decrease.
1891.....	\$ 350,351 97	\$ 2,292 46	.....
1892.....	358,711 04	8,359 07	.....
1893.....	348,012 00	.....	\$ 10,699 04
1894.....	307,824 67	.....	40,187 33
1895.....	283,211 41	.....	24,613 26
1896.....	350,061 03	66,849 62	.....
1897.....	346,758 87	.....	3,302 16
1898.....	341,679 23	.....	5,079 64
1899.....	291,652 37	.....	50,026 86
1900.....	269,116 25	22,536 12
1901.....	250,949 57	18,166 68
1902.....	227,577 93	23,371 64
1903.....	333,096 86	105,518 93

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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 twenty-two years is as follows:—

QUANTITY PASSED DOWN TO MONTREAL.	QUANTITY ON WHICH FULL TOLLS WERE PAID. (Free for 1903.)		
	Tons.	To ports in Ontario. Tons.	Quantity from U. S. Ports to U.S. Ports. Tons.
1882.....	180,694		63,881
1883.....	186,814	10,650	121,876
1884.....	142,194	12,153	104,537
1885.....	96,569	11,909	117,346
1886.....	203,940	9,881	151,551
1887.....	185,034	11,838	134,868
1888.....	160,358	25,599	169,664
1889.....	267,769	19,075	213,766
1890.....	288,513	16,899	245,932
1891.....	293,509	6,805	202,710
1892.....	261,954	8,942	201,540
1893.....	501,806	25,555	222,958
1894.....	273,651	16,699	203,979
1895.....	231,491	32,096	133,823
1896.....	461,049	73,386	160,372
1897.....	* 560,254	53,257	157,756
1898.....	519,532	51,279	144,612
1899.....	332,746	40,197	68,011
1900.....	244,661	17,525	84,589
1901.....	151,566	15,732	83,370
1902.....	208,215	22,787	81,164
1903.....	351,936	29,062	111,828

* Of the quantity of grain passed down to Montreal there were transhipped at Ogdensburg, in 1891, 17,817 tons; in 1892, 4,341 tons; in 1893, 71,445 tons; in 1894, 23,030 tons; in 1895, 18,987 tons; in 1896, 77,355 tons; in 1897, 89,659 tons; in 1898, 40,257 tons; in 1899, 48,828 tons; in 1900, 38,403 tons; in 1901, 17,387 tons; in 1902, 34,060 tons, and 40,641 tons in 1903.

The tolls on grain for passage through the Welland Canal prior to 1884 were 20 cents a ton; since that date, however, reductions have been made by Orders in Council from year to year as follows:—Upon the urgent request of forwarders and others interested in the grain trade, a reduction was made of one-half the usual rate of tolls on grain passing down the Welland Canal and the St. Lawrence Canals to Montreal; and in 1885 tolls were reduced to 2 cents a ton, and thereafter from year to year, including 1891.

In 1892 the tolls were reduced to 2 cents a ton on grain passed down the Welland and St. Lawrence Canals and exported, and in such cases only.

In 1893 by Order in Council of February 13, the tolls were reduced to 10 cents a ton on grain passing eastward through the Welland Canal, irrespective of its destination, and the same rate of tolls for 1894 were allowed by O.C., April 16, 1894.

For the year 1895 (O.C., April 1, 1895), the same rate of tolls was allowed as was granted for the year 1894.

For the year 1896 (O.C., April 23, 1896), the same rate of tolls was allowed as was granted for the year 1895.

For the year 1897 (O.C., April 17, 1897), the same rate of tolls was allowed as was granted for the year 1896.

For the year 1898 (O.C., June 1, 1898), the same rate of tolls was allowed as was granted for the year 1897.

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For the year 1899 (O.C., April 10, 1899), the same rate of tolls was allowed as was granted for the year 1898.

For the year 1900 (O.C., February 20, 1900), the same rate of tolls was allowed as was granted for the year 1899.

For the year 1901 (O.C., May 3, 1901), the same rate of tolls was allowed as was granted for the year 1900.

For the year 1902 (O.C., April 1, 1902), the same rate of tolls was allowed as was granted for the year 1901.

For the year 1903 the canals were declared free of tolls. O.C., April 27, 1903.

The rate through the St. Lawrence Canals only, was 10 cents a ton.

It may be remarked that goods having paid full tolls on the Welland Canal are allowed to pass down the St. Lawrence Canals to Montreal free from payment of any further tolls.

During the last decade the quantity of agricultural products as above, passed down the Welland and St. Lawrence Canals to Montreal, has increased from 273,651 tons in 1894 to 351,936 tons in 1903, and the quantity passed down the Welland Canal from United States ports to United States, has decreased from 203,979 to 111,828 tons for the same years.

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 13 years, is reported as follows:—

	Tons.
For 1891	184,410
1892	291,680
1893	147,610
1894	60,666
1895	51,114
1896	153,717
1897	228,611
1898	293,391
1899	209,170
1900	229,624
1901	227,700
1902	263,861
1903	253,959

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

	Tons.
For 1891	320,434
1892	302,899
1893	532,084
1894	288,015
1895	247,550
1896	495,898
1897	604,200
1898	575,097
1899	372,291
1900	295,928
1901	203,316
1902	242,225
1903	400,057

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Comparative shipments of grain by the St. Lawrence route, and rail and water via the State of New York, 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:—

	Tons.
For 1902	242,225
1903	400,067
Showing an increase of	<u>157,842</u>

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

	Tons.
For 1902	263,861
1903	253,959
Showing a decrease of	<u>9,902</u>

The quantity of grain arrived at tide-water by New York Canals, is reported as follows:—

	Tons.
For 1902	318,677
1903	327,840
Showing an increase of	<u>9,163</u>

The quantity of grain carried to tide-water by the New York railways, is reported as follows:—

	Tons.
For 1902	4,558,536
1903	3,793,973
Showing a decrease of	<u>764,563</u>

The increases and decreases for 1903 as compared with 1902 on the several routes, competing for the carrying trade to the sea-board, are as follows:—

	Increase.	Decrease.	Increase.	Decrease.
	Tons.	Tons.	Per cent.	Per cent.
On the St. Lawrence Canals.....	157,842	.....	65·21	.....
" Canadian Pacific and Grand Trunk Railways.....	.....	9,902	.....	3·72
" New York Canals.....	9,163	.....	2·88	.....
" " Railways .....	.....	764,563	.....	16·77

By reference to Appendix U, it will be seen that the quantity of freight from ports west of Port Colborne to the United States ports, Oswego, Ogdensburg, &c., has decreased from 330,403 tons in 1892 to 213,449 tons in 1903 and the quantity to Ontario ports, between Port Dalhousie and Cornwall, and an increase from 69,886 tons in 1892 to 111,360 tons in 1903. The quantity passed down to Montreal shows an increase from 267,485 tons in 1892 to 390,786 tons in 1903.

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TRANSHIPMENT OF GRAIN.

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.
1889, 208 Cargoes, with an aggregate quantity of	165,117
1890, 203 " "	184,275
1891, 209 " "	190,664
1892, 158 " "	159,018
1893, 146 " "	148,962
1894, 125 " "	159,145
1895, 123 " "	136,617
1896, 196 " "	227,912
1897, 180 " "	229,265
1898, 166 " "	224,021
1899, 162 " "	221,306
1900, 325 " "	183,200
1901, 112 " "	132,558
1902, 131 " "	175,514
1903, 170 " "	218,840

In the United States vessels there were in—

	Tons.
1888, 60 Cargoes, with an aggregate quantity of	43,667
1889, 114 " "	108,358
1890, 35 " "	35,560
1891, 77 " "	90,153
1892, 89 " "	109,812
1893, 257 " "	328,269
1894, 84 " "	106,236
1895, 56 " "	73,987
1896, 158 " "	217,978
1897, 197 " "	285,847
1898, 339 " "	464,852
1899, 167 " "	205,571
1900, 259 " "	163,575
1901, 135 " "	123,229
1902, 135 " "	136,652
1903, 219 " "	273,986

Fifty-six Canadian and 18 American vessels took cargoes of 99,582 tons through to Montreal intact 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 1895, 2 cargoes of 810 tons in 1894, none in 1893, 2 in 1892 of 924 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.

The quantity of grain transhipped at Port Colborne in 1903 and the four previous years is given below.

The total number of grain-laden vessels lightened at this port in 1903 was 117, against 99 the previous year.

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The quantity of grain lightened was as follows :—

Articles.	1899.	1900.	1901.	1902.	1903.
	Bush.	Bush.	Bush.	Bush.	Bush.
Wheat	390,162	272,609	393,490	577,697	670,302
Corn	638,143	448,256	556,911	529,651	834,718
Rye	7,065	Nil.	Nil.	Nil.	13,768
Oats	Nil.	Nil.	76,236	5,824	2,765
Barley	Nil.	Nil.	27,115	Nil.	13,242

WELLAND CANAL.

The total quantity of freight passed on the Welland Canal during the season of 1903 was 1,002,919 tons ; of this quantity 23,102 tons were way or local freight.

There were 732,829 tons of freight passed eastwards, and 270,090 tons passed westwards.

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 1903 was 979,817 tons.

Of this quantity 715,595 tons were east bound and 264,222 west bound freight.

Of the east bound through freight, Canadian vessels carried 324,176 tons and United States vessels carried 391,419 tons ; and of the west bound through freight Canadian vessels carried 76,315 tons and United States vessels carried 187,907 tons, or a total of 400,491 tons for Canadian and 579,326 tons for American vessels.

ST. LAWRENCE CANALS.

The total quantity of freight passed through these canals during 1903 was 1,681,206 tons ; of this quantity 1,222,609 tons passed eastward and 458,597 passed westward.

East and west bound Through Freight.

The total quantity of through freight was 967,817 tons ; of this quantity 756,379 tons were east bound and 211,438 tons were west bound.

Way Freight.

Of the total quantity of (way) or local freight 466,230 tons were east bound and 247,159 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 and westward through the Welland and St. Lawrence Canals, from Lake Erie to Montreal, during fifteen years, is as follows :—

	Eastward to Montreal. Tons.	Westward from Montreal. Tons.
1889.....	298,197	25,370
1890.....	231,746	13,951
1891.....	309,593	14,060
1892.....	263,144	9,452
1893.....	508,016	16,545
1894.....	292,191	9,439
1895.....	266,659	10,555
1896.....	480,077	10,050
1897.....	584,246	4,542
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

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, is as follows :—

	Eastward. Tons.	Westward. Tons.	Total. Tons.
1889.....	297,353	266,231	563,584
1890.....	318,259	215,698	533,957
1891.....	306,257	247,543	553,800
1892.....	300,733	240,332	541,065
1893.....	384,559	247,108	631,667
1894.....	361,319	230,948	592,267
1895.....	255,259	214,520	469,779
1896.....	385,695	267,518	653,213
1897.....	353,863	210,831	564,694
1898.....	277,023	210,516	487,539
1899.....	225,491	135,038	360,529
1900.....	218,969	99,560	318,529
1901.....	190,476	83,543	274,019
1902.....	224,110	44,919	269,029
1903.....	221,074	149,151	370,225

The total quantity of freight passed through the Welland Canal from United States ports to United States ports shows an increase of 101,196 tons, as compared with the previous year ; and a decrease of 193,359 tons as compared with 1889.

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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 years 1867 to 1903 inclusive :—

Fiscal Year.	Aggregate number of Vessels.	Total quantity transported on the Welland Canal.	Quantity passed from United States ports to United States ports.
	Number.	Tons.	Tons.
1867	5,405	933,260	458,386
1868	6,157	1,161,821	641,711
1869	6,069	1,231,903	688,700
1870	7,356	1,311,956	747,567
1871	7,729	1,478,122	772,756
<i>Season of navigation.</i>			
1872	6,063	1,333,104	606,627
1873	6,425	1,506,484	656,208
1874	5,814	1,389,173	748,557
1875	4,242	1,038,050	477,809
1876	4,789	1,099,810	488,815
1877	5,129	1,175,398	493,841
1878	4,429	968,758	373,738
1879	3,960	865,664	284,043
1880	4,104	819,934	179,605
1881	3,332	686,506	194,173
1882	3,334	790,643	282,806
1883	3,267	1,005,156	432,611
1884	3,138	837,811	407,079
1885	2,738	784,928	384,509
1886	3,589	980,135	464,478
1887	2,785	777,918	340,501
1888	2,647	878,800	434,753
1889	2,975	1,085,273	553,584
1890	2,883	1,016,165	533,957
1891	2,594	975,013	553,800
1892	2,615	955,554	541,065
1893	2,843	1,294,823	631,667
1894	2,412	1,008,221	592,267
1895	2,222	869,595	469,779
1896	2,766	1,279,987	653,213
1897	2,725	1,274,292	564,694
1898	2,384	1,140,077	487,539
1899	2,202	789,770	360,529
1900	2,399	719,360	318,529
1901	1,547	620,209	274,019
1902	1,568	665,387	269,029
1903	1,787	1,002,919	370,225

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The total quantity of freight passed through the several divisions of the canals during the season of 1903 is as follows :—

	Farm Stock.	Forest Produce of Wood.	Manufactures.	Merchandise.	Agricultural Products.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Welland.	2	158,721	85,647	214,556	543,993	1,002,919
St. Lawrence.	1,770	191,813	162,515	523,564	801,544	1,681,206
Chambly.	374	188,335	7,647	112,334	37,881	346,571
Ottawa.	1,410	410,620	726	15,557	8,160	436,473
Rideau.	19	29,093	3,600	21,848	6,560	61,120
St. Peters.	17	21,691	5,494	49,681	13,981	90,864
Murray.	8	7,405	8,195	8,940	5,841	30,389
Trent Valley.	219	40,477	74	113	1,524	42,407
Sault Ste. Marie.	61	76,725	110,683	3,884,140	1,440,259	5,511,868

The total quantity of freight moved on the Welland Canal was 1,002,919 tons, of which 543,993 tons were agricultural products.

On the St. Lawrence Canals the total quantity of freight moved was 1,681,206 tons, of which 801,544 were agricultural products, and 523,564 tons were merchandise.

On the Ottawa Canals the total quantity of freight moved was 436,473 tons : of this quantity 410,620 tons were the produce of the forest.

STATISTICAL COMPARISON OF VARIOUS UNITED STATES ROUTES.

The statistical comparisons heretofore given in respect to the quantities of the principal articles carried through the Welland Canal, and those carried over routes in the United States, in competition with that work, have been continued to date.

By reference to statement H, as to the quantity of vegetable food carried to tide-water, it will be observed that the quantity carried by the New York Canals was 512,601 tons in 1903, 489,053 in 1902, 557,099 in 1901, 472,857 in 1900, 577,486 in 1899, 653,027 in 1898, 744,575 in 1897, 957,182 in 1896, 606,505 in 1895, 1,400,129 in 1894, 1,450,116 in 1893, 937,999 in 1892, and 1,092,385 in 1891.

The quantities of vegetable food carried by the New York Central, Erie and New York, West Shore and Buffalo Railways being :—

	Tons.		Tons.
In 1903.	5,548,603	In 1887.	*3,847,766
1902.	6,532,263	1886.	*3,802,262
1901.	6,334,001	1885.	4,105,594
1900.	6,053,005	1884.	3,639,805
1899.	6,211,827	1883.	4,422,461
1898.	7,060,542	1882.	3,885,557
1897.	5,673,638	1880.	4,732,385
1896.	5,183,540	1869.	1,087,809
1895.	3,798,574		
1894.	4,281,056		
1893.	* 5,107,426		
1892.	5,913,013		
1891.	3,565,381		
1890.	4,336,199		
1889.	3,654,984		
1888.	3,197,734		

* Flour and grain only.

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The following figures are an abstract of the quantities of vegetable food carried to tide-water by the canals and railways of the State of New York during thirty-five years :—

	Canals.	Railways.	Total.	Proportions by canals.
	Tons.	Tons.	Tons.	Tons.
1869.	1,302,613	1,087,809	2,390,342	545
1870.	1,295,010	1,766,457	3,061,467	423
1871.	1,850,198	2,205,589	4,055,787	456
1872.	1,674,320	1,870,614	3,544,934	472
1873.	1,745,171	2,036,992	3,782,163	461
1874.	1,767,598	2,791,517	4,559,115	387
1875.	1,305,550	2,343,241	3,648,791	357
1876.	1,064,293	2,875,803	3,940,096	270
1877.	1,498,984	2,493,683	3,992,667	375
1878.	1,912,734	3,695,764	5,608,498	341
1879.	1,833,399	4,333,617	6,187,016	296
1880.	2,371,090	4,732,385	7,103,475	333
1881.	1,116,561	4,983,722	6,100,283	183
1882.	1,118,776	3,885,557	5,004,333	223
1883.	1,379,000	4,422,461	5,801,461	237
1884.	1,236,986	3,639,805	4,876,791	253
1885.	1,063,310	4,105,594	5,168,904	205
1886.	1,489,886	3,802,262	5,292,148	281
1887.	1,539,403	3,847,766	5,387,169	285
1888.	1,166,958	3,197,734	4,364,692	267
1889.	1,296,896	3,654,984	4,951,880	262
1890.	1,167,901	4,336,199	5,504,100	212
1891.	1,092,355	3,565,381	4,657,736	234
1892.	937,999	5,913,013	6,851,012	137
1893.	1,452,563	5,107,426	6,599,989	284
1894.	1,400,129	4,281,056	5,681,185	327
1895.	602,505	3,798,374	4,401,079	159
1896.	957,182	5,183,540	6,140,722	156
1897.	744,575	5,673,638	6,418,213	116
1898.	653,027	7,060,542	7,713,569	085
1899.	577,486	6,211,827	6,789,313	086
1900.	472,857	6,053,005	6,525,862	073
1901.	557,099	6,334,001	6,891,100	081
1902.	489,053	6,532,263	7,021,316	069
1903.	512,601	5,548,603	6,061,204	081

COMPARATIVE STATEMENT OF TRAFFIC BY RAILWAYS AND CANALS VIA THE STATE
OF NEW YORK.

On reference to the returns made by the railways to the state authorities of New York, and to the canal statistics submitted to the state legislature, I find that of the total tonnage of freight carried by the canals and railways, the state canals carried :—

	Per cent.		Per cent.
In 1859.	68·9	In 1886.	16·9
1869.	47·0	1887.	16·3
1870.	38·9	1888.	18·8
1871.	38·9	1889.	15·1
1872.	40·1	1890.	13·9
1873.	34·9	1891.	13·4
1874.	31·7	1892.	9·8
1875.	28·4	1893.	10·1
1876.	24·6	1894.	10·2
1877.	28·3	1895.	9·7
1878.	27·1	1896.	8·5
1879.	23·7	1897.	8·3
1880.	25·1	1898.	6·9
1881.	18·5	1899.	7·2
1882.	19·0	1900.	5·2
1883.	18·7	1901.	5·1
1884.	19·0	1902.	5·5
1885.	17·1	1903.	5·6

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The quantity of freight carried by the canals and railways was greater in 1903 by 207,734 tons than the quantity carried in 1902 and an increase of 59,830,334 tons over 1869.

The quantities carried were as follows:—

	Total Tonnage.	Proportion by canals.
In 1859	5,485,076	·6890
1869	12,453,174	·4705
1870	15,148,274	·3895
1871	15,844,152	·3890
1872	16,631,609	·4012
1873	18,200,208	·3497
1874	18,283,547	·3174
1875	17,101,758	·2841
1876	16,948,627	·2462
1877	17,489,770	·2833
1878	19,017,301	·2719
1879	22,590,766	·2373
1880	25,706,586	·2512
1881	27,857,394	·1859
1882	28,693,054	·1905
1883	30,167,119	·1877
1884	26,293,844	·1905
1885	27,543,948	·1718
1886	31,168,744	·1698
1887	34,029,791	·1632
1888	26,244,610	·1883
1889	35,466,042	·1514
1890	37,624,199	·1394
1891	38,524,179	·1343
1892	43,618,569	·0982
1893	42,953,233	·1009
1894	37,916,412	·1024
1895	36,170,339	·0967
1896	43,756,051	·0849
1897	43,711,512	·0828
1898	49,311,030	·0682
1899	51,702,761	·0713
1900	65,433,541	·0512
1901	65,640,837	·0506
1902	72,075,774	·0549
1903	72,283,508	·0559

Average freight rates, grain, Chicago to Buffalo:—(as reported by the Secretary Merchants' Exchange, Buffalo).

Year.	Wheat.	Year.	Wheat.
1881	3·2	1893	1·6
1882	2·5	1894	1·2
1883	3·5	1895	1·9
1884	2·1	1896	1·7
1885	2·0	1897	1·5
1886	3·6	1898	1·5
1887	4·1	1899	2·5
1888	2·7	1900	1·8
1889	2·5	1901	1·6
1890	1·9	1902	1·5
1891	2·5	1903	1·4
1892	2·2		

Average twenty-three years. 2·3

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STATEMENT of the Quantity of Grain and Rolling Freight passed down the St. Lawrence Canals from Côteau Landing to Montreal during the Years 1899, 1900, 1901, 1902 and 1903.

GRAIN.

	1899.		1900.		1901.		1902.		1903.	
	Tons.	Bushels.	Tons.	Bushels.	Tons.	Bushels.	Tons.	Bushels.	Tons.	Bushels.
Barley.....	8,133	338,538	600	24,967						
Buckwheat.....		11	11	460						
Corn.....	174,932	6,176,145	154,815	5,525,845	71,459	2,552,107	11,732	418,791	109,957	3,920,137
Oats.....	8,357	491,589	16,803	1,005,029	7,831	460,043	3,899	229,262	338	19,865
Pease.....	237	7,900	132	4,700						
Rye.....	1,474	52,643	3,925	140,434	5,141	193,607	11,552	385,207	3,495	124,709
Wheat.....	65,635	2,221,167	126,963	4,215,721	207,403	6,913,434	216,305	7,298,486	175,454	5,837,504
Total.....	259,708	9,287,980	303,259	10,917,156	291,834	10,119,191	243,488	8,251,746	289,724	9,902,215

ROLLING FREIGHT.

Flax seed.....	20,290	3,779	17,208	6,347
Flax and hemp.....	20,745	941	7,290	9,793
Flour.....		8,255		
Furniture.....	617	1	689	18
Lard and lard oil.....	779	448	588	
Meals.....	2,539		1,255	9,415
Oil Cake.....				
Meats.....				
Pork.....	1,259	418	372	461
Seeds, all kinds.....	1,703			18
All other vegetables.....				
Nails.....				
Oils.....				
Sugar.....	896			
Tallow.....	32	373	28	
Merchandise.....	762	686	1	
Barrels, empty.....	420			
Firewood.....			1,355	180

Bois de service.....										
Articles en bois.....										
Total.....	50,042	16,606	29,182	46	379			43,674		
Grand total.....	309,810	319,865	321,016					256,499		

COMPARATIVE STATEMENT of the Commerce through the United States St. Mary's Falls Canal and Canadian Sault Ste. Marie Canal for the Season of 1902 and 1903.

	TRAFFIC FOR 1903.		TOTAL TRAFFIC FOR		INCREASE.	DECREASE.		
			Season of				Amount.	Amount.
	United States Canal.	Canadian Canal.	1903.	1902.				
Vessels.....	14,244	4,351	18,595	22,631		4,036		
Lockages.....	8,400	3,242	11,642	12,845		1,203		
Tonnage registered.....	22,973,698	4,702,746	27,736,441	32,012,323		4,275,879		
" freight.....	29,162,569	5,511,868	34,674,437	35,962,063		1,287,626		
Passengers.....	22,765	32,410	55,175	59,446		4,271		
Coal (hard).....	1,030,405	118,902	1,149,305	369,948				
" (soft).....	4,908,450	880,178	5,788,628	1,512,321				
Flour.....	4,284,433	2,808,927	7,093,360	8,916,135				
Wheat.....	29,152,237	32,232,315	61,384,552	76,746,349				
Grain (excluding wheat).....	25,941,198	6,154,448	32,095,646	25,312,513				
Manufactured and pig iron.....	113,155	80,112	193,267	214,809				
Salt.....	310,298	141,584	451,882	444,319				
Copper.....	105,386	17,491	122,877	120,800				
Iron ore.....	18,971,398	2,683,500	21,654,898	25,300,800				
Lumber.....	972,582,813	30,699,187	1,003,192,000	1,077,432,912				
Silver ore.....				1				
Building stone.....	20,196	1,104	21,300	40,702		19,402		
Unclassified freight.....	416,383	243,456	659,839	742,742		82,903		

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

1889	234 days.
1890	228 "
1891	225 "
1892	233 "
1893	219 "
1894	234 "
1895	231 "
1896	232 "
1897	234 "
1898	241 "
1899	231 "
1900	238 "
1901	230 "
1902	256 "
1903	249 "

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

1895	87 days.
1896	218 "
1897	238 "
1898	243 "
1899	239 "
1900	238 "
1901	246 "
1902	264 "
1903	256 "

The average number of vessels passing per day through the two canals for the season of 1903 was seventy-four.

R. DEVLIN,

Compiler of Canal Statistics.

OTTAWA,

EXPORTS by Lake from Chicago to Canada during the Season of Navigation in 1903.

(From Report of Board of Trade of Chicago.)

Commodities.	Quantity.	Value.
		\$ cts.
Corn.....	Bushels. 4,897,652	2,432,825 00
Rye.....	" 246,066	125,140 00
Wheat.....	" 1,452,427	1,113,448 00
Flour.....	Barrels. 7,135	25,840 00]
Mill-stuffs.....	Sacks. 350	400 00
Grass-seed.....	" 500	2,194 00
Oil-cake.....	" 12,550	44,000 00
Broom-corn.....	Bales. 470	5,766 00
Pork.....	Barrels. 4,355	68,785 00
Manufactures of iron.....	Tons.	1,376 00
Unclassified merchandise.....	" 7,890	44,666 00
Total value.....		3,864,440 00

GRAIN FREIGHTS BY LAKE—SEASON OF 1903.

The following were the correct rates on Wheat and Corn from Chicago to Buffalo, Ogdensburg, Depot Harbour and Montreal; also to New York by Lake and Erie Canal for each week during the Season of Navigation.

1903.	TO BUFFALO.		TO OGDENSBURG.		TO DEPOT HARBOUR.		TO MONTREAL.		ERIE CANAL, BUFFALO TO NEW YORK.		* CHICAGO TO NEW YORK, LAKE AND CANAL.	
	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.	Wheat per bushel.	Corn per bushel.
April 11	2	17										
" 18	2	17										
" 25	1	17										
May 2	1	17										
" 9	1	17										
" 16	1	17										
" 23	1	17										
" 30	1	17	4									
June 6	1	17										
" 13	1	17										
" 20	1	17										
" 27	1	17										
July 4	1	17	3½									
" 11	1	17	3½									
" 18	1	17	3½									
" 25	1	17	3½									
Aug. 1	1	17										
" 8	1	17										
" 15	1	17										
" 22	1	17										
" 29	1	17										
Sept. 5	1	17										
" 12	1	17										
" 19	1	17										
" 26	1	17										
Oct 3	1	17										
" 10	1	17										
" 17	1	17										
" 24	1	17										
" 31	1	17										
Nov. 7	1	17										
" 14	1	17										
" 21	1	17										
" 28	1	17										
Dec. 5	1	17										
" 12	1	17										

* Exclusive of Buffalo charges.

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LAKE FREIGHTS FROM CHICAGO TO BUFFALO ON WHEAT AND CORN.

STATEMENT showing the dates of the changes of the ruling rates of Lake Freights on Wheat and Corn, from Chicago to Buffalo, during 1903, (as reported by the Secretary of the Merchant's Exchange, Buffalo).

1903.	Wheat, Bushels.	Corn, Bushels.	1903.	Wheat, Bushels.	Corn, Bushels.
	Cts.	Cts.		Cts.	Cts.
April, 1.....	1 $\frac{3}{4}$	1 $\frac{5}{8}$	Aug. 23.....	1 $\frac{1}{8}$	1
" 8.....	2	1 $\frac{3}{4}$	Sept. 22.....	1 $\frac{3}{8}$	1 $\frac{1}{4}$
" 15.....		1 $\frac{3}{8}$	" 29.....	1 $\frac{3}{8}$	1 $\frac{1}{4}$
" 20.....	1 $\frac{5}{8}$ to 1 $\frac{1}{2}$	1 $\frac{3}{8}$ to 1 $\frac{1}{2}$	Oct. 10.....	1 $\frac{3}{8}$	1 $\frac{1}{4}$
" 21.....	1 $\frac{1}{2}$	1 $\frac{3}{8}$	" 23.....		1 $\frac{1}{2}$
May, 19.....	1 $\frac{3}{8}$		" 26.....		1 $\frac{1}{2}$
" 20.....		1 $\frac{1}{4}$ to 1 $\frac{3}{8}$	Nov. 9.....	1 $\frac{5}{8}$	1 $\frac{1}{2}$
" 23.....	1 $\frac{1}{2}$	1 $\frac{3}{8}$	" 12.....		1 $\frac{1}{2}$
June, 2.....	1 $\frac{1}{2}$	1 $\frac{1}{4}$	" 13.....		1 $\frac{1}{2}$
" 4.....	1 $\frac{3}{8}$	1 $\frac{1}{4}$	" 16.....	1 $\frac{3}{4}$	1 $\frac{1}{2}$
" 29.....		1 $\frac{1}{8}$ to 1 $\frac{1}{4}$	" 18.....		1 $\frac{5}{8}$
" 30.....		1 $\frac{1}{4}$	" 19.....		1 $\frac{1}{2}$
July, 14.....		1 $\frac{1}{2}$	" 23.....	2	1 $\frac{5}{8}$ to 1 $\frac{1}{2}$
" 31.....	1 $\frac{1}{4}$	1 $\frac{1}{2}$	" 24.....		2
Aug 6.....		1	" 27.....	2 $\frac{1}{8}$	2 $\frac{1}{4}$
" 17.....	1 $\frac{1}{4}$	1 $\frac{1}{2}$	Dec. 1.....	1 $\frac{1}{2}$	
" 19.....		1 to 1 $\frac{1}{8}$	" 3.....	2 to 2 $\frac{1}{8}$	
" 20.....			" 4.....		2 $\frac{1}{4}$
" 21.....		1	" 7.....		3 to close.

Rates from Milwaukee about the same as from Chicago.

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AVERAGE LAKE FREIGHTS.

The following statement shows the average rates of lake freights on wheat and corn between Chicago and Buffalo during each month in the past ten years, the highest and lowest rate on wheat in each year, and the average rate on wheat each year in cents, per bushel :—

(Per Report of the Secretary of Merchants' Exchange, Buffalo.)

	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
Grain, bushels.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
1894 { Wheat.....	1.4	1.2	0.9	1.0	1.4	1.1	1.3
1894 { Corn.....	1.2	1.1	0.9	0.9	1.3	1.0	1.3
Highest rate, wheat, 1894, 3c.; lowest, 1/2c.; average for the season, 1.2c.							
1895 { Wheat.....	1.2	1.2	1.1	1.6	2.1	3.0	3.0
1895 { Corn.....	1.1	1.1	1.0	1.4	1.9	2.9	2.7
Highest rate, wheat, 1895, 3c.; lowest 1c.; average for the season, 1.9c.							
1896 { Wheat.....	1.6	1.5	1.2	1.3	1.4	2.0	2.1
1896 { Corn.....	1.4	1.3	1.1	1.2	1.2	1.9	1.9
Highest rate, wheat, 1896, 2 1/2c.; lowest, 1 1/4c.; average for the season, 1.7c.							
1897 { Wheat.....	1.3	1.2	1.3	1.5	2.0	1.8	1.5
1897 { Corn.....	1.2	1.1	1.2	1.4	1.8	1.7	1.4
Highest rate, wheat, 1897, 2 3/4c.; lowest, 1c.; average for the season, 1.5c.							
1898 { Wheat.....	1.3	0.1	0.9	1.2	1.4	2.5	2.3
1898 { Corn.....	1.2	0.8	0.8	1.1	1.3	2.3	2.1
Highest rate, wheat, 1898, 3 1/4c.; lowest, 1 1/4c.; average for the season, 1.5c.							
1899 { Wheat.....	2.0	2.0	2.2	2.5	3.1	3.5	2.5
1899 { Corn.....	1.8	1.9	2.0	2.3	3.2	3.4	2.3
Highest rate, wheat, 1899, 3 3/4c.; lowest, 1 1/2c.; average for the season, 2.5c.							
1900 { Wheat.....	1.8	1.9	2.1	1.6	1.7	1.7	2.0
1900 { Corn.....	1.6	1.7	2.0	1.5	1.6	1.5	1.8
Highest rate, wheat, 1900, 3c.; lowest, 1 1/4c.; average for the season, 1.8c.							
1901 { Wheat.....	1.9	1.5	1.6	1.3	1.6	1.3	2.0
1901 { Corn.....	1.8	1.3	1.4	1.2	1.5	1.2	1.2
Highest rate, wheat, 1901, 2 1/2c.; lowest, 1 1/4c.; average for the season, 1.60c.							
1902 { Wheat.....	1.3	1.3	1.2	1.6	1.5	1.7	1.9
1902 { Corn.....	1.2	1.1	1.1	1.4	1.4	1.6	1.7
Highest rate, wheat, 1902, 2 1/2c.; lowest, 1 3/4c.; average for the season, 1.5c.							
1903 { Wheat.....	1.4	1.3	1.3	1.2	1.2	1.4	1.8
1903 { Corn.....	1.3	1.2	1.2	1.0	1.0	1.3	1.6
Highest rate, wheat, 1903, 2 1/4c.; lowest, 1 1/4c.; average for the season, 1.4c.							

LAKE FREIGHTS FROM DULUTH TO BUFFALO ON WHEAT (AS REPORTED BY THE SECRETARY OF THE MERCHANTS' EXCHANGE, BUFFALO, N.Y.)

The following statement shows the Lake Freight rates on Wheat from Duluth to Buffalo, during the season of 1903 :—

1903.	Wheat, Bushels.	1903.	Wheat, Bushels.
	Cts.		Cts.
April 1	2	Sept. 2	1 1/4
May 7	1 3/4	" 4	1 1/4
" 11	1 1/4-1 1/2	" 18	1 3/4
" 21	1 1/2-1 1/4	" 21	2
June 15	1 1/4	Oct. 3	1 3/4
" 25	1 3/4	Nov. 18	2
July 21	1 1/2	Nov. 20 to Dec. 5	2 1/2-2 3/4

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In 1885 the range of freights on wheat, Duluth to Buffalo, was $1\frac{1}{2}$ to 5c.; in 1886, $3\frac{1}{4}$ to 8c.; in 1887, 5 to 8c.; in 1888, 2 to 5c.; in 1889, 2 to 5c.; in 1890, 2 to 5c.; in 1891, $1\frac{1}{4}$ to $9\frac{1}{2}$ c.; in 1892, $2\frac{1}{4}$ to 4c.; in 1893, $1\frac{1}{4}$ to $3\frac{1}{2}$ c.; in 1894, $1\frac{1}{4}$ to 3c.; in 1895, 2 to 6c.; in 1896, $1\frac{1}{4}$ to 3c.; in 1897, 1 to $2\frac{1}{2}$ c.; in 1898, 1 to $3\frac{1}{2}$ c.; in 1899, $2\frac{1}{2}$ to 6c.; in 1900, $1\frac{1}{2}$ to $3\frac{3}{4}$ c.; in 1901, $1\frac{1}{8}$ to $3\frac{3}{4}$ c.; in 1902, 1 to $2\frac{1}{4}$ c., and in 1903, $1\frac{1}{8}$ to $2\frac{3}{4}$ c. per bushel.

The first departure by lake, at Duluth in 1903 was April 9; in 1902 was on March 31; in 1901 was on May 6; in 1900 was on April 22; in 1899, on April 29; in 1898, was on April 16; in 1896, on April 22, and in 1895, on April 21. In 1894 season opened on April 19; in 1893, on May 8; in 1892, on April 21; in 1891, on April 30; in 1890, on March 26; in 1889, on April 20; in 1888, on May 12; in 1887, May 4; in 1886, on May 7.

Wheat was shipped at Kingston, Canada, per bushel, during the season of 1887, at $6\frac{1}{4}$ to $7\frac{3}{4}$ c.; in 1888, at 4 to 5c.; in 1889, at —; in 1890, $5\frac{3}{4}$, $5\frac{1}{2}$, $4\frac{1}{2}$, $4\frac{1}{4}$, 4c.; in 1891, during May, $3\frac{3}{4}$, $3\frac{1}{2}$, $2\frac{1}{2}$ c.; during June, 3c.; and on July 25, $2\frac{1}{2}$ c.; in 1892, 5c. in April; 5 to $5\frac{1}{4}$ c. in May; 4c. in June; $4\frac{1}{2}$ c. in July; 3c. in August; 6 to $6\frac{1}{4}$ c. in October; in 1893, ranged from $5\frac{1}{2}$ to $4\frac{1}{2}$ c. in April; $4\frac{1}{2}$ to $4\frac{3}{4}$ c. in May; 4 to $3\frac{1}{2}$ c. in June; $2\frac{3}{4}$ to 3c. in July; $3\frac{1}{2}$ to $3\frac{3}{4}$ c. in September; no figures quoted after that date. In 1894 ranged from $3\frac{1}{4}$ to $3\frac{1}{2}$ c. in May; $3\frac{1}{2}$ c. in June; $2\frac{1}{2}$ c. in July; $2\frac{1}{2}$ to $3\frac{1}{4}$ c. in August; 4c. in September, and $4\frac{1}{4}$ c. in October. On August 25 and November 3, 1894, wheat to Ogdensburg, at $3\frac{1}{4}$ c. and $4\frac{1}{2}$ c., respectively. In 1895, wheat to Kingston from 3c. to 5c. In 1896, wheat to Kingston from 3c. to $5\frac{1}{2}$ c.; and in 1897, wheat to Kingston from 3c. to $3\frac{1}{2}$ c., according to time of year; 1898 and 1899 not given.

LAKE FREIGHTS FROM TOLEDO TO BUFFALO ON WHEAT.

The following statements show the ruling rates of lake freights on wheat from Toledo to Buffalo, during the season of 1903 on the dates specified, as reported by the Secretary Merchants' Exchange, Buffalo.

Date, 1903.	Wheat and Corn per Bushel.	Date, 1903.	Wheat and Corn per Bushel.
	Cts.		Cts.
Opening to April 1.....	$1\frac{1}{2}$	April 1 to July 14.....	$1\frac{1}{4}$
July 14 to August 1.....	$1\frac{1}{8}$	August 1 to close.....	$1\frac{1}{4}$

The range for 1886 was $1\frac{3}{4}$ to 3c.; for 1887, $2\frac{1}{4}$ to 3c.; for 1888, $1\frac{1}{2}$ to $2\frac{1}{4}$ c.; for 1889, $1\frac{3}{4}$ to 2c.; for 1890, $1\frac{1}{2}$ to 2c.; for 1891, 1 to 3c.; for 1892, $1\frac{1}{2}$ to $2\frac{1}{2}$ c.; for 1893, 1 to 2c.; for 1894, 1 to 2c.; for 1895, 1 to $2\frac{1}{4}$ c.; for 1896, $1\frac{1}{4}$ to $1\frac{3}{4}$ c.; for 1897, 1 to $1\frac{1}{4}$ c.; for 1898, 1 to $1\frac{1}{2}$ c.; for 1899, $1\frac{1}{2}$ to 2c.; for 1900, $1\frac{1}{2}$ to 2c.; for 1901, $1\frac{1}{4}$ to $1\frac{1}{2}$ c.; for 1902, $1\frac{1}{8}$ to 2c., and for 1903, $1\frac{1}{8}$ to $1\frac{1}{2}$ c. per bushel.

From Toledo to Ogdensburg, wheat and corn shipped at 6 to 7c. in 1887; at $4\frac{1}{2}$ to 6c. for wheat and 5c. for corn in 1888; and 5 to $5\frac{7}{8}$ c. for wheat in 1889 per bushel. From Toledo, on October 8, 1887, corn shipped to Kingston at $3\frac{1}{2}$ c., and on November 12, at $4\frac{1}{2}$ c. per bushel. In 1888, corn Toledo to Kingston, $4\frac{1}{4}$ to 3c.; and wheat at $3\frac{1}{2}$ to 3c. per bushel. In 1889, wheat, Toledo to Kingston, 3c.; and in 1891, rye, Toledo to Kingston at 3c. per bushel. From Toledo, on June 2, 1887, wheat shipped to Montreal by propeller at $6\frac{1}{2}$ c.; on June 14, corn at same price; but on September 26, the rate on corn was only 5c. per bushel. In 1888, corn, Toledo to Montreal, at 6 to $5\frac{3}{4}$ c. and wheat at $5\frac{1}{2}$ c. per bushel. From 1889 to 1899, no shipments to Montreal or other places in Canada reported.

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CANAL FREIGHT FROM BUFFALO TO NEW YORK.

The following shows the changes in the ruling rates of freight to New York from Buffalo, on the days specified in 1903 (as reported by the Secretary, Merchants' Exchange, Buffalo).

Date, 1903.	Wheat,	Corn,	Date, 1903.	Wheat,	Corn,
	Bushels.	Bushels.		Bushels.	Bushels.
	Cts.	Cts.		Cts.	Cts.
May 2.....	4	.....	July 15.....	4½	3½
May 15.....	4½	.....	September 16.....	4	3½
June 11.....	4	3¾	" 19.....	3¾	3½
July 2.....	4½	4	" 24 to close.....	3¾	3½

The freight on oats varied from 3 to 2½c. per bushel. Pine lumber, per 1,000 feet, was carried from Buffalo to Tonawanda to New York as follows: Opened at \$1.50; June, \$1.50; July, \$1.50; August, \$1.75; September, \$1.75; October, \$1.75 to close \$1.75. Rates to Albany opened \$2; June, \$2; July, \$2; August, \$2.25; September, \$2.25; October, \$2.25 to close \$2.25.

AVERAGE CANAL FREIGHTS.

BUFFALO TO NEW YORK.

The following statement shows the average rates of canal freights on wheat and corn between Buffalo and New York during each month in the past ten years, and the highest and lowest rates on wheat and average rate on wheat in each:—

(Reported by Sec. Merchants' Exchange, Buffalo.)

Grain.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
1894 {Wheat.....	3·1	2·9	3·3	3·4	3·6	2·9	3·0
{Corn.....	2·8	2·6	3·0	3·1	3·3	2·6	2·7
Highest rate, wheat, 1894, 4c.; lowest, 3·6c.; average for the season, 3·2c.							
1895 {Wheat.....	1·9	1·7	2·0	2·0	2·1	2·5	2·7
{Corn.....	1·7	1·5	1·7	1·7	2·0	2·2	2·5
Highest rate, wheat, 1895, 3c.; lowest, 1·9c.; average for the season, 2·2c.							
1896 {Wheat.....	3·7	3·7	3·7	3·7	3·7	3·7	3·8
{Corn.....	3·5	3·5	3·5	3·5	3·5	3·5	3·6
Highest rate, wheat, 1896, 4c.; lowest, 3·1c.; average for the season, 3·7c.							
1897 {Wheat.....	2·6	2·2	2·3	2·5	3·3	3·1	3·5
{Corn.....	2·2	1·8	2·0	2·2	2·8	2·6	3·0
Highest rate, wheat, 1897, 3·5c.; lowest, 2c.; average for the season, 2·8c.							
1898 {Wheat.....	3·0	2·9	2·8	2·7	2·6	3·0	3·0
{Corn.....	2·5	2·3	2·4	2·1	2·2	2·6	2·6
Highest rate, wheat, 1898, 3·4c.; lowest, 2·5c.; average for the season, 2·8c.							
1899 {Wheat.....	2·5	2·7	2·4	2·5	2·5	3·6	4·2
{Corn.....	2·3	2·3	2·1	2·1	2·2	3·0	3·5
Highest rate, wheat, 1899, 4·5c.; lowest, 2·5c.; average for the season, 3c.							
1900 {Wheat.....	2·4	2·2	2·3	2·3	2·2	2·7	3·5
{Corn.....	2·1	2·0	2·1	2·0	2·0	2·4	3·0
Highest rate, wheat, 1900, 3½c.; lowest, 2c.; average for the season, 2·5c.							
1901 {Wheat.....	3·4	3·2	3·2	3·2	3·3	4·0	4·1
{Corn.....	2·7	2·8	2·8	2·9	3·1	3·7	3·8
Highest rate, wheat, 1901, 4¾c.; lowest, 3½c.; average for the season, 3·5c.							
1902 {Wheat.....	4·0	3·8	3·3	3·3	3·8	4·0	4·1
{Corn.....	3·6	3·4	3·1	3·1	3·5	3·7	3·8
Highest rate, wheat, 1902, 4½c.; lowest, 3¾c.; average for the season, 3·8c.							
1903 {Wheat.....	4·1	4·1	4·2	4·2	4·0	3·7	3·7
{Corn.....	3·7	3·7	3·8	3·8	3·6	3·3	3·3
Highest rate, wheat, 1903, 4½c.; lowest, 3¾c.; average for the season, 4c.							

NOTE.—Canal free of tolls since 1882.

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FREIGHT, TOLLS, ELEVATING AND STORAGE RATES COMPARED.

The following statement shows the receipts of grain and flax seed at Buffalo, the average canal freight on wheat, and the tolls on wheat to New York, and the elevating and storage rates at Buffalo for a series of years (as reported by Secretary, Merchants' Exchange, Buffalo) :—

Year.	Grain received.		Average Canal Freight on Wheat.	Tolls on Wheat.	Elevating, including Storage.
	Bush.	Cts.	Cts.	Cts.	Cts.
1870	32,208,039	11·2	3·1	1½	
1871	61,319,313	12·6	3·1	1½	
1872	58,703,666	13·0	3·1	1½	
1873	65,498,955	11·4	3·1	1½	
1874	55,660,198	10·0	3·1	1½	
1875	52,833,451	7·9	2·0	1	
1876	44,207,121	6·6	2·0	1	
1877	61,822,202	7·4	1·0	1	
1878	78,828,443	6·0	1·0	1	
1879	75,089,768	6·8	1·0	1	
1880	105,133,009	6·5	1·0	1	
1881	56,389,827	4·7	1·0	1	
1882	51,501,503	5·4	1·0	1	
1883	65,722,080	4·9	None.	1	
1884*	58,011,800	4·2	do	1	
1885*	52,671,090	3·8	do	1	
1886*	75,570,850	5·0	do	1	
1887*	87,073,570	4·6	do	1	
1888*	73,977,390	3·4	do	1	
1889*	92,290,550	4·8	do	1	
1890*	91,994,680	3·8	do	1	
1891*	135,315,510	3·5	do	1	
1892*	138,872,560	3·5	do	1	
1893*	140,796,410	4·6	do	1	
1894*	105,435,577	3·2	do	1	
1895*	121,225,497	2·2	do	1	
1896*	172,474,664	3·7	do	1	
1897*	204,964,103	2·8	do	1	
1898*	221,383,945	2·8	do	1	
1899*	153,393,184	3·0	do	1	
1900*	157,655,968	2·5	do	1	
1901	132,616,828	3·5	do	1	
1902	124,624,386	3·8	do	1	
1903	140,438,822	4·0	do	1	

to 0

NOTE.—Prior to 1870 tolls 6·21 cents per bushel, and the elevating charge 2 cents per bushel.

* Including flax seed.

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AVERAGE FREIGHT CHARGES PER BUSHEL.

For the transportation of Wheat and Corn from Chicago to New York for a series of years.

(From Report of Board of Trade, Chicago.)

Year.	CORN.			WHEAT.		
	By lake and canal.	By lake and rail.	By all rail.	By lake and canal.	By lake and rail.	By all rail.
	\$	\$	\$	\$	\$	\$
1858	127		3619	1550		3861
1859	1570		3248	1663		3480
1860	a 0833		3248	a 095		3480
1861	a 1062		3881	a 1210		4158
1862	a 0957		4480	a 1062		4800
1863	a 063		4592	a 072		4920
1864	a 09		5600	a 0952		60
1865	a 0864		4188	a 0894		4488
1866	a 1075		4312	a 1377		4620
1867	a 0511		4176	a 08		4475
1868	a 0604		3532	a 0802		3784
1869	a 0584	2355	3320	a 0651	2520	3557
1870	a 16	2220	28	a 0677	2250	30
1871	a 0754	2372	2968	a 0687	2542	3180
1872	a 1072	2660	3266	a 1110	2950	3499
1873	a 0816	2298	2893	a 0917	2461	3102
1874	a 0382	1388	2450	a 0400	1709	2625
1875	a 034	1303	2240	a 0378	1389	2400
1876	b 0875	1079	1574	b 0982	1136	1686
1877	b 0959	1406	1890	b 1109	1546	2050
1878	b 0883	1053	1652	b 0996	1209	1770
1879	b 1049	1220	1456	b 1187	1313	1774
1880	b 1341	1443	1748	b 1313	1580	1980
1881	b 0777	0942	1340	b 0867	1049	1440
1882	b 0672	1028	1350	b 0723	1091	1447
1883	b 0803	11	1512	b 0901	1163	1620
1884	b 0655	085	1232	b 07	10	1320
1885	b 063	0801	1232	b 0654	0902	1320
1886	b 0845	1120	14	b 0910	12	1500
1887	b 0850	1120	1470	b 0950	12	1575
1888	b 0671	1026	1354	b 0705	1114	1450
1889	b 0632	0819	126	b 0692	0897	1500
1890	b 0593	0732	1136	b 0676	0852	1430
1891	b 0632	0753	1400	b 0695	0857	1500
1892	b 0595	0721	1296	b 0645	0759	1380
1893	b 0718	0797	1365	b 0766	0848	1463
1894	b 0493	0650	1232	b 0511	0700	1320
1895	b 0450	0640	1029	b 0486	0696	1189
1896	b 0575	0615	1050	b 0619	0661	1200
1897	b 0453	0692	1143	b 0522	0742	1250
1898	† 0381	0441	0980	† 0445	0491	1200
1899	† 0508	0583	1008	† 0581	0663	1160
1900	† 0497	0472	0919	† 0449	0510	0996
1901	† 0461	0516	0921	† 0511	0554	0988
1902	† 0483	0551	0994	† 0526	0589	1062
1903	† 0485	0578	1054	† 0540	0637	1129

a To Buffalo only.

b Including Buffalo charges and tolls.

† Exclusive of Buffalo charges.

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FOREIGN FREIGHT RATES.

ANNUAL average Freight Rates on Grain, Flour and Provisions (per 100 lbs.) from Chicago to European Ports, by all Rail to Sea-board and thence by steamers.

Shipped to	Articles.	1903.	1902.	1901.	1900.	1899.
		\$	\$	\$	\$	\$
Liverpool	Grain	2268	2085	2147	2498	2972
"	Sacked flour	2519	2350	2300	2790	3012
"	Provisions	4190	3625	3600	4884	4050
Glasgow	Grain	2443	2175	2410	3098	3235
"	Sacked flour	2538	2275	2438	3156	3125
"	Provisions	4688	4188	4516	5531	4469
London	Grain	2356	2175	2323	3110	3060
"	Sacked flour	2519	2400	2550	3501	3350
"	Provisions	4406	3906	4475	5587	4414
Antwerp	"	4969	4150	4625	5109	4750
Hamburg	"	4700	3900	4400	5000	4600
Amsterdam	"	4200	4000	4500	5100	4700
Rotterdam	"	4200	4000	4500	5100	4700
Copenhagen	"	4969	4200	4775	5531	5172
Stockholm	"	5250	4500	5325	6450	6297
Stettin	"	4969	4200	4775	5531	5172
Bordeaux	"	5625	5125	5425	6412	5912

LAKE FREIGHTS ON COAL FROM BUFFALO TO CHICAGO AND OTHER PORTS.

The following statement shows the average freight rate on Coal per net ton, in cents, from Buffalo to the ports named, during the seasons of 1902 and 1903.

(*Buffalo Merchants' Exchange.*)

	1903.	1902.
Freight on hard Coal, Buffalo to Chicago, per ton	49	48
" " Milwaukee "	49	54
" " Duluth "	38	43

TOTAL VALUES of Merchandise received from British North America for Immediate Transit across United States Territory, for Immediate Transhipment in Ports of the United States to British North America, and so shipped, during each Year from 1873 to 1903, inclusive.

YEAR ENDING JUNE 30.	COUNTRIES FROM WHICH RECEIVED.					COUNTRIES TO WHICH SHIPPED.				
	British North America.					British North America.				
	Nova Scotia, New Brunswick, and Prince Edward Island.	Quebec, Ontario, and the Northwest Territories.	British Columbia.	Newfoundland and Labrador.	Total.	Nova Scotia, New Brunswick, and Prince Edward Island.	Quebec, Ontario, and the Northwest Territories.	British Columbia.	Newfoundland and Labrador.	Total.
1873.	\$ 495,289	\$ 12,894,164	\$ 5,240	\$	\$ 13,394,693	\$ 5,282,290	\$ 21,320,174	\$ 181,720	\$	\$ 26,784,184
1874	449,655	13,616,344	97,691		14,163,690	7,150,636	19,843,169	347,534		27,310,739
1875	448,570	17,342,933	256,074		18,042,577	8,999,596	20,283,639	517,060		29,800,295
1876	261,443	22,134,275	1,137		22,591,902	9,102,600	14,658,358	658,836	94	21,419,888
1877	160,658	12,092,619	218,418		12,471,695	2,870,422	15,551,288	544,018	2,475	18,977,153
1878	163,978	11,627,114	412,966		12,204,658	351,268	11,436,470	524,013	364	12,912,685
1879	194,129	11,606,882	280,079		12,081,665	889,559	11,520,877	476,824	2,347	12,889,587
1880	215,131	16,782,315	137,271	55	17,134,717	1,643,716	14,806,663	531,436	288	17,042,103
1881	171,383	16,758,168	72,555		17,002,046	1,778,836	20,837,827	719,368	333	23,336,264
1882	164,990	28,265,083	113,018	87	28,543,178	2,732,635	34,005,845	855,784	1,190	37,595,484
1883	561,971	29,204,631	36,973	25	29,892,820	2,453,557	35,878,389	971,307	7,335	39,312,568
1884	656,233	12,574,953	188,041		13,419,227	1,740,900	19,174,466	1,473,833	5,186	19,700,458
1885	933,806	12,280,483	308,691	633	13,523,613	1,635,442	16,448,942	1,615,293	781	19,700,458
1886	1,165,973	9,303,864	359,104	32,079	10,861,020	2,040,298	16,369,429	1,825,178	6,174	20,241,079
1887	1,684,730	9,606,175	243,816		11,594,721	1,621,748	19,930,206	635,841	70	22,187,465
1888	1,525,048	6,417,701	372,934	27,134	8,542,817	1,781,028	13,459,169	370,322	1,137	13,611,656
1889	2,596,233	8,355,178	294,859	89,853	11,336,123	2,484,787	18,993,957	665,527	2,701	22,146,975
1890	3,079,657	12,449,772	306,897	174,584	16,001,910	5,277,210	21,140,198	913,106	4,690	27,335,204
1891	3,859,074	15,310,945	422,806	187,640	19,780,470	5,005,614	21,635,992	517,144	34,273	27,883,293
1892	4,393,062	19,065,704	201,373	328,116	23,998,255	2,079,783	24,189,181	428,188	6,962	26,704,414
1893	1,009,597	16,404,425	891,986	381,986	17,885,573	2,052,357	20,282,400	409,055	26,289	22,720,111
1894	1,070,976	13,649,881	348,069	273,467	17,342,093	1,831,417	17,880,688	463,471	6,640	20,182,216
1895	1,199,782	17,774,108	411,557	236,415	19,621,862	1,834,745	19,320,714	558,991	7,814	21,722,294
1896	1,118,185	18,038,931	582,469	404,029	20,143,605	1,572,783	19,441,279	772,586	1,768	21,788,416
1897	1,118,055	22,497,151	611,322	367,295	24,593,823	1,682,538	17,660,211	1,312,797	8,130	26,663,676
1898	1,440,950	35,596,039	1,741,289	555,706	39,336,981	1,536,413	22,400,622	2,291,356	19,247	26,200,638
1899	1,618,399	30,673,265	3,708,928	561,129	36,591,721	1,245,518	19,605,819	4,686,539	27,147	25,585,043
1900	2,002,264	37,657,936	3,914,668	553,031	44,137,899	1,245,771	24,730,612	4,687,032	49,535	31,478,271
1901	1,788,541	38,382,558	4,070,940	503,970	44,746,109	1,161,875	24,634,780	4,687,032	71,424	30,555,579
1902	2,206,590	54,332,135	4,531,932	639,241	61,709,898	5,086,469	27,019,441	5,441,234	31,522	37,668,666
1903.	2,191,174	55,923,463	3,490,180	782,619	61,487,376	1,268,469	32,290,433	1,949,975	18,849	35,527,726

TOTAL VALUE of Merchandise received from the Principal and other Foreign Countries for Immediate Transit across United States Territory or for Immediate Transhipment in Ports of the United States to other Foreign Countries, and so shipped, for each Year from 1868 to 1903, inclusive.

Year ending June 30.	COUNTRIES FROM WHICH RECEIVED.						COUNTRIES TO WHICH SHIPPED.						Total Value of Merchandise received and shipped.
	Great Britain and Ireland.		Germany.		British North American Possessions.		Mexico.		Cuba.		Other Countries.		
	\$	¢	\$	¢	\$	¢	\$	¢	\$	¢	\$	¢	
1868	10,664,576	132,074	4,864,269	14,967	4,263,621	1,576,157	3,212,123	14,375,419	481,613	116,521	1,394,875	21,516,604	
1869	10,891,698	150,382	5,852,678	60,715	2,373,474	1,767,937	15,033,821	15,033,821	448,300	1,547,629	1,293,861	21,095,861	
1870	10,210,455	302,806	7,215,973	163,977	3,909,227	2,049,492	2,116,240	16,089,037	321,331	135,915	983,275	23,191,880	
1871	13,473,915	322,110	7,954,060	344,179	1,367,373	1,913,200	1,033,307	18,406,475	346,872	315,224	1,211,840	25,375,937	
1872	17,683,231	227,232	9,276,169	174,104	2,227,462	1,847,162	2,663,819	24,042,730	358,151	173,570	1,497,496	31,089,320	
1873	19,144,815	250,704	13,394,693	286,607	5,737,904	1,284,162	3,222,325	26,784,584	319,771	1,963,617	1,963,617	40,099,185	
1874	18,832,900	211,907	14,163,690	151,920	4,569,360	926,390	3,805,642	27,310,739	665,214	520,493	1,096,387	38,850,676	
1875	18,657,276	325,448	18,042,577	115,527	4,759,808	1,785,942	1,495,285	29,800,285	1,135,004	248,358	757,429	40,686,263	
1876	14,304,137	290,489	22,391,302	226,315	2,962,963	1,686,789	2,938,558	24,419,888	1,129,440	690,061	1,163,508	42,062,655	
1877	13,732,085	337,897	12,471,695	158,832	1,095,451	1,469,735	1,108,298	18,977,153	329,577	306,311	770,333	29,256,773	
1878	10,084,510	378,768	12,204,658	146,822	3,041,357	9,577,050	2,905,230	12,912,685	316,664	319,611	1,305,908	27,337,148	
1879	8,795,340	521,917	12,081,095	222,320	1,954,042	1,521,153	2,252,572	12,889,587	330,968	174,757	1,272,032	25,095,807	
1880	10,311,139	620,704	17,134,747	239,655	3,606,049	1,942,405	3,658,477	17,042,103	300,148	294,848	1,775,394	33,857,749	
1881	14,898,032	721,344	17,002,046	217,444	2,642,550	2,222,122	2,729,216	23,356,264	671,005	1,648,121	1,648,121	37,704,048	
1882	18,911,637	755,560	28,543,178	380,100	5,662,926	3,812,058	5,336,361	37,335,484	800,025	319,257	2,421,526	58,065,459	
1883	20,242,222	1,149,195	29,802,820	381,369	3,126,062	4,276,712	7,738,994	39,312,568	2,282,473	352,552	3,081,875	58,377,327	
1884	14,038,694	948,901	13,419,227	408,124	3,655,568	4,345,878	2,900,488	22,939,385	2,748,431	2,061,061	2,656,635	36,814,392	
1885	11,064,186	1,140,548	13,223,613	308,293	4,853,374	3,545,544	3,771,524	19,700,458	1,262,515	119,376	2,346,146	34,435,538	
1886	13,142,644	1,462,414	10,861,020	216,078	6,797,879	4,558,229	8,510,097	3,803,566	2,279,399	452,700	2,751,423	37,058,264	
1887	17,977,200	1,670,952	11,904,721	111,635	6,780,853	4,720,700	10,652,219	4,353,992	2,187,355	608,121	3,561,358	42,706,121	
1888	13,707,240	1,817,511	8,342,817	120,497	4,820,846	4,334,298	6,853,195	2,531,043	15,611,656	563,539	3,997,596	33,643,209	
1889	19,080,647	2,582,456	11,336,123	296,654	5,052,510	5,052,510	9,233,659	4,581,064	4,781,110	892,158	5,768,287	47,003,253	
1890	20,664,427	2,735,546	16,002,384	639,650	9,759,256	5,898,763	10,656,465	5,097,434	4,944,149	1,215,399	55,639,426		
1891	20,879,851	2,819,238	19,780,470	565,338	6,977,901	6,475,119	11,968,808	3,640,940	27,883,023	966,851	7,983,977	57,497,917	
1892	21,334,783	2,980,571	23,928,255	1,383,455	11,054,445	8,936,228	10,511,282	6,995,419	22,720,114	1,472,980	9,299,451	69,567,737	
1893	20,367,339	3,466,885	17,885,373	1,632,200	10,131,171	14,426,669	18,511,287	7,986,637	22,720,114	4,607,549	12,089,492	67,949,837	
1894	18,641,622	3,717,740	17,342,093	1,858,367	9,910,272	19,061,911	18,394,911	11,154,933	20,182,216	4,543,187	16,645,187	71,507,375	
1895	18,531,083	4,122,899	19,621,862	2,515,091	10,420,747	10,463,981	20,562,325	6,684,735	4,512,293	1,951,985	10,243,561	65,677,193	
1896	19,420,751	3,460,489	20,143,605	1,797,163	11,668,243	13,272,521	24,029,263	7,942,844	21,788,416	1,890,705	12,907,432	69,762,720	
1897	17,513,324	3,183,390	24,393,823	1,968,924	9,389,280	13,273,822	24,800,259	5,393,860	20,063,676	2,608,454	11,874,291	70,060,103	
1898	18,931,226	3,775,038	39,336,984	2,625,521	4,763,587	11,987,069	33,276,696	3,807,811	26,259,780	5,543,843	11,411,697	81,019,375	
1899	16,594,043	4,069,828	36,561,721	3,519,942	8,372,420	10,910,462	29,695,600	5,711,388	5,669,210	2,700,086	10,657,165	60,028,446	
1900	23,152,099	3,915,766	44,127,899	4,245,695	9,316,006	13,793,037	37,383,450	6,488,592	31,478,271	6,965,600	12,571,058	98,551,462	
1901	21,771,394	4,681,613	44,746,109	4,639,259	15,680,962	14,821,842	37,506,242	14,204,010	30,555,579	8,110,116	3,577,929	106,361,119	
1902	22,782,333	5,296,666	61,709,898	5,363,463	10,698,012	13,305,927	50,397,683	6,701,903	37,028,626	3,128,575	14,696,320	118,525,860	
1903	22,583,069	4,864,525	61,487,376	6,081,934	10,190,906	13,478,227	51,137,598	6,831,163	33,927,656	9,577,373	3,080,344	121,386,118	

VALUE of the Imports and Exports of the United States carried respectively in cars and other land vehicles, &c.—*Continued.*

Year ending June 30.	Imports.			Exports.			Imports and Exports.			Imports and Exports.			Percentage carried in American vessels.
	In cars and other land vehicles			In American vessels.			In cars and other land vehicles			In American vessels.			
	\$	%	\$	\$	%	\$	\$	%	\$	%	\$	%	
1888.	32,209,459		568,222,357	23,147,368	67,332,175	606,474,964	54,356,827	190,837,473	1,174,637,321	1,419,911,621	13.44		
1889.	38,227,861		586,120,881	28,436,517	83,022,198	630,942,660	66,064,378	203,805,108	1,217,063,541	1,487,533,027	13.70		
1890.	40,621,361		623,740,100	32,949,902	77,502,138	747,376,644	73,576,263	202,431,086	1,371,116,744	1,647,131,093	12.29		
1891.	40,932,755		676,511,763	31,923,439	78,968,047	773,589,324	72,836,194	206,430,725	1,450,101,087	1,729,397,006	11.94		
1892.	39,726,595		648,535,976	33,220,629	81,033,844	916,023,975	72,947,224	220,173,735	1,564,359,651	1,857,680,610	11.85		
1893.	44,121,094		695,184,394	43,862,947	70,670,073	733,132,174	87,484,041	197,763,507	1,428,316,568	1,714,066,116	12.22		
1894.	29,623,095		563,810,331	49,221,427	73,707,023	769,212,122	78,844,522	195,268,216	1,273,022,456	1,547,135,194	13.3		
1895.	33,201,988		590,538,362	49,902,754	62,277,581	695,357,830	83,101,742	170,507,196	1,285,896,192	1,589,508,130	11.7		
1896.	35,535,979		619,784,338	61,131,125	70,392,813	731,083,000	96,666,204	187,691,887	1,377,973,521	1,662,331,612	12.00		
1897.	35,812,620		626,890,521	63,082,305	79,441,823	905,969,428	100,894,925	189,075,277	1,523,573,766	1,815,723,968	11.00		
1898.	39,427,784		619,784,338	73,283,704	67,792,150	1,030,406,476	103,711,488	161,328,017	1,582,432,479	1,847,331,984	9.30		
1899.	33,424,821		492,085,003	83,870,907	78,562,088	1,064,590,307	117,295,728	160,612,296	1,646,263,857	1,924,171,791	8.9		
1900.	44,412,509		581,673,550	110,483,141	90,779,252	1,193,230,689	154,895,650	195,084,192	1,894,444,424	2,244,424,266	9.3		
1901.	47,100,814		701,223,735	111,900,331	84,343,122	1,291,520,338	159,001,745	177,398,615	1,974,536,796	2,310,957,156	8.2		
1902.	56,366,711		744,766,235	123,824,337	83,631,985	1,174,263,079	180,191,048	185,819,987	1,919,029,314	2,285,040,349	8.8		
1903.	66,208,195		835,844,210	138,851,301	91,628,200	1,190,262,178	205,059,496	214,695,032	2,026,106,388	2,445,860,916	9.1		

NOTE.—1. The amounts carried in cars and other land vehicles, were not separately stated prior to July 1, 1870. 2. Exports are stated in mixed gold and currency values from 1862 to 1879, inclusive.

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STATEMENT showing the Total Values of Foreign Merchandise transported in the In-Transit and Transshipment Trade of the United States with the British North American Possessions, during each year from 1871 to 1903.

Year ending June 30.	Received for transit and transshipment from British North American Possessions.			Shipped in transit to or transshipment for British North American Possessions.		
	By Land.	By Water.	Total.	By Land.	By Water.	Total.
	\$	\$	\$	\$	\$	\$
1871.....	6,035,585	1,918,475	7,954,060	15,624,591	2,781,884	18,406,475
1872.....	8,237,859	1,038,310	9,276,169	19,357,342	4,685,448	24,042,790
1873.....	11,700,787	1,693,906	13,394,693	18,394,693	6,605,518	26,784,184
1874.....	12,695,590	1,468,100	14,163,690	20,572,299	6,938,430	27,510,739
1875.....	16,890,022	1,152,555	18,042,577	23,794,129	6,006,166	29,800,295
1876.....	21,301,262	1,290,640	22,591,902	19,369,958	5,049,930	24,419,888
1877.....	10,835,642	1,636,053	12,471,695	17,066,855	1,910,298	18,977,153
1878.....	10,314,534	1,889,524	12,204,058	11,914,321	998,364	12,912,685
1879.....	10,098,998	1,982,097	12,081,095	12,030,635	858,952	12,889,587
1880.....	15,265,177	1,869,570	17,134,747	16,388,673	653,430	17,042,003
1881.....	15,200,967	1,801,079	17,002,046	22,828,270	527,994	23,356,264
1882.....	24,665,029	3,878,149	28,543,178	36,613,165	982,019	37,595,484
1883.....	26,382,370	3,420,450	29,802,820	38,389,318	923,250	39,312,568
1884.....	13,043,498	375,729	13,419,227	22,120,587	818,798	22,939,385
1885.....	12,755,686	767,927	13,523,613	19,105,476	594,982	19,700,458
1886.....	9,593,344	1,267,676	10,861,020	19,428,867	812,212	20,241,079
1887.....	9,377,041	2,127,680	11,504,721	20,178,365	2,009,590	22,187,955
1888.....	6,309,024	2,033,793	8,342,817	13,347,876	2,063,780	15,611,656
1889.....	8,303,171	3,032,952	11,336,123	19,299,966	2,849,263	22,149,229
1890.....	13,524,298	2,477,612	16,001,910	24,788,152	2,547,052	27,335,201
1891.....	18,065,925	1,714,545	19,780,470	25,185,706	2,697,317	27,883,023
1892.....	21,346,413	2,581,842	23,928,255	23,989,746	2,714,368	26,704,114
1893.....	13,807,662	4,077,911	17,885,573	20,151,432	2,568,679	22,720,111
1894.....	13,501,664	3,840,429	17,342,093	17,974,332	2,207,884	20,182,216
1895.....	14,068,922	5,552,940	19,621,862	18,752,226	2,970,068	21,722,294
1896.....	13,408,578	6,735,027	20,143,605	18,335,373	3,453,043	21,788,416
1897.....	17,665,422	6,928,401	24,593,823	18,430,841	2,232,835	20,663,676
1898.....	27,277,049	12,059,935	39,336,984	22,792,971	3,457,667	26,250,638
1899.....	28,248,759	8,312,962	36,561,721	22,593,761	2,941,282	25,535,043
1900.....	33,346,150	10,781,749	44,127,899	27,996,981	3,481,290	31,478,271
1901.....	37,680,071	7,066,038	44,746,109	27,899,903	2,655,676	30,555,579
1902.....	46,761,353	14,948,545	61,709,898	30,518,576	7,090,990	37,609,666
1903.....	45,025,422	16,460,954	61,487,376	32,349,527	3,178,199	35,527,726

NOTE.—This movement forms no part of the import and export trade.

4-5 EDWARD VII., A. 1905

C.—TABLE showing the Tonnage of the undermentioned Articles moved

Years.	VEGETABLE FOOD.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Vegetable Food.*
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869.....	71,051	670,534	256,475	99,012	92,309	13,489	99,743
1870.....	54,978	658,524	193,129	123,191	117,941	19,520	127,727
1871.....	41,211	748,549	672,057	113,992	129,891	34,563	109,935
1872.....	20,534	403,903	902,753	120,061	92,959	13,357	120,753
1873.....	19,307	803,064	637,296	70,586	70,023	30,160	114,735
1874.....	29,134	772,163	519,203	98,654	59,408	8,215	280,821
1875.....	17,635	744,293	282,031	104,475	62,717	8,309	86,090
1876.....	9,290	416,376	365,254	96,494	52,147	19,949	104,783
1877.....	8,923	448,043	723,458	139,453	66,045	35,948	77,114
1878.....	5,904	844,555	734,993	89,534	85,029	64,613	88,106
1879.....	7,164	949,466	621,180	96,144	23,164	59,210	77,071
1880.....	8,266	966,052	1,156,619	106,247	20,893	26,340	86,673
1881.....	6,926	444,832	475,823	81,587	30,321	15,484	61,588
1882.....	9,372	642,215	251,687	96,650	22,180	43,372	53,300
1883.....	9,047	573,740	522,978	58,787	51,607	95,246	67,595
1884.....	7,251	790,409	198,216	65,008	52,696	71,462	51,944
1885.....	6,869	565,922	359,982	64,587	8,234	10,211	47,505
1886.....	9,005	993,129	354,765	62,854	7,278	3,073	59,782
1887.....	4,089	936,840	446,617	75,458	33,365	6,717	47,678
1888.....	3,287	491,419	499,218	41,100	70,315	12,532	49,087
1889.....	4,429	484,141	592,550	66,110	63,674	36,329	49,663
1890.....	3,489	353,738	616,702	90,754	48,438	21,637	33,123
1891.....	3,126	756,101	142,141	71,903	16,362	68,771	33,951
1892.....	4,879	620,768	150,269	51,596	72,444	4,236	33,807
1893.....	2,367	1,093,927	252,283	49,651	24,714	6,518	20,656
1894.....	2,909	903,361	275,377	89,700	100,874	5,288	22,620
1895.....	2,240	280,550	94,403	77,868	87,839	205	59,400
1896.....	7,963	408,872	100,227	109,967	197,713	77,210	55,230
1897.....	3,206	180,035	312,776	100,337	50,345	66,387	31,489
1898.....	1,854	69,986	364,248	89,906	76,244	7,745	43,044
1899.....	1,247	282,422	92,670	78,627	93,733	5,931	22,856
1900.....	1,171	138,302	189,013	63,204	36,435	10,478	34,254
1901.....	747	214,854	87,392	55,502	88,521	10,326	99,757
1902.....	1,328	291,938	33,001	75,314	44,678	18,503	24,291
1903.....	1,075	143,832	191,351	71,837	62,326	12,027	30,153

* Apples, meal all kinds, pease, potatoes.

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on all Canals in the State of New York, during a series of thirty-five years.

HEAVY GOODS.						
Total.	Railway Iron.	Other Iron.	Salt.	Coal.	Ores.	Total.
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1,302,613	137,677	79,652	263,333	1,324,408	183,992	1,989,062
1,295,010	135,930	89,708	266,740	1,558,185	238,802	2,289,365
1,850,198	178,269	100,310	248,709	1,194,037	289,952	2,011,277
1,674,320	161,667	96,996	248,558	1,462,590	377,592	2,347,403
1,745,171	53,363	62,581	216,706	1,625,859	415,968	2,374,477
1,767,598	24,511	82,955	173,590	1,413,162	232,544	1,926,762
1,305,550	36,603	95,305	186,785	1,217,091	283,219	1,819,003
1,064,293	11,691	69,450	114,070	1,036,698	173,530	1,405,439
1,498,984	10,341	58,828	156,918	1,286,881	250,573	1,763,541
1,912,734	8,385	65,642	139,927	889,873	210,078	1,313,905
1,833,399	27,634	99,568	136,021	971,074	314,411	1,548,708
2,371,090	93,613	139,993	144,487	959,342	370,884	1,709,319
1,116,561	78,650	205,005	113,756	1,092,003	337,873	1,827,287
1,118,776	58,921	122,786	108,040	1,228,435	364,361	1,882,543
1,379,000	46,553	47,412	190,392	1,152,849	293,892	1,731,098
1,236,986	28,513	54,471	161,788	954,288	210,610	1,400,670
1,063,310	12,215	38,726	161,272	1,025,941	195,750	1,433,904
1,489,886	10,878	152,030	112,002	857,884	269,914	1,402,708
1,552,764	21,368	224,979	124,054	905,424	243,578	1,539,403
1,166,958	2,596	43,881	106,344	1,219,680	259,269	1,631,770
1,296,896	3,278	78,135	112,100	1,094,897	234,948	1,523,358
1,167,901	5,800	26,804	93,181	830,154	202,072	1,157,291
1,092,355	1,960	36,770	81,232	881,502	215,686	1,217,150
937,999	524	40,073	93,216	832,397	136,612	1,102,822
1,450,116	536	25,204	52,094	741,934	102,275	922,043
1,400,129	267	22,614	70,353	609,368	37,641	740,243
602,505	4,263	59,402	71,334	766,723	144,076	1,045,798
957,182	1,568	74,651	33,309	682,167	89,998	931,692
744,575	5,080	71,117	66,879	646,803	76,311	866,190
653,027	6,288	101,216	85,525	626,616	73,199	892,844
577,486	2,725	69,106	91,068	777,743	205,234	1,145,876
472,857	833	49,036	88,635	809,187	103,514	1,051,205
557,099	79	30,110	100,080	774,538	90,656	996,093
489,053	15	24,077	111,430	567,911	115,983	819,416
512,601	181	21,577	111,955	733,369	101,752	968,834

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D.—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	103,749	35,751	3,383	917	6,337
1876.....	15,778	201,906	144,501	18,455	24,496	1,454	3,198
1877.....	13,558	253,953	169,196	19,870	2,810	2,439	2,355
1878.....	9,121	191,982	185,931	10,979	3,088	.....	2,302
1879.....	10,710	274,570	144,506	4,655	1,239	440	2,444
1880.....	12,679	242,020	163,738	17,772	477	1,016	1,480
1881.....	9,959	127,832	101,075	24,509	.....	1,844	2,086
1882.....	12,261	215,056	54,799	20,126	611	3,226	403
1883.....	13,471	152,794	182,269	10,436	731	1,642	10,983
1884.....	13,683	144,851	118,811	7,155	10,746	1,320	9,168
1885.....	13,334	124,206	117,536	15,801	1,116	.....	1,912
1886.....	19,474	154,169	219,442	1,595	4,911	564	14,657
1887.....	23,949	221,927	114,938	9,574	12,050	.....	12,533
1888.....	16,983	160,963	194,886	5,906	26,629	811	13,608
1889.....	7,931	126,664	353,595	4,272	28,356	2,673	18,552
1890.....	14,461	118,002	327,394	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.....	44,044	203,088	164,894	8,689	18,236	1,007	46,463
1896.....	42,425	320,563	320,444	11,368	28,178	9,405	56,591
1897.....	9,065	324,743	390,615	14,173	25,161	3,483	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	24,057	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

* Fiscal

† Apples, meal all kinds, pease, potatoes.

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through the Welland Canal, during a period of thirty-three years, ended Dec. 31, 1903.

HEAVY GOODS.							
Total.	Railway Iron.	Other Iron.	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	68,064	16,924	91,575	37,153	103,126	58,781	275,623
538,147	26,217	17,141	50,540	44,243	186,932	98,605	3,678
579,880	6,923	20,754	40,850	17,157	339,016	118,685	43,387
641,397	6,032	12,068	23,309	9,579	323,503	56,825	431,316
417,936	1,517	7,588	13,509	9,962	321,306	43,683	397,565
409,788	51	7,997	30,300	20,327	288,211	81,654	378,540
464,181	9,630	9,696	9,173	3,983	323,869	42,758	399,109
403,403	10	11,518	3,980	12,686	295,318	15,229	338,741
438,564	2,782	5,797	7,174	17,796	192,957	19,164	245,670
442,182	5,360	4,812	413	22,273	109,986	34,139	176,983
269,395	4,585	7,013	10	30,682	128,113	18,785	189,188
306,482	.....	5,348	50	17,327	237,559	23,700	283,984
373,326	1,237	7,922	66	17,037	307,058	31,785	365,105
305,734	698	652	461	3,242	274,471	53,205	332,729
273,905	78	2,055	597	14,243	248,272	26,728	291,973
414,812	166	6,123	48	12,324	271,356	27,447	317,464
394,971	1,351	5,636	.....	6,715	145,193	13,866	172,761
419,786	93	3,220	316	13,617	223,871	16,872	257,989
542,043	47	2,479	1,254	20,269	268,305	2,435	294,789
519,291	.....	753	1,027	28,047	202,384	8,138	240,349
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	1,414	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

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E.—TABLE showing the tonnages of the undermentioned Articles cleared at Buffalo and Tonawanda, for transit through the Erie Canal, for a series of thirty-five years.

VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles *	Total.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869.	5,609	490,904	219,874	1,978	63,728	2,150	2,193	786,436	.....	.....
1870.....	8,258	502,158	165,577	19,944	89,156	10,593	6,906	802,592	2·05	.....
1871.....	5,607	570,849	579,709	19,810	106,391	27,622	5,705	1,315,693	67·59	.....
1872.....		330,032	866,169	41,515	73,572	5,900	88	1,317,276	67·50	.....
1873.....	6	737,167	611,675	8,636	51,615	22,441	634	1,432,174	82·10	.....
1874.....		650,161	459,728	3,192	44,079	112	237	1,157,509	47·18	.....
1875.....	5,859	695,315	273,006	1,156	36,609	2,242	3,372	1,017,559	29·38	.....
1876.....	231	377,317	356,064	6,334	24,488	12,205	4,691	783,331	.....	0·39
1877.....	1,710	398,416	709,723	26,351	52,559	27,365	4,976	1,223,100	55·52	.....
1878.....	987	775,953	718,714	21,665	69,256	51,064	6,662	1,644,301	109·08	.....
1879.....	1,239	892,404	602,171	7,193	14,537	40,471	7,528	1,565,543	99·07	.....
1880.....	2,743	897,603	131,857	434	16,154	12,137	4,256	2,065,184	162·06	.....
1881.....	1,491	386,605	458,318	86	24,751	107	7,484	878,842	11·75	.....
1882.....	1,123	586,019	241,406	1,858	9,046	19,158	6,216	864,826	9·96	.....
1883.....	538	535,150	517,219	6,816	47,190	79,010	6,051	1,191,974	51·06	.....
1884.....	520	767,784	194,368	4,910	47,060	57,856	4,411	1,078,909	37·18	.....
1885.....	323	540,533	356,737	3,317	5,610	6,405	5,427	918,352	14·36	.....
1886.....	488	955,851	351,272	6,799	5,180	.....	4,001	1,353,591	72·11	.....
1887.....	334	914,152	438,069	15,207	32,907	4,612	44,693	1,449,984	95·64	.....
1888.....	534	469,965	494,110	6,589	68,922	10,997	1,717	1,052,834	33·87	.....
1889.....	845	457,922	579,526	16,380	61,175	34,167	5,160	1,155,175	46·88	.....
1890.....	195	329,531	498,641	58,563	45,202	16,903	4,362	953,597	21·23	.....
1891.....	1,071	733,967	137,679	43,779	14,803	66,278	2,594	1,000,171	27·18	.....
1892.....	2,485	611,177	141,506	37,570	70,363	3,997	3,472	870,570	10·69	.....
1893.....	424	1,086,834	240,767	38,986	21,981	6,156	243	1,395,391	77·43	.....
1894.....	327	887,908	265,947	69,707	99,898	5,191	2,123	1,331,101	69·26	.....
1895.....	98	271,957	83,611	71,185	85,507	205	15	508,596	.....	35·32
1896.....	6,971	402,114	89,726	101,151	194,442	77,162	5,575	877,144	11·53	.....
1897.....	1,665	168,870	303,761	88,293	48,591	65,490	11,965	688,635	.....	12·44
1898.....		64,760	354,917	85,359	74,336	7,367	20,818	607,557	.....	22·74
1899.....		271,848	84,370	72,892	92,919	5,839	.....	527,868	.....	32·89
1900.....	620	129,683	184,996	53,472	33,564	10,478	25,621	438,434	.....	44·11
1901.....	3	211,317	86,250	45,624	87,357	10,326	32,862	473,729	.....	39·76
1902.....		289,207	30,293	50,500	43,162	18,503	5,278	436,943	.....	44·44
1903.....		140,508	183,856	47,857	61,060	12,027	510	445,818	43·31

* Apples, meal all kinds, pease, potatoes.

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STATEMENT to Table E showing the shipment at Oswego during the same period.
VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles *	Total.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
1869.....	7,361	141,360	28,585	66,794	1,113	8,569	14,033	267,815	..	..
1870.....	11,440	115,732	10,120	77,906	3,953	7,402	11,628	238,181	..	11·06
1871.....	10,043	123,173	70,218	72,675	1,806	6,250	13,259	297,424	11·05	.....
1872.....	4,773	57,865	27,148	62,172	684	6,751	10,425	169,818	..	36·59
1873.....	4,061	53,361	10,578	46,337	670	6,019	10,739	131,765	..	50·80
1874.....	.....	108,288	46,127	77,007	1,103	7,053	3,747	243,325	.....	9·14
1875.....	1,728	32,690	3,034	75,083	3,308	4,989	5,931	126,763	.....	52·67
1876.....	967	21,890	1,324	63,336	117	5,703	6,638	99,975	.....	62·67
1877.....	855	28,955	3,308	80,306	316	6,603	6,556	126,899	.....	52·61
1878.....	1,394	24,171	1,333	50,381	.....	10,598	5,222	93,149	.....	65·21
1879.....	734	25,740	9,268	71,693	.....	16,623	3,110	127,168	.....	52·51
1880.....	951	17,466	15,656	82,743	.....	12,598	5,996	135,410	.....	49·43
1881.....	758	25,352	8,064	62,793	206	14,444	4,027	115,638	.....	56·82
1882.....	813	20,274	4,401	70,862	416	22,265	7,773	126,804	.....	52·65
1883.....	432	22,634	535	32,557	.....	14,384	1,967	72,507	.....	73·00
1884.....	404	5,932	413	48,391	.....	12,173	2,819	70,132	.....	73·43
1885.....	519	6,484	22	45,264	.....	4,613	2,945	59,847	.....	77·62
1886.....	737	9,579	154	42,261	.....	1,671	4,814	59,216	.....	77·88
1887.....	790	675	2	44,580	.....	716	1,370	48,133	.....	82·02
1888.....	384	2,206	168	6,237	.....	.....	2,196	11,191	.....	95·82
1889.....	473	8,002	8,950	40,096	16	1,405	1,003	59,945	.....	77·61
1890.....	545	10,378	10,408	26,639	8	4,635	2,356	54,969	.....	79·47
1891.....	292	4,298	1,652	27,418	.....	2,130	3,620	39,410	.....	85·28
1892.....	273	4,806	5,657	5,283	.....	199	2,340	18,558	.....	93·07
1893.....	119	2,036	3,968	8,476	.....	237	2,784	17,620	.....	93·43
1894.....	8	10,296	10,514	17,160	.....	.....	2,609	40,584	.....	84·84
1895.....	66	3,073	7,352	1,900	1,816	.....	258	14,465	.....	94·23
1896.....	.....	1,825	7,778	7,552	.....	.....	2,468	19,623	.....	93·01
1897.....	.....	6,588	5,550	7,349	498	219	245	20,449	.....	92·37
1898.....	160	2,111	5,886	1,450	16	.....	784	10,407	.....	96·12
1899.....	216	3,106	4,478	2,400	.....	.....	2,346	12,546	.....	94·61
1900.....	214	485	1,404	2,400	.....	.....	403	4,906	.....	98·54
1901.....	245	526	.....	5,375	.....	.....	120	6,266	.....	97·67
1902.....	159	3,678	3	632	4,472	98·34
1903.....	8,239	570	8,809	96·71

* Apples, meal, all kinds, potatoes.

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F.—TABLE showing the Total Way and Through Tonnage of the undermentioned Articles cleared downward on the Welland Canal during a series of thirty-three years, ended December 31, 1903.

VEGETABLE FOOD.

Year.	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Other Articles. †	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	44,110	310,090	119,541	3,920	.....	680	1,541	479,882
1872	26,648	231,056	254,534	693	7,594	64	2,300	524,889
1873	30,660	345,720	180,042	643	1 188	3	3,557	563,813
1874	24,017	406,157	181,128	377	5,953	.....	3,301	620,933
1875	13,930	248,555	103,477	813	3,383	500	4,304	374,962
1876	15,735	194,559	144,501	1,110	24,496	1,454	2,949	384,807
1877	13,588	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	403,923
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

*Fiscal.

† Apples, meal, all kinds, pease, potatoes.

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G.—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 thirty-three years, ended December 31, 1903.

Years.	VEGETABLE FOOD.							HEAVY GOODS.						
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	*Other Articles.	Total.	Railway Iron.	Other Iron.	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	7,400	667	1,006	337,530	68,064	14,334	89,086	28,566	35,912	235,962
1870	10,482	124,695	89,761	1,391	7,400	608	1,006	234,337	24,040	13,239	49,843	45,741	59,401	242,264
1871	10,805	127,727	101,329	1,920	1,188	3	392	243,866	4,659	13,826	40,507	170,242	62,942	292,176
1872	8,230	229,653	125,627	2,641	5,948	3	5,368	374,226	5,742	8,941	22,888	203,673	19,651	260,895
1873	1,881	113,832	54,188	2,946	5,948	590	1,920	177,908	11	4,123	12,431	192,767	34,616	234,451
1874	5,187	96,247	58,138	1,905	1,905	403	403	162,405	11	5,531	29,395	107,110	25,808	227,844
1875	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
1876	1,316	65,542	60,026	859	277	.....	341	128,361	.....	10,713	3,892	150,583	13,535	178,723
1877	159	53,791	33,401	464	464	.....	11	87,826	2,405	3,648	6,318	118,573	17,797	148,711
1878	.....	30,611	16,122	1,551	296	.....	.....	48,580	4,743	3,515	371	65,945	18,380	92,954
1879	.....	34,320	30,033	1,924	.....	.....	10	65,285	1,313	5,570	.....	83,858	6,464	97,205
1880	107	39,227	32,433	537	.....	684	14	61,002	4,076	4,076	.....	158,552	14,533	177,161
1881	2,041	54,382	66,128	735	731	.....	8,579	132,496	1,209	6,901	8	196,462	24,891	229,471
1882	1,715	40,956	53,707	.....	9,874	.....	8,170	114,422	698	599	.....	210,790	15,100	227,187
1883	124	53,255	63,229	732	882	.....	1	118,203	1,594	1,594	.....	198,416	15,029	215,639
1884	7,591	53,258	91,048	4,790	4,790	.....	13,201	172,888	156	5,328	1	189,964	11,364	206,813
1885	11,780	37,678	83,431	1,732	12,050	.....	10,850	157,530	15	4,406	.....	82,780	627	87,828
1886	8,563	39,969	102,974	2	26,510	179	11,598	189,825	63	1,601	56	173,259	2,309	177,288
1887	5,017	39,229	147,045	27,492	27,492	.....	17,225	236,208	.....	1,587	896	227,476	1,204	231,163
1888	9,204	31,527	180,842	6,519	27,030	.....	29,437	275,619	.....	594	208	162,231	1,600	164,563
1889	6,802	32,697	127,494	8,113	52,823	.....	26,115	253,444	.....	292	208	186,572	1,773	189,542
1890	11,018	26,650	131,222	6,433	36,935	.....	31,992	244,550	.....	576	705	183,895	.....	184,473
1891	6,588	28,187	198,777	16,751	23,870	864	36,352	311,389	.....	344	.....	206,827	.....	207,171
1892	17,795	53,846	105,329	28,095	27,621	.....	69,462	198,358	.....	297	.....	188,521	.....	188,818
1893	10,169	27,881	100,512	7,904	17,029	.....	46,316	209,802	181	246	.....	149,490	.....	149,917
1894	16,224	34,878	175,094	14,137	16,137	490	46,456	300,407	.....	146	.....	207,348	.....	207,494
1895	7,237	28,919	169,057	14,173	14,969	.....	41,887	276,242	965	15	.....	165,143	.....	166,123
1896	4,212	11,268	150,667	6,909	12,732	1,197	22,671	209,656	770	339	4	156,814	.....	157,927
1897	6,118	12,026	81,777	2,424	19,526	923	18,198	141,892	351	1,646	533	88,931	.....	91,481
1898	7,966	18,771	60,545	2,402	39,706	2,149	14,243	145,787	.....	353	.....	46,024	.....	46,377
1899	17,165	23,557	55,531	7,418	26,344	.....	14,016	143,732	83	80	105	46,702	.....	46,970
1900	13,785	32,639	66,111	7,119	10,006	.....	12,675	142,634	.....	214	.....	12,911	.....	13,125
1901	6,082	15,439	108,917	11,433	6,112	4,174	13,568	165,725	459	.....	.....	113,072	.....	113,535

* Apples, meal, all kinds, pease, potatoes.

4-5 EDWARD VII., A. 1905

H.—TABLE showing the Tonnage of Vegetable Food carried on each of the Lines of Canals and the two principal Railways, competing for the Carrying Trade between Lake Erie and Tidewater, for a series of thirty-three years, ended December 31, 1903.

Year.	Total on New York Canals.	Total on Welland Canal.	Total on New York Central and Erie Railways.	Quantity cleared at Buffalo and Tonawanda by Erie Canal.	Quantity cleared at Oswego by Canal.	Quantity cleared through the Welland Canal in transit between ports in the United States.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1869*	1,302,613	503,860	1,087,809	786,436	267,815	337,530
1872.....	1,674,320	538,147	1,870,614	1,317,276	169,818	234,337
1873.....	1,745,171	579,880	2,036,992	1,432,174	131,765	243,366
1874.....	1,767,598	647,397	2,791,517	1,557,509	243,325	374,226
1875.....	1,305,550	417,936	2,343,241	1,017,559	126,763	177,908
1876.....	1,064,293	409,788	2,875,803	783,331	99,975	162,405
1877.....	1,498,984	464,181	2,493,683	1,223,100	126,899	180,586
1878.....	1,912,734	403,403	3,695,764	1,644,301	93,149	128,361
1879.....	1,833,399	438,564	4,353,617	1,565,543	127,168	87,826
1880.....	2,371,090	442,182	4,732,385	2,065,184	135,410	48,580
1881.....	1,116,561	269,395	4,983,722	878,842	115,638	65,285
1882.....	1,118,776	306,482	3,885,557	864,826	126,804	64,002
1883.....	1,379,000	372,236	4,422,461	1,191,974	72,507	132,496
1884.....	1,236,986	305,734	3,639,805	1,078,909	70,132	114,422
1885.....	1,063,310	273,905	4,105,594	918,352	59,847	118,203
1886.....	1,489,886	414,812	3,802,262	1,353,591	59,216	172,888
1887.....	1,552,764	394,971	3,847,766	1,449,984	48,133	157,530
1888.....	1,166,958	419,786	3,197,734	1,052,834	11,191	189,825
1889.....	1,296,896	542,043	3,654,984	1,155,175	59,945	236,208
1890.....	1,167,901	519,291	4,336,199	953,337	54,969	275,619
1891.....	1,092,355	367,177	3,565,381	1,000,171	39,410	253,444
1892.....	937,999	527,426	5,913,013	870,570	18,558	244,550
1893.....	1,452,563	805,253	5,107,426	1,395,391	17,620	311,389
1894.....	1,400,129	591,409	4,281,056	1,331,101	40,584	293,148
1895.....	602,505	486,421	3,798,574	508,596	14,465	209,802
1896.....	957,182	788,974	5,183,540	877,144	19,623	300,407
1897.....	744,575	816,914	5,673,638	688,635	20,449	276,242
1898.....	653,927	720,183	7,060,542	607,557	10,407	209,656
1899.....	577,486	459,688	6,211,827	527,868	12,546	141,892
1900.....	472,857	375,720	6,053,005	438,434	4,906	145,787
1901.....	557,099	290,909	6,334,001	473,729	6,266	143,732
1902.....	489,053	350,792	6,532,263	436,943	4,472	142,634
1903.....	512,601	537,252	5,548,603	445,518	8,809	165,725

* Fiscal.

SESSIONAL PAPER No. 20

I.—STATEMENT showing the Quantity of Through Freight passed Down the Welland Canal in Canadian and United States Vessels, &c.—Continued.

ARTICLES.	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	126,398	104	59,532	354	355,702	195	108,720	869	650,352
1898.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
Wheat	95,567	36,157	54,934	18,355	205,013					
Corn	56,538	30,455	284,059	66,761	437,813					
Barley			9,465	2,821	12,286					
Oats			17,329		17,329					
Pease	260		45		305					
Rye	3,564	1,480	9,135	1,948	16,127					
Coal	575	1,916	759	2,620	5,870					
Miscellaneous merchandise ..	19,385	4,104	47,271	8,758	79,518					
Shingles, woodenware, &c. . .	2	9			11					
Sawed lumber..... Ft. B.M.	4,910,669	1,641,783	16,220,972	24,484,283	47,257,707					
Square timber..... Cub. ft.	825,545	1,183,821		388,410	2,397,776					
Firewood..... Cords.	249				249					
Staves..... No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	19	100,242	129	75,777	201	212,027	78	36,962	599	425,008
1899.	Tons.	Tons.	Tons.	Tons.	Tons.					
Wheat	91,901	80,928	16,250	7,244	196,323					
Corn	28,015	18,905	138,834	18,250	204,004					
Barley			2,424		2,424					
Oats	1,557		21,646		23,203					
Pease			923		923					
Rye										
Coal	435	6,736		3,398	10,569					
Miscellaneous merchandise ..	25,203	18,651	49,522	1,567	94,943					
Shingles, woodenware, &c. . .	485	916		100	1,501					
Sawed lumber..... Ft. B.M.	2,077,748	772,739	14,855,338	19,949,079	37,654,904					
Square timber..... Cub. ft.	322,138	585,780	20,802	328,806	1,257,526					
Firewood..... Cords.		9			9					
Staves..... No.										
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
	216	114,885	109	67,475	168	182,444	71	30,309	564	395,113
1900.	Tons.	Tons.	Tons.	Tons.	Tons.					
Wheat	67,694	43,157	23,066	2,130	136,047					
Corn	39,597	31,248	78,701	13,963	163,509					
Barley			2,402	1,047	3,449					
Oats			39,706	407	40,113					
Pease	115		4		119					
Rye	1,389		2,149		3,538					
Coal	723	637	433	559	2,352					
Miscellaneous merchandise ..	53,649	31,536	43,344	3,564	132,093					
Shingles, woodenware, &c. . .	1,078				1,078					
Sawed lumber..... Ft. B.M.	6,847,279	5,344,258	14,984,483	18,770,405	45,946,425					
Square timber..... Cub. ft.	439,827	355,951	11,583	198,420	1,005,781					
Firewood..... Cords.	126	255			381					
Staves..... No.	1,000				1,000					

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L.—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.
	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					
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.
	239	151,850	76	45,918	243	252,094	69	27,854	627	477,716
1903.	Tons.	Tons.	Tons.	Tons.	Tons.					
Wheat	149,378	38,473	60,514	6,305	254,670					
Corn	21,356	4,682	174,588	10,132	210,758					
Barley	2,580	667	11,409		14,656					
Oats	306	1,335	6,112		7,753					
Pease	63		22		85					
Rye			4,904		4,904					
Coal	389	12,991	8,133	8,496	30,009					
Merchandise	39,563	3,367	41,584	2,000	86,514					
Shingles, woodenware, &c. . .		54			54					
Sawed lumber Ft. B.M.	12,841,552	1,625,855	17,871,652	14,733,677	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					

SESSIONAL PAPER No. 20

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 1903, is as follows:

Summary.	Tons.	Tons.
In Canadian steam vessels.....	60,642	
" sail ".....	14,663	
Total quantity in Canadian vessels.....		75,305
In United States steam vessels.....	164,564	
" sail ".....	23,343	
Total in United States vessels.....		187,907
Grand total freight passed up the Welland Canal in Canadian and United States vessels.....		263,212

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STATEMENT of the Quantity of Through Freight passed Up and Down, on the Welland Canal during the season of navigation in 1903.

Summary.	Tons.	Tons.
In Canadian steam vessels up.....	60,642	
" " down.....	246,485	
Total in Canadian steam vessels.....		307,127
In Canadian sail vessels up.....	14,663	
" " down.....	77,691	
Total, in Canadian sail vessels.....		92,354
Total, quantity in Canadian vessels.....		399,481
In United States steam vessels up.....	164,564	
" " down.....	337,071	
Total in United States steam vessels.....		501,635
In United States sail vessels up.....	23,343	
" " down.....	54,348	
Total in United States sail vessels.....		77,691
Total quantity in United States vessels.....		579,326
Total in Canadian and United States vessels.....		978,807
	Down or East bound.	Up or West bound.
In Canadian vessels.....	324,176	75,305
In United States vessels.....	391,419	187,907
Total.....	715,595	263,212

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SESSIONAL PAPER No. 20

ix.—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 in 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902 and 1903.

Articles.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
	T. us.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 2.</i>													
Cement and water lime.													
Clay, lime and sand.						12	38	52	15	15		50	
" pig	371			195	79	5				508			
" all other.				1	1,766	2,020	7,564	6,217	5,063	4,292	1,178	5,785	2,542
Steel					394	542	375	1,351	3,000	5,420			
Stone, for cutting.					200	200							
Apples.		54		50	28	1,263							
Barley.		600		258	959	240		3,960	596	1,288			2,206
Corn.	52,539	53,689	278,564	60,661	70,235	182,330	267,583	310,498	150,999	103,359	14,319	1,719	123,864
Flaxseed.							3,293	5,687			4,965		3,643
Flour.	3,324	2,874	5,514	16,563	30,916	11,964	1,029	653	4,229	1,595	1,400	6,755	16,151
Meal, all kinds.	67	16		4	65						35		348
Oats.									10,250	8,922	1,584	1,442	2,438
Oil cake.		524		175	1,654	12,373	6,847	3,975			1,083		462
Pease.	390					3,020	2,078	200		115			63
Rye.	64,978	9,119	3,669			8,323	8,135	15,488	923	3,978	2,961	4,079	4,260
Salt.		75				20	216	144	183		50		132
Seeds, all kinds.	2								200				
Hay, pressed.									96		246		
Tobacco, raw.	1						51				23		
Wheat.	159,785	194,281	209,212	212,557	158,643	255,198	278,498	184,154	169,478	121,896	132,702	200,475	224,746
All other agricultural products, vegetable.	2			29		29		56	32				
Hides, skins, horns and hoofs.		20											
Horses.	2	2		1	1	1	1	4	1				
Lard and lard oil.	100										1,155		
Meats, all kinds.											114		
Pork.	201			717		1					34		3
Tallow.													
All other agricultural products, animal.		103											
Total, Class 3.	281,762	260,757	567,321	201,151	264,740	477,541	576,008	532,499	345,565	256,491	161,849	229,805	382,858
<i>Class 4.</i>													
Agricultural implements.	40	17	23	19	34	94	133	73	3	25	1,785	13	58
Ashes.									55		3		2

SESSIONAL PAPER No. 20

L.—STATEMENT showing the Quantity of Freight passed Westward from Montreal, through the whole length of the St. Lawrence and Welland Canal to Lake Erie, during the Seasons of Navigation in 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902 and 1903.

Articles.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 2.</i>													
Bricks	469			1	24	15	70	70	24	49	196	22	80
Brinstone													23
Cement and water lime	2,380	1,570	3,169	2,281	1,859	1,686	897	996	997	1,951	2,916	178	3,924
Clay, lime and sand.	206	240		253			4	144		4	2	1	181
Cotton, raw.													23
Fish	7	426	465	512		11	10	9	10	8	8		8
Gypsum.									4				
Iron, railway	2,855	1,171	6,576	20		1,687				74	748	11,735	39,611
" pig	112	74	25		56	28	6			3		558	273
" all other	595	387	543	114	1,831	727	559	699	1,318	1,428	4,950	2,904	5,845
Salt	4,391	2,034	995	843	932	822	25	35		48	75	4	87
Steel		269	426	248	528			19	18		3	11	332
Stone for cutting		145				4	62						
Flour			3								16		
Hay					121								
Meals.				15									17
Oats													
Potatoes													
Seeds, all kinds													
Tobacco, raw				33	25	99	121	56	121	218	302	58	325
Agricultural products not enumerated,													
Feed, vegetables	52			5	26		4				1	1	
Hides and skins.					26							16	6
Horses						1		1					
Lard and hard oil.		16			1			2				11	
Meats other than pork.													1
Pork										1			
Wool	2	13											
All other articles not enumerated.	2			10									
Total, class 3.	11,071	6,345	12,292	4,335	5,432	5,080	1,698	2,031	2,500	3,764	9,222	15,520	50,768
<i>Class 4.</i>													
Ashes, pot and pearl.	31	88					1						2
Crockery and earthenware	251	8	98	107	12	83	4	33	3	5			32
Dye woods, &c													
Furniture.	1	3					2			1			1

SESSIONAL PAPER No. 20

M.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1891 to 1903, inclusive.

Articles.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 3.</i>													
Bricks.....							845			18			
Cement and water lime.....	1		5					300					
Fish.....							965	770	1,008	714		30	
Iron, railway.....		1	162					324	1,008		105		
" all other.....	494							549					
Salt.....								2,951	13,522	3,110			
Steel.....						498							
Stone for cutting.....													
Apples.....													
Barley.....	8,113	6,433	16,751	28,695	7,904	11,128	14,173	6,909	2,424	2,462	7,119	7,413	11,433
Corn.....	127,494	131,222	198,777	105,329	100,512	175,094	169,057	130,667	81,777	60,545	55,531	65,111	108,917
Flour.....	6,802	11,918	6,588	17,795	10,169	16,224	7,237	4,212	6,118	7,966	17,168	13,785	6,082
Hay, pressed.....							301						
Meal, all kinds.....	26,096	31,724	36,352	60,390	46,316	46,456	41,644	22,625	18,198	14,214	11,016	12,675	13,546
Oil cake.....				29						2,705	1,302	110	740
Oats.....	52,823	36,935	23,870	27,621	16,442	16,137	14,969	12,729	19,526	39,706	26,344	10,006	6,112
Pease.....								45					22
Potatoes.....													
Rye.....			864			490		1,197	923	2,119			4,174
Flaxseed.....									200				1,594
Seeds, all kinds.....	256	50	16		14	78	299	44	11			10	27
Tobacco.....													
Wheat.....	32,097	26,950	28,187	53,846	27,881	34,878	28,919	11,268	12,926	18,771	23,557	32,639	15,436
Agricultural products, vegetables.													
Hides and skins, &c.....	42				8	41	23			6	10		1
Horses.....	3			4		3				4			2
Lard and lard oil, &c.....	10		1		6	1,348	1,444	3,671	864	1,588	1,680	2,413	
Meats, other than pork.....	2	29			30								
Pork.....	73	1	52	56	87	390	243	1,271	343	117	970	682	152
Sheep.....													
Tallow.....								359	291	631	119		
Wool.....	1,237	70	80	1,484	1,536	900	197	89	130		3	752	482
Total, class 3.....	253,553	244,434	311,647	294,654	211,300	303,655	280,319	219,434	158,720	151,680	147,917	146,581	168,720
<i>Class 4.</i>													
Agricultural implements.....													399
Crockery and earthenware.....													
Furniture.....	7				2			2	7		3	17	

M.—STATEMENT showing the Quantity of Freight passed Eastward through the Welland Canal, from United States Ports to United States Ports, during the Season of Navigation from 1891 to 1903, inclusive—*Concluded.*

Articles.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
<i>Class 4—Con.</i>													
Glass, all kinds.....	1												
Marble.....													
Molasses.....				57					8	57			
Nails.....					30	1,005	198	119	11	17	22	1,594	2,000
Oil, in barrels.....	1	44						3	2	36			4
Paint.....									1				
Rags.....													
Soda ash.....													
Stone, wrought.....					59	165	31			154	448	280	
Sugar.....													
White lead.....					15	3,990	3,591	34	168	1	1		3
Whisky, beer and all other spirits.....	167	46	83	2,976	7,656	3,990	3,591	3,828	6,219	7,889	3,327	1,928	2,010
Merchandise.....	1,865	1,331	1,693										
Total, Class 4.....	2,041	1,421	1,782	3,033	7,762	5,160	3,820	3,986	6,783	8,164	3,805	4,218	4,017
<i>Class 5.</i>													
Empty barrels.....			9			10				5	282		
Firewood, in vessels.....						165						4	
Lumber, sawn, in vessels.....	45,504	54,173	68,985	62,905	41,974	75,515	68,280	52,844	57,695	55,128	38,085	72,806	48,337
Masts and spars, in vessels.....							403						
Hoops.....													
Railway ties, in vessels.....					446								
Shingles.....			13										
Staves, barrel.....					500								
Timber, square, in vessels.....							1,040						
Woodenware, &c.....	4	54				12	1						
Total, Class 5.....	45,508	54,227	69,007	62,905	42,920	75,702	69,724	52,844	57,695	55,133	38,367	72,810	48,337
<i>Special Class</i>													
Coal.....	1,382	651	2,123	727	603	1,255		759	2,293	992	357	501	
Stone, not suitable for cutting.....													
Kryolite.....	1,773												
Total, Special Class.....	3,155	651	2,123	727	603	1,255		759	2,293	992	357	501	
Grand total.....	306,257	300,733	384,559	361,319	262,585	385,782	353,863	277,023	225,491	218,969	190,476	224,110	221,074

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N.—STATEMENT showing the Number of Vessels which took their Cargoes of WHEAT through the Welland Canal from Ports west of Port Colborne; the quantity transhipped at Kingston, and the quantity of each Cargo through the St. Lawrence Canals to Montreal during the Season of Navigation in 1903.

Names of Vessels.	Original quantity through the Welland Canal.	Quantity transhipped at Kingston.	Cargo through the St. Lawrence Canals to Montreal
Canadian Steamer Advance.....	1,224	155	1,069
" " ".....	1,041	.....	1,041
" " ".....	1,050	.....	1,050
" " ".....	1,080	.....	1,080
" " A. E. Ames.....	1,633	.....	1,633
" " ".....	1,620	.....	1,620
" " ".....	1,590	.....	1,590
" " ".....	1,500	.....	1,500
" " Arabian.....	1,200	.....	1,200
" " ".....	1,206	.....	1,206
" " ".....	1,200	.....	1,200
" " ".....	1,200	.....	1,200
" " ".....	1,200	.....	1,200
" " Myles.....	1,081	601	480
" " Neepawah.....	1,829	.....	1,829
" " H. M. Pellatt.....	1,500	.....	1,500
" " ".....	1,560	.....	1,560
" " ".....	1,260	.....	1,260
" " ".....	510	.....	510
" " H. M. Penall.....	1,560	.....	1,560
" " ".....	1,290	.....	1,290
" " J. H. Plummer.....	1,320	.....	1,320
" " ".....	1,620	.....	1,620
" " ".....	1,650	.....	1,650
" " ".....	1,590	.....	1,590
" " ".....	1,620	.....	1,620
" " Turret Chief.....	1,897	.....	1,897
" " ".....	1,050	.....	1,050
" " Wahcondah.....	1,620	.....	1,620
" " ".....	1,632	.....	1,632
" " ".....	1,629	.....	1,629
" " ".....	1,620	.....	1,620
" " ".....	1,590	.....	1,590
" " ".....	1,590	.....	1,590
" " Barge F. L. Danforth.....	1,350	629	721
" " Melrose.....	1,500	240	1,260
" " Mimmedosa.....	480	.....	480
" " ".....	1,800	210	1,590
" " Selkirk.....	1,440	90	1,350
United States Steamer H. G. Dalton.....	2,055	.....	2,055
" " A. D. Davidson.....	1,515	.....	1,515
" " ".....	2,130	.....	2,130
" " G. E. Howe.....	701	.....	701
" " J. S. Keefe.....	2,175	.....	2,175
" " A. Marshall.....	2,100	.....	2,100
" " S. N. Parent.....	2,100	.....	2,100
" " R. Wallace.....	2,160	.....	2,160
Total.....	69,268	1,925	67,343

Number of cargoes of wheat.....	47
Quantity through Welland to Kingston.....	69,268 tons.
" transhipped at Kingston.....	1,925 "
" taken to Montreal in vessels in which it arrived Kingston.....	67,343 "

4-5 EDWARD VII., A. 1905

N.—STATEMENT showing the Number of Vessels which took their Cargoes of Corn through the Welland Canal from Ports west of Port Colborne; the quantity transhipped at Kingston, and the quantity of each Cargo through the St. Lawrence Canals to Montreal, during the Season of Navigation in 1903.

Name of Vessel.	Original Quantity through the Welland Canal.	Quantity trans- hipped at Kingston.	Cargo through the St. Lawrence Canals to Montreal
	Tons.	Tons.	Tons.
Canadian Steamer A. E. Ames	1,652		1,652
" " Advance	1,064		1,064
" " Cuba	560		560
" " "	480		480
" " "	504		504
" " "	336		336
" " "	448		448
" " "	336		336
" " "	280		280
" " "	504		504
" " "	504		504
" " "	504		504
" " Lake Michigan	454		454
" " Melbourne	280		280
" "	420		420
" "	448		448
" "	504		504
" "	280		280
" "	280		280
" "	504		504
" "	504		504
" "	504		504
" "	448		448
" Barge Winnipeg	1,400	84	1,316
United States Steamer J. Cierar	2,186		2,186
" " A. D. Davidson	756		756
" " G. C. Howe	1,477		1,477
" " J. Lambert	2,198		2,198
" " "	2,155		2,155
" " A. M. Marshall	2,184		2,184
" " W. P. Palmer	1,924		1,924
" " S. N. Parent	2,168		2,168
" " R. Wallace	2,168		2,168
" " A. B. Wolvin	1,941		1,941
Total	32,323	84	32,239

Number of cargoes of corn	34
Quantity through Welland to Kingston	32,323 tons.
" transhipped at Kingston	84 "
" taken to Montreal in vessels in which it arrived at Kingston	32,239 "

4-5 EDWARD VII., A. 1905

O.—STATEMENT showing the Quantity of Grain passed Down the Welland Canal to Kingston, Ogdensburg and other Ports, in Canadian and United States Vessels entering the Canal at Port Colborne, during the Season of Navigation in 1903.

	CANADIAN VESSELS.				UNITED STATES VESSELS.				TOTAL.	
	Steam.		Sail.		Steam.		Sail.		Steam and Sail.	
	No.	Tonnage of Vessels.	No.	Tonnage of Vessels.	No.	Tonnage of Vessels.	No.	Tonnage of Vessels.	No.	Total Tonnage of Vessels.
	121	107,074	28	22,869	171	217,006	14	8,611	334	355,560
	Tons.		Tons.		Tons.		Tons.		Tons.	
Barley.	2,580		667		11,409		.....		14,656	
Corn	21,356		4,682		174,588		10,132		210,758	
Oats.....	306		1,335		6,112		.....		7,753	
Pease.....	63		.....		22		.....		85	
Rye.....	.....		.....		4,904		.....		4,904	
Wheat.....	149,378		38,473		60,514		6,305		254,670	
Total.....	173,683		45,157		257,549		16,437		492,826	

			Tons.
133 cargoes in Canadian Vessels, steam, total	quantity.....		173,683
37 " " " " " " " " " " " "	sail " " " " " " " " " " " "		45,157
205 " " " " " " " " " " " "	United States vessels, steam " " " " " " " " " " " "		257,549
14 " " " " " " " " " " " "	" " " " " " " " " " " "		16,437

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P.—STATEMENT of the Quantity of Grain arrived at Kingston and Ogdensburg in Vessels which passed Down the Welland Canal, during the Season of Navigation in 1903.

Summary.	Tons.	Tons.
Canadian steam—133 cargoes of grain.....	173,683	
" sail 37 ".....	45,157	
Total in Canadian vessels.....		218,840
United States steam—205 cargoes of grain.....	257,549	
" sail 14 ".....	16,437	
Total in United States vessels.....		273,986
Total in Canadian and United States vessels.....		492,826
Distributed as follows :—		
63 Canadian and 18 United States vessels arrived at Kingston and discharged part of their cargoes, taking the balance to Montreal.....		99,582
308 vessels arrived at Kingston, Ogdensburg and other ports and discharged all their cargoes as follows :—		
81 cargoes in Canadian vessels.....	130,538	
227 " United States vessels.....	260,697	
Quantity discharged by 7 Canadian vessels which took the balance to Montreal.....	2,009	
Total quantity discharged.....	393,244	
Total quantity of above transhipped from Kingston and Ogdensburg to Montreal.....		*252,354
Quantity transhipped from Kingston and Ogdensburg to Cardinal.....		6,957
" remaining at Kingston, Ogdensburg and other American ports.....		133,933
Total.....		492,826

* Of this quantity 2,890 tons were transhipped from Kingston, being grain of 1902.

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Q.—COMPARATIVE STATEMENT of the Quantity of Grain passed Down the Welland Canal to Kingston and Ogdensburg, during the Seasons of Navigation in 1902 and 1903.

	1902.		1903.	
	No. of Cargoes.	Tons.	No. of Cargoes.	Tons.
Quantity arrived at Kingston in Canadian vessels.	131	175,514	170	218,840
Quantity arrived at Kingston and Ogdensburg in United States vessels	135	136,652	219	273,986
Total.	266	312,166	389	492,826
Quantity transhipped at Kingston and Ogdensburg in Canadian vessels for Montreal.		* 166,866		252,354
Quantity taken to Montreal in vessels in which it arrived at Kingston.		35,253		99,582
Quantity remaining at Kingston, Ogdensburg and Cardinal.		110,047		140,890
Total.		312,166		492,826

* Of this quantity 2,890 tons were transhipped to Montreal in 1903.

74 vessels took their cargoes through in 1903, against 36 in 1902.

7 " discharged part of their cargo in 1903, against 3 in 1902.

303 " " all their cargo in 1903, against 227 in 1902.

R.—STATEMENT showing the Number of Vessels, their Tonnage, Number of Passengers and Tons of Freight passed down the Rapids of the St. Lawrence Canals during the Season of Navigation in 1903.

Destination.	No. of Sections.	No. of Vessels.	Tonnage of Vessels.	Number of passengers	Class Three.	Class Four.	Class Five.	Special Class.	Tolls.
			Tons.		Tons.	Tons.	Tons.	Tons.		$ cts.
Prescott to Montreal.	4	115	58,411	15,306	284	942	.....	.....	2,200 01
" Lachine.	3	30	16,131	2,534	975	937	.....	.....	531 42
Valleyfield to Lachine.	1	171	37,866	4,025	1,798	709	36	.....	278 29
Lachine to Montreal.	1	300	55,166	20,649	1,253	1,213	17	731 18
Total.	616	167,574	42,514	4,310	3,801	53	3,740 90

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S.—The quantity of Coal passed through the Welland Canal during a series of years from 1885 to 1903, inclusive, and the amount of Tolls collected thereon, is as follows :—

YEARS.	From Canadian Ports to Canadian Ports.		From United States Ports to United States Ports.		From United States Ports to Canadian Ports.		Total, Tons.	Amount of Tolls paid. — Rate 20 cents a ton. \$ cts.	
	Up.	Down.	Up.	Down.	Up.	Down.			
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.			
1885.....			193,442	4,974	10,321	31,350	240,087	48,017 40	
1886.....			184,564	5,400	22,187	49,724	261,875	52,375 00	
1887.....			81,617	1,163	26,775	25,968	135,523	27,104 60	
1888.....			172,381	878	17,365	27,183	217,807	43,561 40	
1889.....			226,352	1,124	12,036	25,931	265,443	53,188 60	
1890.....	80		116,616	615	17,280	22,781	202,372	38,222 30	
1891.....			185,190	1,382	17,374	20,698	224,644	44,928 20	
1892.....			183,244	651	12,391	15,330	211,616	42,284 13	
1893.....			204,704	2,123	8,325	17,944	233,096	46,619 20	
1894.....			187,794	727	1,269	13,947	203,737	40,789 93	
1895.....	4		148,887	603	1,565	7,807	158,866	31,773 05	
1896.....	20	210	206,093	1,255	4,127	11,740	223,445	44,668 20	
1897.....		4	165,143			1,277	9,799	176,223	35,244 60
1898.....			156,055	759	986	4,536	162,336	32,467 20	
1899.....			86,638	2,293	525	8,276	97,732	19,546 40	
1900.....	8		45,032	992		1,360	47,392	9,478 40	
1901.....			46,345	357	456	2,322	49,480	9,896 00	
1902.....			12,410	501	65	51,037	64,013	12,845 60	
1903.....	3		113,076		4,796	30,009	147,884	29,576 80	

NOTE.—Tolls on soft coal passed down the Welland Canal, during the season of 1890, were reduced from 20 to 10 cents a ton, per O. C. 11th May, 1890, for the season of 1890 only; the rate for 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901 and 1902, being 20 cents a ton for passage either eastward or westward. During 1903 all tolls were free. O. C. Apr. 27, 1903.

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T.—STATEMENT showing the quantity of Coal passed through the whole length of the St. Lawrence Canal during the seasons of 1885 to 1903 inclusive.

Years.	Quantity passed up free of Tolls.	Quantity passed down to Montreal.	Total Quantity passed up and down.	Amount of Tolls on Quantity passed down to Montreal.
	Tons.	Tons.	Tons.	§ cts.
1885.....	5,035	122,829	127,864	18,424 35
1886.....	3,301	118,802	122,103	17,820 70
1887.....	7,579	121,618	129,197	18,242 70
1888.....	8,341	123,050	131,391	18,423 90
1889.....	5,360	124,290	129,650	18,604 90
1890.....	6,538	135,168	141,706	20,275 20
1891.....	7,951	141,701	149,652	21,255 15
1892.....	7,543	157,134	164,677	23,570 10
1893.....	2,285	147,139	149,424	22,070 85
1894.....	16,213	169,552	185,765	25,432 80
1895.....	.....	165,151	165,151	24,772 65
1896.....	689	161,551	162,240	24,232 65
1897.....	40	164,963	165,003	24,722 37
1898.....	400	175,609	176,009	26,341 05
1899.....	448	201,546	201,994	30,231 80
1900.....	10	280,169	280,179	42,025 35
1901.....	2,765	298,245	301,010	44,732 55
1902.....	9,231	95,702	104,933	11,958 90
1903.....	30	290,548	290,578	*43,555 73

NOTE.—Coal is allowed to pass free up the St. Lawrence Canals. Con. O. C. Oct. 26, 1889.

* These tolls were 'free' by O. C. April 27, 1903.

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U.—COMPARATIVE STATEMENT of the Quantity of Freight passed down the Welland Canal, showing the Quantity to Montreal, the Quantity to Canadian Ports between Port Dalhousie and Cornwall, and the Quantity to United States Ports, Oswego, Ogdensburg, &c., on the south side of Lake Ontario, for the years 1892 to 1903, inclusive.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
	Tons.	Tons.	Tons.
1892.			
Ashes, pot and pearl	17	2	
Apples.....	54		
Barley			6,433
Corn	53,689	7,637	131,222
Coal		14,839	651
Flour	2,874		11,918
Fish	9		
Furniture	1		7
Hides.....	20		
Horses	2		
Iron, railway		100	
" all other		765	1
Meal, all kinds.....	16		31,724
Meats, other than pork.....	94		29
Oats.....			36,935
Oil		7	
Pease	524		
Potatoes.....			1
Pork			44
Rye	9,119	273	
Salt		865	
Seeds, all kinds	75		50
Steel			1
Stone for cutting		1,264	
Sugar			20
Wheat	194,281	5,373	26,950
Whisky, beer, spirits, &c.....	6	15	46
Wool			70
Merchandise not enumerated	36	13	1,304
Barrels, empty	1		29
Lumber, sawn, in vessels	1,678	150	83,403
Square timber.....	440	42,768	440
Staves and headings, pipe	8	80	
" " West India.....	200	76	
Shingles			25
Total	263,144	74,227	330,403
*Wheat	+4,341	-4,341	
Total.....	267,485	69,886	330,403

* This quantity of wheat was taken from Kingston to Ogdensburg and stored in elevators, and subsequently transhipped to Montreal.

A refund of 18 cents a ton, Welland Canal tolls, was allowed on wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat which passed down the whole length of the Welland and St. Lawrence Canals, to Montreal, or any port east of Montreal, and such products exported out of the country, and in such cases only.

4-5 EDWARD VII., A. 1905

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
	Tons.	Tons.	Tons.
1893.			
Ashes, pot and pearl	23		
Barley	600	1,110	16,751
Bricks		1,251	
Corn	278,564	5,752	156,776
Coal		17,944	2,123
Flour	5,514		6,588
Fish			5
Furniture			6
Horses	1	1	2
Iron, pig			100
" all other			2
Meal, all kinds		1,025	36,352
Meats, other than pork			1
Oats	9,761	1,090	20,313
Pork			52
Rye	3,669	1	1
Salt		286	
Seeds, all kinds			16
Wheat	209,212	17,602	29,117
Whisky, beer, &c	1		83
Wool			80
Merchandise not enumerated	4	2	1,693
Barrels, empty			9
Firewood (in rafts)		15	
Lumber, sawn, in vessels	667	1,981	123,665
Shingles			13
Square timber		45,605	
Staves and headings, barrel		12	
" pipe		7	
" West India		53	
Total	508,016	93,737	393,748

There was no rebate allowed of the Welland Canal toll on grain passed down to Montreal during the season of navigation in 1893.

The tolls were, however, reduced by Order in Council of 13th February, 1893, as follows:—"For the season of 1893, the canal toll for the passage of the following food products: wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat, for passage eastward through the Welland Canal be ten cents per ton; and for passage eastward through the St. Lawrence Canals only, ten cents per ton, payment of the said toll of ten cents a ton for passage through the Welland Canal to entitle these products to free passage through the St. Lawrence Canal."

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U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed	Quantity passed	Quantity passed
	down to Montreal.	down to Canadian Ports between Port Dalhousie and Cornwall.	down to United States Ports.
1894.	Tons.	Tons.	Tons.
Apples.....	50		
Ashes.....	19		
Barley.....	258		28,095
Bricks.....		552	
Coal.....		13,818	727
Corn.....	60,661	3,243	105,329
Dye woods and dye stuffs.....		4	2
Fish.....			5
Flour.....	16,503	41	16,880
Furniture.....	2	3	
Horses.....	1	2	4
Iron, pig.....	195	2,170	
" all other.....	1	183	
Meals.....	4		60,390
Nails.....			57
Oats.....	175	107	27,621
Oil cake.....	29		
" in barrels.....		27	
Pork.....	717		56
Salt.....		133	
Spirits, beer, &c.....		3	
Sugar.....			52
Wheat.....	212,557	13,349	42,934
White lead.....	16		
Wool.....			1,484
Merchandise not enumerated.....	314		2,889
Barrels, empty.....		16	
Sawn lumber, in vessels.....	683		86,545
Square timber ".....		47,030	
Woodenware.....	6		
Total.....	292,191	80,681	373,070

There was no rebate allowed of the Welland Canal toll on grain passed down to Montreal during the season of navigation in 1894.

The tolls were, however, reduced by Order in Council of 16th April, 1894, as follows :—For the season of 1894, the canal tolls for the passage of the following food products : wheat, Indian corn, pease, barley, rye, oats, flaxseed and buckwheat, for passage eastward through the Welland Canal be ten cents per ton ; and for passage eastward through the St. Lawrence Canals only, ten cents per ton, payment of the said toll of ten cents a ton for passage through the Welland Canals to entitle these products to free passage through the St. Lawrence Canals.

4-5 EDWARD VII., A. 1905

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—Continued.

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1895.	Tons.	Tons.	Tons.
Apples.....	28		
Ashes.....	34	15	
Barley.....	959		7,730
Bricks.....		651	
Coal.....		7,809	603
Corn.....	70,235	2,912	91,743
Flour.....	30,916	1,824	10,265
Furniture.....		12	2
Glass.....		1	
Horses.....	1	1	
Hides, skins, &c.....			8
Iron, railway.....			181
" pig.....	79	1,994	
" all other.....	1,766	1,408	214
Lard and lard oil.....			6
Meal, all kinds.....	65		46,316
Meats other than pork.....			30
Molasses.....	100		
Oats.....	1,654	123	16,442
Oil, in barrels.....	6	41	30
Pork.....			87
Paint.....	2		
Salt.....		36	
Stone, for cutting.....		430	
Seeds, all kinds.....			14
Steel.....	394		462
Sugar.....			59
Spirits, beer, &c.....	101	84	15
Tobacco.....		16	
Wheat.....	*158,643	29,061	17,908
Wool.....			1,536
Merchandise not enumerated.....	558	1,302	7,656
Barrels, empty.....	1		
Sawn lumber, in vessels.....	1,117	492	43,286
Railway ties.....			1,942
Shingles.....		19	
Square timber, in vessels.....		63,715	500
Total.....	266,659	111,946	247,035

* Of this amount 3,469 tons came down to Kingston in 1894, were stored there and taken to Montreal in 1895; and 245 tons came down to Ogdensburg in 1894, stored there, and transhipped to Montreal in 1895.

SESSIONAL PAPER No. 20

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
	Tons.	Tons.	Tons.
1896.			
All other (vegetable).....	29		
Apples.....	†1,263		
Ashes.....	94		
Barley.....	240		11,128
Cement and water-lime.....	12		
Coal.....		11,742	1,255
Corn.....	182,330	19,688	118,426
Crockery.....	5		
Fish.....		2	
Flour.....	11,964	13,846	16,224
Furniture.....		3	
Glass.....	9	3	
Hay, pressed.....		563	
Hides, skins, &c.....			41
Horses.....	1	1	3
Iron, railway.....		1,192	
" pig.....	5	1,559	
" all other.....	2,020	1,725	
Lard and lard oil.....			1,348
Meal, all kinds.....		500	46,456
Molasses.....	167		
Oats.....	12,373	1,454	14,351
Oil in barrels.....	23		1,005
Pease.....	3,020	10	
Pork.....	1		390
Rags.....	4		
Rye.....	8,323	647	
Salt.....		80	
Seeds, all kinds.....	20		78
Steel.....	542	11,317	498
Sugar.....	1		165
Tobacco.....		1	
Wheat.....	*254,763	51,587	16,467
Wool.....		8	900
Merchandise not enumerated.....	376	54	3,990
Barr-ls, empty.....			10
Firewood, in vessels.....			165
Sawn lumber ".....	657	1,286	78,397
Shingles.....		94	40
Square timber, in vessels.....		55,588	
" rafts.....	1,200		
Woodenware.....			12
Total.....	479,442	172,950	311,349

† 523 tons of this quantity of apples paid full tolls by sections on the Welland Canal, and consequently does not appear on the Welland Through Statement.

* Of this amount 5,290 tons came down to Kingston in 1895, were stored there and transhipped to Montreal in 1896.

4-5 EDWARD VII., A. 1905

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed	Quantity passed	Quantity passed
	down to Montreal.	down to Canadian Ports between Port Dalhousie and Cornwall.	down to United States Ports.
1897.	Tons.	Tons.	Tons.
Agricultural products, vegetable.....			32
Ashes.....	133		
Barley.....			14,173
Bricks.....		739	845
Clay, lime and sand.....	38	430	
Coal.....		9,803	
Corn.....	*264,396	11,103	115,689
Flaxseed.....	3,293	169	
Flour.....	1,029	211	7,237
Furniture.....	1	5	
Glass.....	53	9	
Hay, pressed.....			301
Horses.....	1	1	3
Hides and skins, &c.....			23
Iron, railway.....		6,241	965
" pig.....		2,828	
" all other.....	7,564	6,143	
Lard and lard oil.....			1,444
Meal, all kinds.....		699	41,644
Molasses.....	9		
Oats.....	*6,847	3,046	15,233
Oil in barrels.....	112	51	198
Pease.....	*2,078	3	
Pork.....			243
Rye.....	8,435	48	
Salt.....	216		
Stone for cutting.....		330	
Seeds, all kinds.....			299
Steel.....	375	4,680	
Sugar.....			31
Spirits, beer, &c.....	46		
Tobacco.....	51		
Wheat.....	*278,498	†39,057	12,661
Wool.....			197
Merchandise not enumerated.....	1,214	347	3,591
Firewood, in vessels.....		12	
Hoops.....	257	8	
Lumber, sawn, in vessels.....	478	1,158	69,710
Masts.....			403
" " rafts.....		5	
Railway ties, in vessels.....		999	
Split posts.....		4	
Timber, square.....	1,207	81,117	1,040
Staves and headings, salt barrel.....	4,716		
Woodenware.....			1
Total.....	581,047	169,246	285,963

* Of this quantity of corn 573 tons came down to Ogdensburg and Prescott in 1896, were stored there and transhipped to Montreal in 1897.

* Of this quantity of oats 50 tons came down to Prescott in 1896 and passed down to Montreal in 1897, and 170 tons passed through on St. Catharines Reports; 136 tons of which passed down to Montreal.

* Of this quantity of pease 230 tons were transhipped and passed through on St. Catharines Reports.

* Of this quantity of wheat 624 tons were transhipped and passed through on St. Catharines Reports, and 7,072 tons came down to Kingston and Prescott in 1896 and passed down to Montreal in 1897.

† Of this quantity, 1,079 tons were transhipped and passed through on St. Catharines Reports.

SESSIONAL PAPER No. 20

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed	Quantity passed	Quantity passed
	down to Montreal.	down to Canadian Ports between Port Dalhousie and Cornwall.	down to United States Ports.
1898.	Tons.	Tons.	Tons.
Agricultural products, vegetable.....	56		
Ashes.....	73		
Barley.....	3,966	1,417	6,909
Cement and water-lime.....			300
Clay, lime and sand.....	52	1	
Coal.....		4,536	759
Corn.....	*310,498	13,338	116,317
Flaxseed.....	5,687	9	
Flour.....	653		4,212
Furniture.....			2
Glass.....	75		
Horses.....	4		
Iron, railway.....		674	770
" pig.....		4,187	
" all other.....	6,217	257	324
" ore.....		13,433	
Lard and lard oil.....			3,671
Meal, all kinds.....			22,626
Molasses.....	56		
Oats.....	3,975	625	12,729
Oil, in barrels.....	1,141	15	119
Pamt.....			3
Pease.....	260		45
Pork.....			1,271
Rye.....	*16,133	39	
Salt.....	144	644	
Seeds, all kinds.....			44
Spirits, beer, &c.....	4		34
Steel.....	1,351	3,122	2,951
Stone for cutting.....		554	
Tallow.....			359
Wheat.....	*184,706	15,860	8,612
Wool.....			89
Merchandise, not enumerated.....	866	25	3,828
Firewood, in vessels.....		747	
Lumber, sawn, in vessels.....	3,065	2,840	72,897
Railway ties.....		190	
Shingles.....		11	
Square timber.....	329	48,369	
Total.....	539,305	119,893	258,871

* Of this quantity of corn 2,340 tons came down to Ogdensburg and Prescott in 1897, were stored there, and transhipped to Montreal in 1898.

* Of this quantity of rye 45 tons came down to Prescott in 1897, were stored there, and transhipped to Montreal in 1898.

* Of this quantity of wheat 4,165 tons came down to Kingston in 1897, were stored there, and transhipped to Montreal in 1898.

4-5 EDWARD VII., A. 1905

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed	Quantity passed	Quantity passed
	down to Montreal.	down to Canadian Ports between Port Dalhousie and Cornwall.	down to United States Ports.
1899.	Tons.	Tons.	Tons.
Agricultural products, vegetable	32		
Ashes	58		
Barley	596		1,828
Clay, lime and sand	15		
Coal		8,276	2,293
Corn	*150,999	16,594	43,854
Flaxseed	200		
Flour	4,229	1,839	4,404
Furniture		2	7
Glass	16		
Horses	1		
Iron, ore		26,125	
" all other	5,063		294
Lard and lard oil		3	864
Meal, all kinds			18,198
Molasses	159		8
Nails	1	1	11
Oats	*10,250	1	13,139
Oil, in barrels	7,143	2	254
Paint			2
Pork			343
Rags			1
Rye	923		
Salt	183	479	549
Seeds, all kinds			11
Spirits, beer, &c.	74	71	168
Steel	3,000	1,562	11,802
Stone for cutting		429	
Tallow			201
Tobacco	96		
Wheat	*169,978	23,602	9,190
Wool			130
Merchandise, not enumerated	518	126	6,219
Barrels, empty	1		
Firewood, in vessels		27	
Hop poles		100	
Lumber, sawn, in vessels	924	4,583	57,695
Masts and spars		3	
Railway ties		74	1,273
Shingles		50	
Square timber, in vessels	26	24,959	
Total	354,485	108,958	172,738

* Of this quantity of corn 7,443 tons came down to Ogdensburg and Prescott in 1898, were stored there, and transhipped to Montreal in 1899.

* Of this quantity of oats 187 tons passed down from Dunnville to Montreal.

* Of this quantity of wheat 6,447 tons passed down to Kingston in 1898, were stored there, and transhipped to Montreal in 1899.

SESSIONAL PAPER No. 20

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1900.	Tons.	Tons.	Tons.
Agricultural products, vegetable		1	6
Ashes	25	15	
Barley	1,288	563	1,598
Cement and water-lime			18
Clay, lime and sand	15		
Coal		1,360	992
Corn	*109,359	9,844	44,306
Flour	1,595	990	6,371
Furniture	1		
Glass, all kinds	6	4	
Horses			4
Iron, pig	508	1,284	
" all other	4,292	1,044	714
" ore		58,400	
Lard and lard oil			1,588
Meal (all kinds)			14,244
Molasses		21	57
Oats	*8,925	348	30,840
Oil, in barrels	15,647	4,288	17
Oil-cake			2,705
Paint		2	36
Pease	115		4
Pitch and tar		24	
Pork			117
Rye	3,078	160	300
Salt		467	
Soda ash		15	
Steel	5,420		2,601
Sugar			154
Tallow			631
Wheat	*121,896	6,610	7,541
White lead	16		
Merchandise not enumerated	103	154	7,899
Barrels, empty	182	407	5
Firewood, in vessels		1,143	
Lumber, sawn, in vessels	15,760	5,701	55,128
Shingles		90	
Square timber, in vessels		20,267	
Staves		3	
Total	288,231	113,205	177,876

*Of this quantity of corn 751 tons came to Ogdensburg, Kingston and Prescott in 1899, were stored there, and transhipped to Montreal in 1900.

*Of this quantity of oats 585 tons came down to Ogdensburg, Kingston and Prescott in 1899, were stored there, and transhipped to Montreal in 1900.

*Of this quantity of wheat 10,835 tons came down to Ogdensburg, Kingston and Prescott in 1900, were stored there, and transhipped to Montreal in 1900.

4-5 EDWARD VII., A. 1905

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
1901.	Tons.	Tons.	Tons.
Agricultural implements.....	1,785		
" products, vegetable.....			10
Ashes.....	3		
Barley.....			7,119
Coal.....		2,322	357
Corn.....	14,319	4,828	48,609
Flaxseed.....	4,965	2	
Flour.....	1,400	218	15,768
Furniture.....	5		
Glass (all kinds).....	1		
Hay, pressed.....	246		
Iron, pig.....		1,790	
" all other.....	1,178	589	
" ore.....		98,452	
Lard and lard oil.....	1,155	827	525
Meal (all kinds).....	35		13,981
Meats.....	114	7	
Molasses.....		17	
Oats.....	1,584	853	25,704
Oil (in barrels).....	14,987	2,971	22
Oil-cake.....	1,083	113	219
Paint.....	17	6	
Pitch and tar.....		17	
Pork.....	34	970	10
Rye.....	2,961		
Salt.....	50	165	105
Soda ash.....	4		
Spirits, &c.....	32		
Sugar.....	112		448
Tallow.....			119
Tobacco, raw.....	23		
Wheat.....	*132,702	8,051	9,057
Wool.....			3
Merchandise not enumerated.....	2,420	1,395	966
Barrels, empty.....	66		216
Firewood, in vessels.....		1,287	
Lumber, sawn, in vessels.....	2,635	3,412	51,931
Mast spars, &c. ".....		13	
Shingles.....		18	
Square timber, in vessels.....	504	14,023	
Total.....	184,420	142,346	175,169

*Of this quantity 9,324 tons came to Ogdensburg in 1900, were stored there, and transhipped to Montreal in 1901.

SESSIONAL PAPER No. 20

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*Continued.*

Articles.	Quantity passed down to Montreal.	Quantity passed down to Canadian Ports between Port Dalhousie and Cornwall.	Quantity passed down to United States Ports.
	Tons.	Tons.	Tons.
1902.			
Agricultural implements.....	13		399
Barley.....			7,418
Coal.....	15,976		35,562
Corn.....	1,719	10,335	55,593
Fish.....		1	
Flour.....	6,755	5,697	7,030
Furniture.....			17
Iron, railway.....	50		
" all other.....	5,785		220
" ore.....		3,492	18,988
Lard and lard oil.....			2,413
Meal, all kinds.....			12,675
Molasses.....	54	18	
Oats.....	1,442		9,764
Oil (in barrels).....	12,091	131	1,594
Oil cake.....			110
Paint.....		20	
Pitch and tar.....		33	
Pork.....			632
Rye.....	4,079		
Seeds, all kinds.....			10
Sugar.....			280
Wheat.....	* 200,975	12,452	8,380
Wool.....			752
Merchandise not enumerated.....	419	172	1,928
Barrels (empty).....	5	15	4
Firewood, in vessels.....		288	
Lumber, sawn, in vessels.....	1,085	2,178	97,300
Saw logs.....		28	
Square timber, in vessels.....		20,838	
Staves (barrel).....		35	
Woodenware.....	17		
Total.....	250,475	55,733	261,078

* Of this quantity 6,096 tons were transhipped to Montreal being grain of 1901.

4-5 EDWARD VII., A. 1905

U.—COMPARATIVE STATEMENT of the Quantity of Through Freight passed down the Welland Canal, &c.—*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.
1903.	Tons.	Tons.	Tons.
Agricultural implements	46		
" products		1	
Ashes	14		
Barley	2,206	1,017	11,433
Coal		30,009	
Corn	116,223	13,846	80,689
Flax and hemp		5	
Flax seed	3,643		
Flour	16,151		6,082
Furniture	3	10	
Glass, all kinds	15		
Horses			2
Iron, railway		15	
" all other	2,542	556	
" ore		18,323	
Meal, all kinds	348		13,549
Molasses	240	16	
Nails	19		
Oats	2,438		5,315
Oil	14,619	518	2,000
Oil cake	462	792	740
Paint	5		
Pease	63		22
Pork			152
Rags	4		
Rosin	20		
Rye	4,260		644
Salt	132	2,242	
Seeds, all kinds			27
Spirits	2		3
Steel		5	
Tallow	3	15	
Wheat	* 226,746	14,199	13,725
Wool			482
Merchandise not enumerated	582	117	2,012
Firewood, in vessels		210	9
Lumber, sawn, in vessels		3,086	76,563
Shingles		54	
Timber, square, in vessels		26,324	
Total	390,786	111,360	213,449

* Of this quantity 2,890 tons were transhipped to Montreal being grain for 1902.

SESSIONAL PAPER No. 20

U.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal to Canadian Ports, &c.—*Continued.*

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 the south side of Lake Ontario.
1892.	Tons.	Tons.	Tons.
Barley.....			6,433
Corn.....	53,689	7,637	131,222
Oats.....			36,935
Pease.....	524		
Rye.....	9,119	273	
Wheat.....	194,281	5,373	26,950
Total grain.....	257,613	13,283	201,540
Quantity taken to Ogdensburg and transhipped to Montreal.....	*4,341	4,341	
Total.....	261,954	8,942	201,540
Other articles.....	5,531	60,944	128,863
Total.....	267,485	69,886	330,103
1893.			
Barley.....	600	1,110	16,751
Corn.....	278,564	5,752	156,776
Oats.....	9,761	1,090	20,313
Pease.....			
Rye.....	3,669	1	1
Wheat.....	209,212	17,602	29,117
Total grain.....	501,806	25,555	222,958
Other articles.....	6,210	68,182	170,790
Total.....	508,016	93,737	393,748
1894.			
Barley.....	258		28,095
Corn.....	60,661	3,243	105,329
Oats.....	175	107	27,621
Pease.....			
Rye.....			
Wheat.....	212,557	13,349	42,934
Total grain.....	273,651	16,699	203,979
Other articles.....	18,540	63,982	169,091
Total.....	292,191	80,681	373,070
1895.			
Barley.....	959		7,730
Corn.....	70,265	2,912	91,743
Oats.....	1,654	123	16,442
Rye.....			
Wheat.....	†158,643	29,061	17,908
Total grain.....	231,491	32,096	133,823
Other articles.....	35,168	79,850	113,212
Total.....	266,659	111,946	247,035

* This quantity of wheat was taken from Kingston to Ogdensburg and stored in elevators and subsequently transhipped to Montreal.

† Of this amount, 3,469 tons came down to Kingston in 1894, was stored there, and taken to Montreal in 1895, and 245 tons came down to Ogdensburg in 1894, was stored there, and transhipped to Montreal in 1895.

4-5 EDWARD VII., A. 1905

U.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal to Canadian Ports, &c.—*Continued.*RECAPITULATION—*Continued.*

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 the south side of Lake Ontario.
1896.	Tons.	Tons.	Tons.
Barley.....	240		11,128
Corn.....	182,330	19,688	118,426
Oats.....	12,373	1,454	14,351
Pease.....	3,020	10	
Rye.....	8,323	647	
Wheat.....	254,763	51,587	16,467
Total grain.....	*461,049	73,386	160,372
Other articles.....	18,393	99,564	150,977
Total.....	749,442	172,950	311,349
1897.			
Barley.....			14,173
Corn.....	264,396	11,103	115,689
Oats.....	6,847	3,046	15,233
Pease.....	2,078	3	
Rye.....	8,435	48	
Wheat.....	278,498	39,057	12,661
Total grain.....	†560,254	53,257	157,756
Other articles.....	20,793	114,989	122,207
Total.....	581,047	166,246	285,963
1898.			
Barley.....	3,960	1,417	6,909
Corn.....	310,498	13,338	116,317
Oats.....	3,975	625	12,729
Pease.....	260		45
Rye.....	16,133	39	
Wheat.....	184,706	15,860	8,612
Total grain.....	†519,532	31,279	144,612
Other articles.....	19,773	79,614	114,259
Total.....	539,305	110,893	258,871
1899.			
Barley.....	596		1,828
Corn.....	150,999	16,294	43,854
Oats.....	10,250	1	13,139
Pease.....			
Rye.....	923		
Wheat.....	169,978	24,602	9,190
Total grain.....	§332,746	40,197	68,011
Other articles.....	21,739	68,761	104,727
Total.....	354,485	108,958	172,732

* Of this amount, 5,290 tons came down to Kingston in 1895, was stored there, and transhipped to Montreal in 1896.

† Of this quantity, 7,695 tons came down in 1896 and were transhipped to Montreal in 1897.

‡ Of this quantity, 6,550 tons came down in 1897 and were transhipped to Montreal in 1898.

§ Of this quantity, 14,077 tons came down in 1898 and were transhipped to Montreal in 1899.

SESSIONAL PAPER No. 20

U.—STATEMENT showing the Quantity of Through Freight passed down the Welland Canal to Canadian Ports, &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 the south side of Lake Ontario.
		Tons.	Tons.	Tons.
1900.				
Barley.....	1,288	563		1,598
Corn.....	109,359	9,844		44,306
Oats.....	8,925	348		30,840
Pease.....	115			4
Rye.....	3,078	160		300
Wheat.....	121,896	6,610		7,541
Total grain.....	*244,661	17,525		84,589
Other articles.....	43,570	93,680		93,287
Total.....	288,231	113,205		177,876
1901.				
Barley.....				
Corn.....	14,319	4,828		48,609
Oats.....	1,584	853		25,704
Pease.....				
Rye.....	2,961			
Wheat.....	132,702	8,051		9,057
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		55,593
Oats.....	1,442			9,764
Pease.....				
Rye.....	4,079			
Wheat.....	200,975	12,452		8,389
Total grain.....	‡208,215	22,787		81,164
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.....	4,260			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

* Of this quantity, 12,171 tons came down in 1899 and were transhipped to Montreal in 1900.

† Of this quantity, 9,324 tons came down in 1900 and were transhipped to Montreal in 1901.

‡ Of this quantity, 6,096 tons came down in 1901 and were transhipped in 1902.

§ Of this quantity, 2,890 tons came down in 1902 and were transhipped in 1903.

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COMPARATIVE STATEMENT showing the Quantity of Vegetable Food and Lumber passed through the Canals during the Years ended December 31, 1902 and 1903.

	VEGETABLE FOOD.										Lumber.	Total.
	Flour.	Wheat.	Corn.	Barley.	Oats.	Rye.	Buck-wheat.	All Other.				
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.		
Welland Canal, 1902.....	22,282	225,171	67,647	7,418	11,232	4,079		12,963	102,775		453,567	
" 1903.....	25,998	259,031	210,758	14,656	7,911	4,904		13,994	85,595		622,847	
Increase.....	3,716	33,860	143,111	7,238		825		1,031			169,280	
Decrease.....					3,321				17,180			
St. Lawrence Canals, 1902.....	22,599	444,261	24,366	8,255	22,840	19,738	920	4,812	27,506		573,297	
" 1903.....	17,762	294,363	125,701	7,095	17,033	8,053	802	10,081	43,843		435,373	
Increase.....	4,837	239,898	101,335	1,160	5,807	11,045	118	5,269	16,337		139,924	
Decrease.....												
Chambly Canal, 1902.....	743		1		998			749	26,750		29,291	
" 1903.....	955		17		1,317			718	29,906		32,913	
Increase.....	102		16		319				3,156		3,622	
Decrease.....								31				
Ottawa Canals, 1902.....	8				565			265	286,463		287,321	
" 1903.....	78				985			545	332,963		334,528	
Increase.....	70				370			280	46,500		47,207	
Decrease.....								13				
Rideau Canal, 1902.....	487	1,041	22	122	541	28	7	98	14,194		16,510	
" 1903.....	588	868	111	40	934		2	264	17,833		20,390	
Increase.....	51		89	82	393			166	3,639		4,050	
Decrease.....		173				28	5					

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St. Peter's Canal, 1902	1,473			13	2,135			4,787	13,671	22,079
" 1903	2,234	273		16	2,995			7,014	17,635	30,174
Increase										
Decrease	761	273		3	861			2,227	3,968	8,005
Trent Valley Canals, 1902										
" 1903										
Increase								6	5,501	7,171
Decrease	1,661							298	4,459	5,983
"	1,226									
Increase										
Decrease	435							292	1,045	1,188
Murray Canal, 1902	154			1,328	159	1,161		742	1,189	5,419
" 1903	73	8	8	1,004	206	350	92	1,684	3,041	7,210
Increase										
Decrease	81			324	47	814	92	942	1,861	1,821
Sault Ste. Marie Canal, 1902	316,063			21,001	9,689	2,128		15,988	81,822	1,284,636
" 1903	312,210	630	1,260	28,192	35,289	2,725	1,248	17,609	51,944	1,416,535
Increase										
Decrease	3,853	630	630	7,191	25,600	597	1,248	1,621	30,778	131,839
Total increase										
Total decrease	1,011	245,454		12,866	18,462		1,206	11,797	26,458	224,862
Total for year 1902										2,681,381
" 1903										2,906,243

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

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CANAL

COMPARATIVE STATEMENT for

	January.	February.	March.	April.	May.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Welland Canal, 1902				4,160 24	15,558 65
" " 1903			0 42	8,012 23	20,769 75
Increase			0 42	3,851 99	5,211 10
Decrease					
St. Lawrence Canals, 1902	12 50			594 89	12,224 01
" " 1903	8 50		25 00	526 14	16,907 34
Increase			25 00		4,683 33
Decrease	4 00			68 75	
Chambly Canal, 1902				33 29	3,516 26
" " 1903				30 27	2,984 25
Increase					
Decrease				3 02	532 01
Ottawa Canals, 1902				132 40	4,941 76
" " 1903	75 00			17 60	5,002 99
Increase	75 00				61 23
Decrease				114 80	
Rideau Canal, 1902				47 64	693 53
" " 1903					566 96
Increase					
Decrease				47 64	126 57
St. Peter's Canal, 1902	40 56		2 55	222 56	336 41
" " 1903	28 34			129 17	303 74
Increase	12 22		2 55		
Decrease				93 39	32 67
Trent Valley Canal, 1902				27 58	72 43
" " 1903				20 71	130 22
Increase					57 79
Decrease				6 87	
Murray Canal, 1902				46 01	89 10
" " 1903				22 48	107 17
Increase					18 07
Decrease				23 53	
Sault Ste. Marie Canal, 1902					
" " 1903					
Increase					
Decrease					
Total increase	58 78		22 87	3,493 97	9,340 29
Total decrease					

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REVENUE.

Years ended December 31, 1902 and 1903.

June.	July.	August.	September.	October.	November.	December.	Total.
\$ cts. 12,183 06 21,919 34	\$ cts. 15,152 28 17,827 43	\$ cts. 13,341 38 17,115 53	\$ cts. 11,364 73 15,702 06	\$ cts. 15,853 37 22,063 51	\$ cts. 9,322 57 12,704 40	\$ cts. 1,905 82 1,082 64	\$ cts. 98,842 10 137,197 31
9,736 28	2,675 15	3,774 15	4,337 33	6,210 14	3,381 83	823 18	38,355 21
8,144 93 19,988 36	9,023 29 21,975 31	10,329 63 22,566 71	10,819 85 19,238 41	8,582 88 17,540 49	11,034 66 11,186 79	820 38 484 51	71,587 02 130,447 56
11,843 43	12,952 02	12,237 08	8,418 56	8,957 61	152 13	335 87	58,860 54
2,705 56 3,916 11	2,905 31 5,657 21	3,361 07 4,470 31	3,969 97 3,013 24	3,921 01 3,168 44	2,310 84 1,532 41		22,723 31 24,772 24
1,210 55	2,751 90	1,109 24	956 73	752 57	778 43		2,048 93
3,538 87 5,626 00	4,068 87 4,802 80	3,809 81 4,572 66	3,957 62 3,813 03	2,663 02 3,384 14	1,750 02 2,235 99		24,862 37 29,530 21
2,087 13	733 93	762 85	144 59	721 12	485 97		4,667 84
621 16 737 13	738 67 1,007 89	585 14 748 73	385 89 785 09	509 21 753 02	456 47 566 33	15 00	4,037 71 5,180 15
115 97	269 22	163 59	399 20	243 81	109 86	15 00	1,142 44
354 54 391 42	451 35 502 73	444 98 582 99	393 95 364 09	338 71 392 02	266 37 330 04	182 16 276 80	3,034 14 3,301 34
36 88	51 38	138 01	29 86	53 31	63 67	94 64	267 20
205 56 227 76	284 68 294 38	289 35 316 53	207 26 253 77	172 39 203 90	106 23 85 80	5 00	1,370 48 1,533 07
22 20	9 70	27 18	46 51	31 51	20 43	5 00	162 59
110 68 120 90	182 59 219 09	202 58 254 81	168 46 147 43	162 64 185 85	101 51 77 25	7 23	1,070 80 1,134 98
10 22	36 50	52 23	21 03	23 21	24 26	7 23	64 18
50							50 00
50							50 00
25,012 66	19,479 80	18,264 33	12,049 39	15,488 14	3,370 34	1,061 64	105,518 93

Total revenue for 1902\$227,577 93
 " " 1903..... 333,096 86

RICHARD DEVLIN, *Compiler of Canal Statistics.*

APPENDIX A.

No. (A) 1.—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal and the Amount of Revenue heretofore collected, now free, during the Season of Navigation in 1903.

4-5 EDWARD VII., A. 1905

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.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Ashes, pot and pearl.....											14			2 80
Apples.....														
Agricultural products not enumerated, vegetables.....											1		0 20	0 20
Agricultural products not enumerated, animal.....											46	0 15	9 20	0 15
Agricultural implements.....											14,656	1,465 60	1,465 60	1,465 60
Barley.....		3,223			11,433					200	23 68			23 68
Bricks.....	200													
Bones.....														
Brimstone.....														
Buckwheat.....														
Cement and water lime.....	1													
Clay, lime and sand.....	325	460												
Coal.....	5				113,076					336	2,027	19 00	149 63	163 63
Corn.....										117,875	30,009	23,575 00	6,001 80	29,576 80
Cattle.....					108,917						210,758		21,075 80	21,075 80
Cotton (raw).....														
Crockery and earthenware.....	96									159		23 85		23 85
Dye wood and dye stuffs.....														
Fish.....					36					36		5 40		5 40
Flax and hemp.....					1,900					1,900	5	285 00	0 50	285 50
Flour.....	21	3,936			6,682					21	25,977	0 10	4,510 23	4,510 63
Furniture.....											13		2 60	2 60
Gypsum.....														
Glass (all kinds).....	20									40	15	6 00	3 00	9 00
Hay (pressed).....														
Hogs.....														
Horses.....														
Hides and skins, horns and hoofs.....														
Iron, railway.....	14	15								1,080	15	33 13		33 13
					459					473		70 95	3 00	73 95

4-5 EDWARD VII., A. 1905

No. (A) 1.—GENERAL STATEMENT showing the Quantity of each Article transported on the Welland Canal, &c.—Continued.

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.	Amount of Tolls, Up. \$ cts.	Amount of Tolls, Down. \$ cts.	Total Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Hoops														
Hop poles.														
Lumber, sawn, in vessels.		3,870		28,226	248	48,337	1,410		3,749	81,843	85,592	674 53	14,578 62	15,253 15
" " rafts	3								3		3	0 45		0 45
Masts, spars and telegraph poles, in vessels.													0 50	0 50
" " rafts		7								7	7			
Railway ties, in vessels	688								688		688			
" " rafts										1,144	1,711	85 00		85 00
Saw-logs	424	1,144							567		1,711	21 00	61 62	82 62
Staves and headings, barrel.														
" " pipe.														
" " W. India														
Shingles										54	54		38 46	38 46
Split posts and fence rails, in vessels.														
" " rafts														
Timber, square, in vessels		2,520								26,324	26,324		3,948 60	3,948 60
" " rafts														
Traverses.														
Woodenware and wood partly manufactured.														
Total freight heretofore paying tolls, now free.	9,938	189,652	5,506	30,350	149,151	221,074	4,796	290,902	169,391	731,978	901,369	30,742 50	89,064 75	119,807 25
Articles having paid full tolls on the St. Lawrence Canals, free:—														
Bricks	26									80	80			
" "			54							23	23			
Brimstone			20											
Cement and water lime	3,809								3,924		3,924			
Clay, lime and sand	177		4					300	181	300	481			
Coal								401		401	401			
Fish										8	8			
Iron, railway	39,641								39,641		39,641			
" pig	195		168						273		273			

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" all other.....	3,791	2,054	5,845	5,845			
Steel.....	332		332	332			
Salt.....	87		87	87			
Cotton, raw.....	23		23	23			
Meats all kinds.....	17		17	17			
Seeds, all other.....	106	219	325	325			
Tobacco, raw.....	2		2	2			
Hides and skins.....		6	6	6			
Meats, other than pork.....		1	1	1			
Ashes.....		2	2	2			
Crockery and earthenware.....	32		32	32			
Furniture.....	1		1	1			
Glass, all kinds.....	169	1,038	1,207	1,207			
Molasses.....	5	1	6	6			
Nails.....	2,634	184	2,818	2,818			
Oils.....	7	9	16	16			
Paints.....	153	5	158	158			
Pitch and tar.....	41	17	58	58			
Rags.....	11	18	29	29			
Resin.....	1		1	1			
Soda ash.....	43	221	264	264			
Sugar.....	68	136	204	204			
Stone, unwrought.....		150	209	209			
Tin.....	28	181	209	209			
Turpentine.....	1		1	1			
White lead.....	52	28	80	80			
Whiting.....	12	10	22	22			
Whisky, &c.....	99	353	452	452			
All other goods and merchandise not enumerated.....	2,906	768	3,674	3,674			
Firewood in vessels.....		40,026	40,026	40,026			
Railway ties in vessels.....		611	611	611			
Grand total freight.....	61,380	189,802	51,763	30,350	149,151	221,074	4,796
				291,603	270,090	732,829	1,002,919
Total tolls on vessels.....							
" passengers.....							8,296 51
" free goods.....							67 82
							16,890 60
							145 04
Total tolls.....							39,106 83
Fines.....							136,842 89
Damages.....							7 00
Harbour dues.....							50 58
Winterage.....							303 60
Other receipts.....							1 20
							42 80
Total revenue, exclusive of hydraulic rents.....							137,247 89

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
 OTTAWA, May 16, 1904.

4-5 EDWARD VII., A. 1905

APPENDIX A.
 No. (A) 2.—GENERAL STATEMENT showing the Quantity of each Article of Through Freight transported on the Welland Canal and the Amount of Tolls, heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls.		Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		cts.	cts.	
Ashes, pot and pearl.											14		2 80	2 80
Apples.														
Agricultural products, not enumerated, vegetables.														
Agricultural products, not enumerated, animals.			1						1		1		0 20	0 20
Agricultural implements.											46		9 20	9 20
Barley.		3,223				11,433					14,656		1,465 60	1,465 60
Bricks.	30								30				4 50	4 50
Bones.														
Brimstone.														
Buckwheat.														
Cement and water lime.	1								1					0 15
Clay, lime and sand.	50								61				9 15	9 15
Coal.	3				113,076		4,796	30,009	117,875	30,009	147,884		6,001 80	29,576 80
Corn.						103,917		101,841		210,758	210,758		21,075 80	21,075 80
Cattle.														
Cotton (raw).									159				23 85	23 85
Crockery and earthenware.	96		62		1									
Dye wood and dye stuffs.														
Fish.					36				36				5 40	5 40
Flax and hemp.					1,900				1,900				285 00	285 50
Floor.		5								5			0 50	0 50
Furniture.	1													
Gypsum.		192				6,082		15,959	11,875	22,233	22,233		4,446 60	4,446 60
Glass (all kinds).								13		13			2 60	2 60
Hay (pressed).	20							15	40	15	55		3 00	3 00
Hogs.														
Horses.														
Hides and skins, horns and hoofs.														
Ice.	14							459						
Iron, railway.		15							473		15		70 95	73 95

4-5 EDWARD VII., A. 1905

No. (A) 2.—GENERAL STATEMENT showing the Quantity of each through Article transported on the Welland Canal, &c.—Continued.

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.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Fire wood, in rafts.														
Hoops														
Hop poles														
Lumber, sawn, in vessels.		1,676		3,501	248	48,337		1,410	3,749	79,649	83,398	674 53	14,331 91	15,006 44
" " in rafts.														
Masts, spars and telegraph poles, in vessels.														
Masts, spars and telegraph poles in rafts.														
Railway ties, in vessels.		375							375		375	60 00		60 00
" " in rafts.														
Saw logs.														
Staves and heading, barrel														
" " pipe.														
" " W. India														
Staves, salt barrel.										54	54	38 46		38 46
Shingles.														
Split posts and fence rails, in vessels.														
Split posts and fence rails, in rafts.														
Timber, square, in vessels.														
" " in rafts.		2,520						23,804		26,324	26,324		3,948 60	3,948 60
Traverses.														
Woodenware and wood partly manufactured.														
Total freight paying tolls.	5,293	175,418	4,283	30,125	149,151	221,074	4,796	288,978	163,523	715,595	879,118	30,538 13	87,807 52	118,345 65
Articles having paid full tolls on the St. Lawrence Canals, five:—														
Bricks	26		54						80		80			
Brimstone	3		20						23		23			
Cement and water lime.	3,809		115						3,924		3,924			

4-5 EDWARD VII., A. 1905

No. (A) 3—GENERAL STATEMENT showing the Quantity of each Article of Way Freight transported on the Welland Canal, &c.—Concluded.

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.	Amount of Tolls Up.	Amount of Tolls Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Barrels empty														
Boat knees														
Floats														
Firewood, in vessels		3,261				225				3,486			164 39	164 39
" rafts														
Hoops														
Hop poles														
Lumber, sawn, in vessels		2,194								2,194			246 71	246 71
" rafts	3								3			0 45	0 45	0 45
Masts, spars and telegraph poles, in vessels										7			0 50	0 50
Masts, spars and telegraph poles, in rafts														
Railway ties, in vessels	313								313			25 00		25 00
" rafts										567	1,144	21 00	61 62	82 62
Saw logs	424	1,144				143								
Staves and headings, barrel														
" pipe														
" " W. India														
Staves, salt barrel														
Shingles														
Split posts and fence rails, in vessels														
Split posts and fence rails, in rafts														
Timber, square, in vessels														
" rafts														
Traverses														
Woodenware and wood partly manufactured														
Total freight paying tolls.	4,645	14,234	1,223	225		1,924			5,868	16,383	22,251	204 37	1,257 23	1,461 60

4-5 EDWARD VII., A. 1905

APPENDIX A—Continued.

No. (A) 4.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence Canals and the Amount of Revenue heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Ashes, pot and pearl.....	163	12	2						165	12	177	42 59	2 40	44 99
Apples.....	57	7,870		65					122	7,870	7,992	7 86	1,092 99	1,100 85
Agricultural products not enumerated—														
Vegetable.....	218	2,141							218	2,141	2,359	25 51	317 85	343 36
Animal.....	1,857	3,375	2						1,859	3,375	5,234	80 52	480 89	561 41
Agricultural implements.....	115	68							115	68	183	14 75	4 55	19 30
Barley.....	7,997	7,095							7,095	7,095	7,095	.....	555 75	555 75
Bricks.....	7,997	64	184				126		8,307	64	8,371	497 81	2 42	500 23
Bones.....	394								394		394	.....	52 72	52 72
Brimstone.....	1,966	17	31						1,997	17	2,014	202 88	1 21	204 09
Buckwheat.....	8,140	802							802	802	802	.....	56 69	56 69
Cement and water lime.....	22,218	422	467						8,607	422	9,029	1,129 59	17 21	1,146 80
Clay, lime and sand.....	55	78,007	4						25,735	28,122	53,857	1,045 51	1 318 80	2,364 40
Coal.....	4,157	115,674			4,784			3,513	55	316,368	316,423	6 19	44,967 38	44,973 49
Corn.....	59	364						238,577	4,157	121,544	125,701	508 69	3,498 69	4,007 38
Cattle.....	23	2						3,870	59	364	423	2 63	25 82	28 45
Cotton (raw).....	242	188							23	188	25	3 45	0 13	3 58
Crockery and earthenware.....	48	14							242	188	430	41 81	36 85	78 66
Dye wood and dye stuffs.....	122	8	15				6		54	14	68	5 34	2 40	7 74
Fish.....	43	6	34						157	8	145	14 06	0 82	14 38
Flax and hemp.....	1,523	16,239							77	6	83	11 55	0 90	12 45
Flour.....	513	1,443	10						1,523	16,239	17,762	111 71	1,246 87	1,358 58
Furniture.....	1,123	165							1,523	1,443	1,966	89 91	229 15	319 06
Gypsum.....	1,349	17							1,123	165	1,288	14 11	.....	14 11
Glass (all kinds).....	5,055	2,379	1,325						2,674	165	2,839	527 18	27 80	554 48
Hay (pressed).....	12	17							5,055	2,379	7,434	189 87	157 13	347 00
Hogs.....	405	801		11					12	17	29	0 48	0 96	1 44
Horses.....									416	801	1,217	20 11	49 88	69 99

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	30	43	73	2 71	2 10	4 81
Hides and skins, horns and hoofs.....						
Ice.....	43,009	468	43,477	6,435 81	41 86	6,477 67
Iron, railway.....	3,462		4,436	563 79		563 79
" pig.....	32,197	1,637	36,116	2,738 43	148 14	2,906 57
" all other.....						
" ore.....						
Kryolite chemical ore and other ore, except iron.....		464	464		23 20	23 20
Lard and lard oil.....	89	416	505	10 99	58 18	69 17
Meat, all kinds.....	108	475	535	10 91	32 04	42 95
Meats, other than pork.....	45	44	89	4 88	4 66	9 48
Marble.....	5	2	7	0 30	0 40	0 70
Manilla.....	36	12	77	12 37	2 40	14 77
Molasses.....	4,310	134	660	65 36	6 70	72 06
Nails.....	4,441	607	5,048	870 69	42 80	913 49
Oats.....	16,339	94	17,039	4 83	1,027 53	1,032 36
Oil (in barrels).....	925	1,424	2,480	187 95	228 85	416 80
Oil cake.....	16	9,425	9,441	1 57	472 63	473 60
Pease.....	9	1,337	1,346	0 68	101 17	104 85
Potatoes.....	70	78	148	3 71	6 04	9 75
Pork.....	295	588	883	26 89	38 70	65 59
Paint.....	1,054	348	1,171	215 10	57 60	272 70
Pitch and tar.....	256	32	474	54 57	2 95	57 52
Rags.....	385	78	637	62 40	12 00	74 40
Rye.....		8,072	8,693		392 04	392 04
Flax seed.....	12	6,747	6,759	1 35	168 70	170 05
Resin.....	302	21	1,931	105 29	1 65	106 34
Salt.....	4,328	543	5,407	534 52	26 24	560 76
Stone intended for cutting.....	17	155	172	1 51	5 82	7 33
" wrought.....	80	3	83	5 12	0 69	5 72
" not suitable for cutting, unwrought.....		9,867	9,867		201 15	201 15
Seeds, all kinds.....	6,004	98	6,311	263 24	10 50	363 74
Sheep.....	23	78	101	0 96	5 96	6 92
Soda ash.....	703		1,368	270 68	0 65	271 33
Steel.....	5,716	38	5,787	403 51	5 48	408 99
Sugar.....	2,210	321	2,814	448 59	28 95	477 54
Spirits, beer, &c.....	1,560	563	2,474	273 12	89 10	362 22
Tobacco (raw).....	37	7	44	4 88	0 39	5 27
Tallow.....		2	2		0 30	0 30
Tin.....	527	56	861	150 50	10 90	161 40
Turpentine.....	29	2	73	7 44	0 10	7 54
Wheat.....	483	201,452	204,363	54 23	6,864 68	6,918 91
White lead.....	266	34	355	60 75	5 45	66 20
Whiting.....	530	1	835	166 50	0 65	166 55
Wood.....	5	15	20	2 82		2 85
All other goods and merchandise, not enumerated.....						
Bark.....	17,398	10,533	33,360	3,259 86	1,633 75	4,893 61

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No. (A) 4.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Lawrence Canals, &c.—*Concluded.*

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.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Barrels, empty.....	1,269	70							1,289	70	1,339	156 12	5 49	161 61
Boat knees.....														
Floats.....	12,540	2,302	105,615						118,155	2,302	120,457	7,501 70	59 34	7,561 04
Firewood, in vessels.....														
" rafts.....														
Hoops.....														
Hop poles.....	2								2		2	0 10		0 10
Lumber sawn, in vessels.....	33,384	8,543	415		67	278			34,077	8,610	42,687	955 51	284 58	1,240 09
" rafts.....		1,156								1,156	1,156		25 22	35 22
Masts, spars, and telegraph poles, in vessels.....														
Masts, spars, and telegraph poles, in rafts.....		20,518								20,518	20,518		512 95	512 95
Railway ties, in vessels.....														
" rafts.....			611						611		611	48 88		48 88
Sawlogs.....														
Staves and headings, barrel pipe.....		81							81		81		14 42	14 42
" West India.....														
Staves, salt barrel.....		70								70	70	0 75	14 53	15 28
Shingles.....	4								4		4			
Split posts and fence rails, in vessels.....		10								10	10		1 00	1 00
Split posts and fence rails, in rafts.....		200					660		2,240	860	860		35 50	35 50
Timber, square, in vessels.....		3,117							2,240	3,117	5,357	56 00	79 26	135 26
" rafts.....														
Traverses.....														
Woodenware and wood partly manufactured.....	40	5							40	5	45	15 20	1 00	16 20
Total, freight paying tolls	231,923	575,412	117,407		338	5,661	9,867	242,952	359,535	825,025	1,183,560	30,667 21	66,454 71	97,621 92

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APPENDIX A—Continued.

No. (A) 5.—GENERAL STATEMENT showing the Quantity of each Article of Through Freight transported on the St. Lawrence Canals, and the Amount of Tolls heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total of Amount of Tolls.			
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.							
															\$	cts.	\$	cts.
Ashes, pot and pearl	38	12	2						40	12	52	8 00	2 40	10 40			
Apples		6,977								6,977	6,977		1,016 60	1,046 60			
Agricultural products not enumerated, vegetable	105	2,068							105	2,068	2,173	15 75	310 20	325 95			
Agricultural products not enumerated, animal		3,075								3,075	3,075		461 25	461 25			
Agricultural implements		7								7	7		1 40	1 40			
Barley		5,043								5,043	5,043		504 30	504 30			
Bricks	1,174		184						1,358		1,358	203 70		203 70			
Bones																	
Brimstone	29		31						60		60	9 00		9 00			
Buckwheat		488								488	488		48 80	48 80			
Cement and water lime	6,033	5	467						6,500	5	6,505	975 00	0 75	975 75			
Clay, lime and sand	314	210	4						348	210	558	52 20	31 50	83 70			
Coal		72,463								290,548	290,548		43,555 73	43,555 73			
Corn	2,984	1,866							2,984	5,219	8,203	447 60	521 90	969 50			
Cattle																	
Cotton, raw	23								23		23	3 45		3 45			
Crockery and earthenware	97	183							97	183	280	19 40	36 60	56 00			
Dye wood and dye stuffs	12	10							12	10	22	2 40	2 40	4 80			
Fish	5		15						20		20	3 00		3 00			
Flax and hemp	43	6	34						77	6	83	11 55	0 90	12 45			
Flour	51	4,595							51	4,595	4,646	7 65	689 25	696 90			
Furniture	303	1,018	10						313	1,018	1,331	62 60	203 60	266 20			
Gypsum																	
Glass, all kinds	1,118	121	1,325						2,443	121	2,564	488 60	24 20	512 80			
Hay, pressed																	
Logs																	
Horses		81								81	81		12 15	12 15			

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	8	3					8	3	11	1 20	0 45	1 65
Hides and skins, horns and hoofs.....												
Ice.....	42,806	164					12,806	164	42,970	6,420 90	24 60	6,445 50
Iron, railway.....	2,940	302					3,242		3,242	486 30		486 30
" pig.....	9,326	457					11,423	642	12,065	1,713 45	96 30	1,809 75
" all other.....							185					
" ore.....												
Kryolite chemical ore and other ore, except iron.....		464						464	464		23 20	23 20
Lard and lard oil.....	43	376					43	376	419	6 45	56 40	62 85
Mead, all kinds.....	40	104					40	104	144	6 00	15 60	21 60
Meats, other than pork.....	13	19					13	19	32	1 95	2 85	4 80
Marble.....		2						2	2		0 40	0 40
Manilla.....		12					29	12	41	5 80	2 40	8 20
Molasses.....		2					2		2	0 40		0 40
Nails.....	3,916	83					4,047	83	4,130	809 40	16 00	826 00
Oats.....		131							7,822		782 20	782 20
Oil, in barrels.....	541	1,020					666	1,020	1,686	133 20	204 00	337 20
Oil cake.....		8						8	8	1 20	1 20	1 20
Pease.....		929						929	929		93 65	93 65
Potatoes.....		3						3	3		0 45	0 45
Pork.....		88						88	88	13 20		13 20
Paint.....	910	262					946	262	1,208	189 20	52 40	241 60
Pitch and tar.....	133	9					172	9	181	34 40	1 80	36 20
Rags.....	89	47					122	47	169	24 40	9 40	33 80
Rye.....		1,708					621	2,329	2,329		232 90	232 90
Flax seed.....	6						6		6	0 90		0 90
Resin.....	61						63		63	12 60		12 60
Salt.....	1,666	50					1,666	50	1,716	249 90	7 50	257 40
Stone intended for cutting wrought.....		3							7	0 80	0 00	1 40
" " not suitable for cutting unwrought.....		4										
Sauces, all kinds.....	314	58					523	64	64	78 45	5 10	87 15
Sheep.....		61						61				
Soda ash.....	671	2					1,329	2	1,331	265 80	0 40	266 20
Steel.....	1,577	29					1,610	29	1,639	241 50	4 35	245 85
Sugar.....	1,521	82					1,748	82	1,830	349 60	16 40	366 00
Spirits, beer, &c.....	278	365					610	384	994	122 00	76 80	198 80
Tobacco, raw.....	24	1					24	1	25	3 60	0 15	3 75
Tallow.....		2						2	2		0 30	0 30
Tin.....	369	49					647	49	696	129 40	9 80	139 20
Turpentine.....	1						1		1	0 20		0 20
Wheat.....	240	21,637					240	23,565	23,805	36 00	2,356 50	2,392 50
White lead.....	115	16					170	16	186	34 00	3 20	37 20
Whiting.....	569	304					813		813	162 60		162 60
Wool.....	3	15					18		18	2 70		2 70
All other goods and merchandise not enumerated.....	10,148	6,425					11,687	6,503	18,190	2,337 00	1,300 60	3,637 60
Bark.....							78					

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Total freight ordinarily subject to tolls (now exempt)	140,670	115,159	224,923	211,408	365,593	577,001	23,755 23	52,921 45	76,476 68
<i>Articles having passed down the full length of the Welland Canal, free:</i>										
Agricultural implements.....	.....	.....	.....	46	.....	46	46	.....	.....	.....
Asbes.....	2,206	.....	.....	14	.....	14	14	.....	.....	.....
Barley.....	61,402	.....	.....	51,821	.....	2,206	2,206	.....	.....	.....
Flax seed.....	2,318	.....	.....	1,325	.....	116,223	116,223	.....	.....	.....
Flour.....	101	.....	.....	16,050	.....	3,643	3,643	.....	.....	.....
Furniture.....	.....	.....	.....	3	.....	3	3	.....	.....	.....
Glass.....	.....	.....	.....	15	.....	15	15	.....	.....	.....
Iron, all other.....	20	.....	.....	2,522	.....	2,512	2,512	.....	.....	.....
Meal.....	348	.....	.....	.....	.....	348	348	.....	.....	.....
Merchandise.....	259	.....	.....	323	.....	582	582	.....	.....	.....
Molasses.....	.....	.....	.....	240	.....	240	240	.....	.....	.....
Nails.....	.....	.....	.....	19	.....	19	19	.....	.....	.....
Oats.....	1,646	.....	.....	792	.....	2,438	2,438	.....	.....	.....
Oil cake.....	.....	.....	.....	462	.....	462	462	.....	.....	.....
Oils.....	2,513	.....	.....	12,106	.....	14,619	14,619	.....	.....	.....
Paint.....	.....	.....	.....	5	.....	5	5	.....	.....	.....
Pease.....	.....	.....	.....	63	.....	63	63	.....	.....	.....
Rags.....	.....	.....	.....	4	.....	4	4	.....	.....	.....
Rush.....	.....	.....	.....	29	.....	20	20	.....	.....	.....
Rye.....	730	.....	.....	3,530	.....	4,260	4,260	.....	.....	.....
Salt.....	.....	.....	.....	132	.....	132	132	.....	.....	.....
Tallow.....	.....	.....	.....	3	.....	3	3	.....	.....	.....
Wheat.....	201,812	.....	.....	21,934	.....	226,746	226,746	.....	.....	.....
Whisky.....	.....	.....	.....	2	.....	2	2	.....	.....	.....
Coal, free per O.C.....	30	.....	.....	.....	.....	.....	.....	.....	.....	.....
Grand total freight.....	96,279	417,025	.....	339,354	211,438	756,379	967,817	.....	.....	.....
Total tolls on vessels.....	.....	.....	.....	.....	.....	.....	.....	6,567 32	6,748 75	13,286 07
passengers.....	.....	.....	.....	.....	.....	.....	.....	798 65	2,166 60	2,965 25
free goods—\$41,896 65.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total through tolls.....	.....	.....	.....	.....	.....	.....	.....	31,121 20	61,806 80	92,928 00

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
 OTTAWA, May 16, 1904.

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APPENDIX A—Continued

No. (A) 6.—GENERAL STATEMENT showing the Quantity of each Article of Way Freight transported on the St. Lawrence Canals, and the Amount of Tolls heretofore collected, now free, during the Season of Navigation in 1903—Continued.

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.	Amount of Tolls, Up.		Amount of Tolls, Down.	Total Amount of Tolls.		
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		%	cts.				
																%	cts.
Ashes, pot and pearl	125								125		125	34	59		34	59	
Apples.....	57	893			65				122	893	1,015	7	86	46	39	54	25
Agricultural products not enumerated, vegetables.	113	73							113	73	186	9	76	7	65	17	41
Agricultural products not enumerated, animal	1,857	300							1,859	300	2,159	80	52	19	64	100	16
Agricultural implements	115	61			2				115	61	176	14	75	3	15	17	90
Barley	6,823	2,052							6,949	2,052	7,013	294	11	2	42	296	53
Bricks	61	394					126		64	394	404			52	72	52	72
Bones	1,937	17							1,937	17	1,954	193	88	1	21	195	09
Brimstone	314								314		314			7	89	7	89
Buckwheat	2,107	417							2,107	417	2,524	154	59	16	46	171	05
Cement and water lime	24,874	27,912					3,513		25,387	27,912	53,309	993	31	1,287	39	2,280	70
Clay, lime and sand	55	5,538					15,198		55	25,820	25,875	6	19	1,417	76	1,417	76
Coal	1,173	113,808					2,517		1,173	116,325	117,498	61	09	2,976	79	3,037	88
Corn	59	364							59	364	423	2	63	25	82	28	45
Cattle											2			0	13	0	13
Cotton (raw)	145	5							145	5	150	22	41	0	25	22	66
Crockery and earthenware	36	4					6		42	4	46	2	94	0	40	3	34
Dye wood and dye stuffs.	117	8							117	8	125	11	06	0	32	11	38
Fish																	
Flax and hemp																	
Flour	1,472	11,611							1,472	11,644	13,116	104	06	557	62	661	68
Furniture	210	425							210	425	635	27	31	25	55	52	86
Gypsum	1,123								1,123		1,123	14	11			14	11
Glass (all kinds)	231	44							231	44	275	38	58	3	10	41	68
Hay (pressed)	5,055	2,379							5,055	2,379	7,434	189	87	137	13	347	00
Hogs	12	17							12	17	29	0	48	0	96	1	44
Horses	403	720							416	720	1,136	26	11	37	73	57	84

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Hides and skins, horns and hoofs.....	22	40					222	40	62	1 51	1 65	3 16
Ice.....	293	304				293	304		507	14 91	17 26	32 17
Iron, railway.....	522			672		1,194			1,191	77 49		77 49
" pig.....	22,871	1,180				22,871	1,180		24,051	1,044 98	51 84	1,096 82
" all other.....												
" ore.....												
Kryofite chemical ore and other ore, except iron.....	46	10				46	40		86	4 54	1 78	6 32
Lard and lard oil.....	68	371	12			80	371		57	4 91	16 41	21 33
Meat, all kinds.....	32	25				32	25		5	2 93	1 75	4 68
Meats, other than pork.....	5					5			36	6 57		6 57
Marble.....	36					36						
Manilla.....	409	134		121		521	134		658	64 96	6 70	71 66
Molasses.....	499	524				394	524		918	61 29	26 20	87 49
Nails.....	93	9,117	1			94	9,117		9,211	4 83	245 33	250 16
Oats.....	384	401		6		390	404		794	54 75	24 85	79 60
Oil (in barrels).....	16	9,417				16	9,417		9,433	1 57	470 83	472 40
Oil cake.....	9	408				9	408		117	0 68	10 52	11 20
Pease.....	70	75				70	75		145	3 71	5 50	9 30
Potatoes.....	295	500				295	500		795	26 89	25 50	52 39
Pork.....	144	86		81		225	86		311	25 90	5 20	31 10
Print.....	123	23				270	23		293	20 17	1 15	21 32
Pitch and tar.....	296	31		141		437	31		168	38 00	2 60	40 60
Rags.....	6	6,364				6	6,364		6,364		159 14	159 14
Rye.....	241	21				241	21		6,733	0 45	168 70	169 15
Flax seed.....	2,862	493		1,606		1,847	493		1,808	92 69	1 65	93 74
Resin.....	17	155		336		3,138	155		3,691	284 62	18 76	303 36
Salt.....	76					17			172	1 51	5 82	7 33
Stone intended for cutting.....						76			76	4 32		4 32
" wrought.....												
" not suitable for cutting, unwrought.....												
Seeds, all kinds.....	5,690	40				5,690	40		9,803	214 79	196 65	196 65
Sheep.....	33	78				33	78		101	0 96	5 96	6 13
Soda ash.....	5	5				5	5		37	4 88	0 25	5 13
Steel.....	4,139	9				4,139	9		4,148	162 01	1 13	163 14
Sugar.....	689	239		56		745	239		984	98 99	12 35	111 54
Spirits, beer, &c.....	1,282	198				1,282	198		1,480	151 12	12 30	163 42
Tobacco, raw.....	13	6				13	6		19	1 28	0 24	1 52
Tallow.....												
Tu.....	158	7				158	7		165	21 10	1 10	22 20
Turpentine.....	28	2		42		70	2		72	7 24	0 10	7 34
Wheat.....	243	180,315				243	180,315		189,358	18 23	1,508 18	4,526 41
White lead.....	151	18				151	18		169	25 75	2 25	29 00
Whiting.....	21	1				21	1		22	3 90	0 05	3 95
Wool.....	2					2			2	0 15		0 15
All other goods and merchandise not enumerated.....	7,250	4,108	8	247	810	10,238	4,932	4,922	15,170	922 86	333 15	1,256 01
Bark.....												

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No. (A) 6. GENERAL STATEMENT showing the Quantity of Way Freight transported on the St. Lawrence Canals, and the Amount of Tolls collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls, Up.	Amount of Tolls, Down.	Total Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.				
Barrels empty.....		67							728	67	795	\$ 48 72	\$ 4 97	\$ 53 69
Boat knees.....														
Boats.....	7,506	2,302							7,506	2,302	9,808	125 10	59 34	184 44
Pirewood, in vessels.....														
" rafts.....														
Hoops.....	2								2		2	0 10		0 10
Hop poles.....	33,377	8,543					67	278	33,655	8,610	42,265	917 56	284 58	1,202 14
Lumber, sawn, in vessels.....		1,156								1,156	1,156		35 22	35 22
" rafts.....														
Masts, spars and telegraph poles, in vessels.....														
Masts, spars and telegraph poles, in rafts.....		20,518								20,518	20,518		512 95	512 95
Railway ties, in vessels.....														
" rafts.....														
Saw logs.....														
Staves and headings, barrel		11								11	11		0 42	0 42
" pipe.....														
" West India														
Staves, salt barrel.....														
Shingles.....	4	70							4	70	74	0 75	14 53	15 28
Split posts and fence rails, in vessels.....		10								10	10		1 00	1 00
Split posts and fence rails, in rafts.....														
Timber, square, in vessels.....	2,240	3,117							2,240	3,117	5,357	56 00	79 26	135 26
" rafts.....														
Traverses.....														
Woodenware and wood partly manufactured.....	4	5							4	5	9	0 80	1 00	1 80

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Total freight heretofore paying tolls, now free....	235,674	434,742	2,248	338	5,661	9,867	18,029	148,127	458,432	606,559	6,911 98	14,033 26	20,945 24
<i>Free articles, having paid full tolls on Welland Canal:—</i>													
Corn.....	266						7,375		7,641	7,641			
Coal, free, per Order in Council.....	90,898	157			8,134			99,032	157	99,189			
Grand total way freight....	326,572	435,165	2,248	338	5,661	18,001	25,404	247,159	466,230	713,389			
<p style="text-align: center;">Total tolls on vessels.....</p> <p style="text-align: center;"> " passengers.....</p> <p style="text-align: center;"> " free goods.....</p>													
											4,430 83	2,588 03	7,018 86
											996 94	1,300 43	2,297 37
											12,339 75	17,921 72	30,261 47
											Total way tolls... ..		

DEPARTMENT OF RAILWAYS AND CANALS.
OTTAWA, May 16, 1904.

RICHARD DEVLIN.
Compiler of Canal Statistics.

No. (A) 7.—GENERAL STATEMENT showing the Quantity of each Article transported on the Ottawa Canals, and the Amount of Revenue Collected, &c.—*Concluded.*

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.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Hop poles.....												\$ cts.
Lumber, sawn, in vessels.....		293,927		38,636							332,563	23,501 60
" " rafts.....		400									100	42 00
Masts, spars and telegraph poles, in vessels.....												
" " rafts.....												
Railway ties, in vessels.....		139									139	12 41
" " rafts.....												
Saw logs.....	50									50	723	17 00
Staves and headings, barrel.....												
" " pipe.....												
" " West India.....												
Staves, salt barrel.....												
Shingles.....											14	2 68
Split posts and fence rails, in vessels.....												
" " rafts.....												
Timber, square, in vessels.....		2,160									2,160	30 71
" " rafts.....		1,454									1,454	16 29
Traverses.....												
Woodenware and wood partly manufactured.....												
Total freight paying tolls.....	922	368,711		38,990					922	407,701	408,923	26,382 62
<i>Free per Order in Council.</i>												
Floats.....												
Lumber, sawn, in rafts.....		15,330									15,330	
Timber, square, " " rafts.....		120									120	
" " rafts.....		12,400									12,400	
Freight, grand total.....	922	396,561		38,990					922	436,551	430,473	

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Total tolls, on vessels.....	2,827 24
" passengers.....	219 35
" free goods.....	\$ 335 19
Total tolls.....	29,439 21
Other receipts.....	29,439 21
Total revenue exclusive of hydraulic rents.....	29,439 21

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

RICHARD DEVLIN,
Compiler of Canal Statistics.

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APPENDIX A—Continued.

No. 8 (A).—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly Canal, and the Amount of Revenue heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			
													% cts.
Ashes, pot and pearl.													
Apples.	6	686							6	693	699	47 64	
Agricultural products not enumerated, vegetables.		4								4		40	
" " animal.													
" " "	75	14							75	14	89	3 75	
Agricultural implements.													
Barley.	1								21	17	38	2 41	
Bricks.				20						3	3	20	
Bones.													
Brunstone.													
Buckwheat.													
Cement and water lime.	1,679								1,679	23	1,702	114 25	
Clay, lime and sand.	120								120	23,318	23,438	1,843 13	
Coal.	884	26							884	79,010	79,894	7,779 94	
Corn.		17								17	170		
Cattle.		9								2	178	187	6 57
Cotton (raw).													
Crockery and earthenware.		51								51	51	5 10	
Dye wood and dye stuffs.										33	33	3 30	
Fish.													
Flax and hemp.													
Flour.	908	12							908	47	955	33 45	
Furniture.										4	4	40	
Gypsum.													
Glass (all kinds).													
Hay (pressed).	177	3,943		30,494					30,671	4,185	34,856	2,879 46	
Hogs.													
Horses.	15	22							15	22	37	1 35	
Hides and skins, horns and hoofs.													
Ice.													
Iron, railway.	35								35	334	369	34 59	

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" pig	8	538	838	338	33 80
" all other				8	54
Iron ore, Kyrolic chemical ore and other ore, except iron		1,999	1,999	1,999	99 35
Lard and lard oil		348	348	348	16 68
Meat, all kinds					
Meats, other than pork					
Marble					
Manilla	51	124	124	175	14 16
Molasses	52	2	2	54	1 88
Nails	3	1,314	1,314	1,317	43 97
Oats	97	2	11	108	4 19
Oil (in barrels)					
Oil cake					
Pears	13		13	13	41
Potatoes	5		5	6	21
Pork	5		5	5	19
Paint					
Pitch and tar		2,018	2,018	2,018	201 80
Rags					
Rye					
Flax seed					
Resin					
Salt	148	2,482	2,482	2,482	296 62
Stove intended for cutting wrought	3	504	507	655	55 49
" wrought, not suitable for cutting, unwrought					
Seeds, all kinds	6				
Sheep					
Soda ash	150		150	150	20
Steel					
Sugar	77	56	60	137	8 38
Spirits, beer, etc					
Tobacco (raw)					
Tallow					
Tin					
Turpentine		42	42	42	4 20
Wheat					
White lead					
Whiting					
Wool					
All other goods and merchandise not enumerated	1,606	1,773	3,564	2,403	467 05
Bark					
Boat knees	17		15	82	1 31
Boards empty					
Boat knees					
Fire wood, in vessels	483			483	5,188 29
" ratts					
Hoops					
Hop poles					

No. 8 (A).—GENERAL STATEMENT showing the Quantity of each Article transported on the Chambly Canal, &c.—*Concluded.*

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.	Amount of Tolls, cts. \$
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
	Lumber, sawn, in vessels	476	25	29,430				110	135	29,906			135	30,041	1,764 83
" rafts												
Masts, spars, and telegraph poles, in vessels												
" rafts	*	63								63	63	2 10
Railway ties, in vessels			1,238						1,238		1,238	98 81
" rafts												
Saw logs												
Staves and headings, barrels												
" pipe												
" West India												
Staves, salt barrel									91		91	20 77
Shingles	83		8									
Split posts and fence rails, in vessels												
" rafts							700			744	744	27 49
Timber, square, in vessels		44								256	256	8 55
" rafts		256										
Traverses												
Woodenware and wood partly manufactured												
Total freight	6,534	7,475	218,567				113,495	225,101	225,101	121,470	346,571	21,124 69
Total tolls on vessels	Total tolls on vessels.....											
" passengers	" passengers.....											
	Total toll.....											
* Damages	* Damages.....											
Fines	Fines.....											
Other receipts	Other receipts.....											
	Total revenue, exclusive of hydraulic rents.....											

* Amount of damages, not included in above, \$5.

APPENDIX A—Continued.

No. 9—GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal, and the Amount of Revenue heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl.									28	53	81	2 18
Apples.	28	53							5	9	14	0 40
Agricultural products not enumerated, vegetables.	5	9							181	1,970	2,051	162 60
" " annual.	181	1,910							105	111	216	22 93
Agricultural implements.	105	111							40	40	80	0 94
Barley.									139	84	223	5 78
Bricks.												
Bones.												
Brimstone.												
Buckwheat.	2										2	0 65
Cement and water lime.	515	366							515	366	881	23 27
Clay, fine and sand.	3,638	5,236							3,638	5,236	8,874	207 56
Coal.		1,163									7,082	280 13
Corn.	4	107							4	107	111	2 69
Cattle.	1								1		1	0 63
Cotton (raw).												
Crockery and earthenware.	12	20							12	20	32	2 88
Dye wood and dye stuffs.	2								2		2	0 18
Fish.	91								91		91	2 16
Flax and hemp.	2								2		2	0 05
Floor.	181	357							181	357	538	13 61
Furniture.	54	54							54	54	108	9 83
Gypsum.												
Grass (all kinds).	58	8							58	8	66	5 88
Hay (pressed).	1,125	75							1,125	75	1,200	33 34
Hogs.												
Horses.												
Hides and skins, horns and hoofs.	7	9							7	9	16	0 46
Ice.	4								4		4	0 11
Iron, railway.												
" pig.	1								1		1	0 66
" all other.	173								173		173	4 31
Iron ore.	502	41							502	41	543	14 63

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No. (A) 9. — GENERAL STATEMENT showing the Quantity of each Article transported on the Rideau Canal, &c. — *Continued.*

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.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Kryolite, chemical ore and other ore, except iron												
Lard and lard oil	27	1							27	1	28	86
Meat, all kinds	43	107							43	107	150	3 78
Meats, other than pork	8	9							8	9	17	50
Manilla												09
Molasses	56	8							56	8	64	5 62
Nails	117	8							117	8	125	12 89
Oats	227	707							227	707	934	37 25
Oil (in barrels)	178	118							178	118	296	26 35
Oil cake		6								6	6	24
Pease												
Potatoes	16	17							16	17	33	1 02
Pork	100	3							100	3	103	2 55
Paint	41	1							41	1	42	1 17
Pitch and tar	9								9		9	81
Rags	5	16							5	16	21	1 87
Rye												
Flax seed												
Rosin												
Salt	1,993	296							1,993	296	2,289	63 72
Stone intended for cutting		3								3	3	07
" wrought	7								7		7	62
" not suitable for cutting, unwrought												
Seeds, all kinds	23								23		23	66
Sheep		2								2	2	05
Soda ash	19								19		19	1 65
Steel	72	13							72	13	85	2 04
Sugar	165	145							165	145	310	29 85
Spirits, beer, &c	171	51							171	51	222	19 79
Tobacco (raw)		11								11	11	33
Tallow		7								7	7	17
Tin	3	1							3	1	4	36
Turpentine	2								2		2	18
Wheat	5	863							5	863	868	20 31
White lead	72								72		72	6 96

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Whiting.....	10	1	10	1	10	1	10	1	10	97
Wood.....	1	517	1	1	1	1	1	1	2	66
All other goods and merchandise not enumerated.....	1,431		1,431	547	1,978	1,431	547	1,978	182	91
Bark.....	6		6		6	6		6	52	52
Barrels, empty.....	1	81	1	84	85	1	84	85	6	37
Boat knees.....	200		200		200	200		200	3	50
Planks.....	8,274	534	8,424	534	8,958	8,424	534	8,958	172	10
Firewood, in vessels.....	81		81		81	81		81	1	71
Hoops.....										
Hop poles.....										
Lumber, sawn, in vessels.....	2,501	7,455	4,061	13,772	17,833	4,061	13,772	17,833	1,301	25
rafts.....										
Masts, spars, and telegraph poles, in vessels.....		220		220	220		220	220		8
rafts.....	294	300	497	300	497	497	300	497	15	00
Saw-logs.....		307		307	307		307	307		52
Staves and headings, barrels.....										09
" pipe.....										7
" West India.....										00
Staves, salt barrel.....										
Shingles.....	195	76	195	76	271	195	76	271	71	19
Split posts and fence rails, in vessels.....										
rafts.....										
Timber, square, in vessels.....	400		400		400	400		400	7	48
rafts.....	20		20		20	20		20	13	13
Traverses.....	5		5		5	5		5	44	44
Woodenware and wood partly manufactured.....										
Total freight paying tolls.....	23,830	21,610	1,913	6,317	60,782	25,743	33,039	60,782	2,883	09
Coal, free, per Order in Council.....	338		338		338	338		338		
Grand total, freight.....	24,168	21,610	1,913	6,317	61,120	26,081	33,039	61,120		

Total tolls on vessels.....
 " passengers.....

Total tolls.....
 Total tolls on free coal.....

Winterage.....
 Other receipts.....

Total revenue, exclusive of hydraulic rents.....

DEPARTMENT OF RAILWAYS AND CANALS,
 OTTAWA, May 16, 1904.

RICHARD DEVLIN,
 Compiler of Canal Statistics.

1,743 97
 373 61
 4,999 77
 91 00
 65 00
 5,156 77

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APPENDIX A—Continued.

No. 10.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peter's Canal and the Amount of Revenue heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl.....												
Apples.....	134								134		134	1 34
Agricultural products not enumerated, vegetables.....	131								131		131	1 31
" " animal.....	6								6		6	0 06
Agricultural implements.....	21								21		21	0 21
Barley.....	16								16		16	0 16
Bricks.....	1,284								1,284		1,284	12 84
Bones.....												
Brinstone.....	2								2		2	6 02
Buckwheat.....	470	1,326							470	1,326	1,796	17 96
Cement and water lime.....		84								84	84	0 84
Clay, lime and sand.....	397	37,363							397	37,363	37,760	377 60
Coal.....	21	252							21	252	273	2 73
Corn.....	13								13		13	0 13
Cattle.....												
Cotton (raw).....	21	5							21	5	26	0 26
Crockery and earthenware.....												
Dye wood and dye stuffs.....	421	3,240				375			421	3,615	4,036	40 36
Fish.....												
Flax and hemp.....	2,234								2,234		2,234	22 34
Flour.....	19	12							19	12	31	0 31
Furniture.....												
Gypsum.....	17	375							17	375	375	3 75
Glass (all kinds).....												
Hay (pressed).....	1,026								1,026		1,026	10 26
Hogs.....												
Horses.....												
Hides and skins, horns and hoofs.....												
Ice.....												
Iron, railway.....	212								212		212	2 12
" pig.....		10								10	10	0 10
" all other.....	221	47							221	47	268	2 68

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Iron ore.....	11	5	11	5	0 05
Kryolite-chemical ore and other ore, except iron.....	10	10	10	10	0 11
Lard and lard oil.....	793	793	793	793	0 10
Meal, all kinds.....	89	89	89	89	7 93
Meat, other than pork.....	50	50	50	50	0 85
Marble.....	31	31	31	31	0 50
Mantilla.....	328	328	328	328	0 31
Molasses.....	143	143	143	143	3 30
Nails.....	2,996	2,996	2,996	2,996	1 43
Oats.....	466	466	466	466	29 96
Oil (in barrels).....	6,087	6,087	6,087	6,087	5 50
Oil cake.....	132	132	132	132	60 87
Pease.....	11	11	11	11	1 32
Potatoes.....	6	6	6	6	0 11
Pork.....	112	112	112	112	1 18
Paint.....					
Pitch and tar.....					
Rags.....					
Rye.....					
Flax seed.....					
Resin.....					
Salt.....	633	633	633	633	6 48
Stone intended for cutting.....	145	145	145	145	1 45
" wrought.....	5,381	5,381	5,381	5,381	53 81
" not suitable for cutting, unwrought.....	4	4	4	4	0 04
Seeds, all kinds.....	6	6	6	6	0 06
Sheep.....	225	225	225	225	2 25
Soda ash.....	214	214	214	214	2 16
Steel.....	18	18	18	18	0 18
Sugar.....	3	3	3	3	0 03
Spirits, beer, &c.....	122	122	122	122	1 22
Tobacco (raw).....	2	2	2	2	0 02
Tallow.....					
Tin.....					
Turpentine.....					
Wheat.....					
White lead.....					
Whiting.....					
Wool.....					
All other goods and merchandise not enumerated.....	1,171	1,171	1,171	1,171	11 86
Bark.....	13	13	13	13	0 13
Barrels, empty.....	69	69	69	69	1 06
Boat knees.....					
Floats.....					
Firewood, in vessels.....	316	316	316	316	3 46
" rafts.....					
Hoops.....					
Hop poles.....					
Lumber, sawn, in vessels.....	17,052	17,052	17,052	17,052	176 39
" " rafts.....	587	587	587	587	17 39

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No. (A) 10.—GENERAL STATEMENT showing the Quantity of each Article transported on the St. Peter's Canal, &c.—*Concluded.*

Articles.	From Canadian to Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		Tons.		Total Tons.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Masts, spars and telegraph poles, in vessels.....	28	210					28	210	238	2 38
" " rafts.....										
Railway ties, in vessels.....	160						160		160	1 60
" " rafts.....										
Saw-logs.....		270						270	270	2 70
Staves and headings, barrel.....	15						15		15	0 15
" " pipe.....										
" " West India.....										
Staves, salt barrel.....	465						465		465	4 65
Shingles.....	879	1,215					879	1,215	2,094	20 94
Split posts and fence rails, in vessels.....										
" " rafts.....	434	47					434	47	481	4 81
Timber, square, in vessels.....										
" " rafts.....										
Traverses.....										
Woodenware and wood partly manufactured.....										
Total freight paying tolls.....	39,427	51,062					39,427	51,437	90,864	908 64
Total tolls on vessels.....									2,384 70	
Other receipts.....									8 00	
Total receipts.....									3,301 34	

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

SESSIONAL PAPER No. 20

APPENDIX A—Continued.

No. (A) 11.—GENERAL STATEMENT showing the Quantity of each Article transported on the Trent Valley Canals, and the Amount of Revenue heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Ashes, pot and pearl.												cts.
Apples												
Agricultural products not enumerated, vegetables.												
" " annual												
Agricultural implements.												
Barley		6								6		0 18
Bricks	60									60		0 60
Bones												
Brimstone												
Buckwheat												
Cement and water lime												
Clay, lime and sand												
Coal												
Corn												
Cattle												
Cotton (raw)												
Crockery and earthenware												
Dye wood and dye stuffs												
Fish												
Flax and hemp												
Flour	2								2			
Furniture		1								1		
Gypsum												
Glass (all kinds)												
Hay (pressed)												
Hugs		219							219			2 19
HOPS												
Hides and skins, horns and hoofs												
Ice												
Iron, railway												

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Turpentine	1,226				1,226	12 26
Wheat						
White lead						
Whiting						
Wool						
All other goods and merchandise not enumerated	10	103			103	3 29
Bark	68	38			68	4 15
Barrels, empty						
Boat knees						
Floats	2,301	9,728			2,301	98 39
Fire wood, in vessels	10,481	4,065			10,481	253 92
" rafts						
Hoops						
Hop poles						
Lumber, sawn, in vessels	2,804	278			2,804	51 51
" rafts	492	885			492	30 00
Masts, spars and telegraph poles, in vessels						
" rafts						
Railway ties, in vessels	880				880	17 40
" rafts						
Saw logs						
Staves and headings, barrel	6,894	598			6,894	62 99
" pipe						
" West India						
Staves, salt barrel						
Shingles	9	9			9	2 55
Split posts and fence rails, in vessels						
" rafts						
Timber, square, in vessels	357				357	2 12
" rafts		50			50	0 70
Traverses						
Woodenware and wood partly manufactured						
Total, freight paying tolls	26,094	16,313			26,094	545 13

Total tolls on vessels..... 710 55
 " passengers..... 252 39

Total tolls..... 1,508 07

Other receipts..... 25 00

Total revenue exclusive of hydraulic rents..... 1,533 07

RICHARD DEVLIN,
 Compiler of Canal Statistics.

4-5 EDWARD VII., A. 1905

APPENDIX A—Continued.

No. (A) 12.—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray Canal and the Amount of Revenue heretofore collected, now free, during the Season of Navigation in 1903.

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.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
	Ashes, pot and pearl.....	3								3				3	0 08
Apples.....	832	517							832	517	1,349	25 41
Agricultural products not enumerated, vegetables.....	316	381							316	381	697	13 31
" " annual.....	57	125							57	125	182	3 53
Agricultural implements.....	3	11							3	11	14	0 36
Barley.....		1,004								1,004	1,004	18 85
Bones.....	207		17						224		224	4 23
Brimstone.....												
Buckwheat.....		91							1	91	92	1 74
Cement and water lime.....	114	6	17						131	6	137	2 59
Clay, lime and sand.....	20								20		20	0 39
Coal.....	30	409					618		30	1,027	1,057	19 85
Corn.....	4	8							4	8	12	0 24
Cattle.....												
Cotton (raw).....	107	207							107	207	314	7 91
Crockery and earthenware.....	28	4							28	4	32	0 83
Dye wood and dye stuffs.....												
Fish.....												
Flax and hemp.....	28	45							28	45	73	1 40
Flour.....	105	163							105	163	268	6 93
Furniture.....												
Gypsum.....	506	171	58						504	171	735	18 44
Glass (all kinds).....												
Hay (pressed).....												
Hogs.....	1	3	4						5	3	8	0 16
Horses.....												
Hides and skins, horns and hoofs.....	36								36		36	0 69
Ice.....												
Iron, railway.....	648	288							648	288	936	17 63

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No. (A) 12.—GENERAL STATEMENT showing the Quantity of each Article transported on the Murray Canal, &c.—Continued.

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.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
Lumber, sawn, in vessels.....	1,183	601	1,257						2,440	601	3,041	34 20
" rafts.....									24		24	0 16
Masts, spars, and telegraph poles, in vessels.....												
" rafts.....			1,001								1,001	10 01
Railway ties, in vessels.....												
" rafts.....												
Saw-logs.....												
Staves and headings, barrel.....												
" pipe.....												
" West Indies.....												
Staves, salt barrel.....												
Shingles.....												
Split posts and fence rails, in vessels.....									51		51	4 17
" rafts.....												
Timber, square, in vessels.....												
" rafts.....												
Traverses.....												
Woodenware and wood partly manufactured.....												
Grand total freight.....	12,118	11,585	6,066					620	18,184	12,205	30,389	575 46
Total tolls on vessels.....												261 21
" passengers.....												298 31
* Damages.....												1,134 98
Total revenue exclusive of hydraulic rents.....												1,134 98

* Amount of damages not included in above \$20.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.RICHARD DEVLIN,
Compiler of Canal Statistics.

4-5 EDWARD VII., A. 1905

No. (A) 13.—GENERAL STATEMENT showing the Quantity of each Article transported on the Sault Ste. Marie Canal, &c.—Continued.

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.		Total.		Total Tons.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	
	Iron, railway.....	40,692	105			1,708		5,647	110	48,047		215	48,262
" pig.....	585			1,000		13,883	153		738	14,883	15,621
" all other.....	7,477	563		3,438		3,326		300	8,602	7,627	16,229
Iron ore.....		31,034		180,075	750	2,410,739	500	60,402	1,250	2,682,250	2,683,500
Kryolite chemical ore and other ore, except iron.....		20				17,408			2	17,491	17,491
Lard and lard oil.....											
Meal, all kinds.....	23	81				14,302			23	14,383	14,406
Meats, other than pork.....											
Marble.....											
Manilla.....	999								999		999
Molasses.....	220								220		220
Nails.....	4,164	17			950				5,114	17	5,131
Osas.....	32	19,552				15,280		425	32	35,257	35,289
Oil (in barrels).....	515	4			68				706	4	710
Oil cake.....		80				550		946		1,576	1,576
Pease.....											
Potatoes.....	92	5				130			92	135	227
Pork.....	4								4		4
Paint.....	219								219		219
Pitch and tar.....	66								66		66
Rags.....											
Rye.....											
Flax seed.....		3,931				2,725				2,725	2,725
Resin.....	1					51,724		6,105	1	67,760	67,760
Salt.....	7,224		1,793	43	11,576				20,636	43	20,679
Stone intended for cutting.....			30						30		30
" wrought.....	2				1,072				2		2
" not suitable for cutting, unwrought.....									1,072	54	1,072
Seeds, all kinds.....	37	54							37	54	91
Sheep.....											
Soda ash.....	38								38		38
Steel.....	327	17			160		1,000	52	1,487	69	1,556
Sugar.....	1,530				915				2,445		2,445

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Spirits, beer, &c	1,089									1,119		1,191
Tobacco (raw)												
Tallow	197									197		197
Tin	1									1		1
Turpentine	659,849			104,385						81,971		967,018
Wheat	141									141		141
White lead												
Whiting												
Wool	179											
All other goods and merchandise not enumerated.	69,596	2,417	30,343	1,052	39,651					421		2,061
Bark		84										84
Barrels, empty		35										35
Boat knees												
Floats												
Firewood, in vessels		30		325								
" rafts		44										
Hoops												
Hop poles												
Lumber, sawn, in vessels	349	133		30,803	834	18,835				1,183	49,861	51,044
" rafts												
Masts, spars and telegraph poles, in vessels	10									10		10
" rafts		89								60	89	149
Railway ties, in vessels												
" rafts		4										
Saw logs	379	6,375	21		1,970	938				2,370	7,617	9,987
Staves and headings, barrels												
" pipe												
" West India												
Staves, salt barrel												
Shingles	10	15				11,254				10	11,672	11,682
Split posts and fence rails, in vessels				1								
" rafts												
Timber, square, in vessels		240		1,000							3,360	3,360
" rafts		5									5	5
Traverses												
Woodenware and wood partly manufactured		66									66	66
Total freight paying tolls	151,656	844,238	34,458	332,468	713,848	2,904,081	350,659	180,460	1,250,621	4,261,247	5,511,868	

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

RICHARD DEVLIN,
Comptroller of Canal Statistics.

4-5 EDWARD VII., A. 1905

APPENDIX

No. (A.) 14.—STATEMENT of Traffic on the undermentioned Canals, and the amount

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Class No. 1.</i>		\$ cts.		\$ cts.		\$ cts.
Canadian vessels, steam	362,477	5,662 84	874,081	6,124 74	77,898	259 70
United States vessels, steam	510,127	7,658 09	179,483	1,208 06	434	7 34
Canadian vessels, sail.	102,819	2,198 82	1,252,007	12,081 72	32,550	452 24
United States vessels, sail	61,573	1,370 85	81,642	890 41	232,126	2,882 47
Total, Class No. 1.	1,036,996	16,890 60	2,387,213	20,304 93	343,008	3,601 75
<i>Class No. 2.</i>	No.		No.		No.	
Passengers.	1,479	145 04	109,506	5,362 62	2,182	32 80
<i>Class No. 3.</i>	Tons.		Tons.		Tons.	
Bricks.	200	23 68	8,371	500 23	38	2 41
Brimstone.			2,014	204 09		
Cement and water lime.	1	0 15	9,029	1,146 80	1,702	114 25
Clay, lime and sand.	2,363	168 03	53,837	2,364 40	23,438	1,843 13
Fish.	36	5 40	145	14 38		
Gypsum.			1,123	14 11		
Iron, railway.	488	73 95	43,477	6,477 67	369	34 59
" pig.	177	26 55	4,436	563 79	338	33 80
" all other.	5,230	897 96	86,116	2,906 57	8	0 54
Steel.	754	100 23	5,787	408 99		
Salt.	2,554	479 00	5,407	560 76	655	55 49
Stone for cutting.			172	7 33		
Apples.			7,992	1,100 85	699	47 64
Barley.	14,656	1,465 60	7,095	555 75		
Buckwheat.			802	56 69		
Corn.	210,758	21,075 80	125,701	4,007 38	17	1 70
Cotton, raw.			25	3 58		
Flax and hemp.	1,905	285 50	83	12 45		
Flour.	25,998	4,540 63	17,762	1,358 58	955	33 45
Hay, pressed.			7,434	347 00	34,856	2,879 46
Meals, all kinds.	13,909	2,781 28	595	42 95		
Oil cake.	1,994	398 80	9,441	473 60		
Oats.	7,911	802 96	17,033	1,032 36	1,317	43 97
Pease.	85	8 50	1,346	104 85	13	0 44
Potatoes.			148	9 75	6	0 21
Rye.	4,904	490 40	8,693	392 04		
Flax seed.	3,643	364 30	6,759	170 05		
Seeds, all kinds.	60	10 35	6,311	303 74	6	0 20
Tobacco, raw.			44	5 27		
Wheat.	259,031	25,971 01	204,363	6,918 91		
All other agricultural products, vegetable.	1	0 20	2,359	343 36	4	0 40
Bones.			394	52 72	3	0 20
Cattle.			423	28 45	187	6 57
Hogs.			29	1 44		
Hides and skins, horns and hoofs.			73	4 81		
Horses.	2	0 40	1,217	69 99	37	1 35
Lard and lard oil.	9	1 35	505	69 17		
Meats (other than pork).	1	0 15	89	9 48		
Pork.	159	31 45	883	65 59	5	0 19
Sheep.			101	6 92	150	5 15
Tallow.	106	16 80	2	0 30		
Wool.	482	96 40	20	2 85		
All other agricultural products, animal.	1	0 15	5,234	561 41		
Total, Class No. 3.	557,418	60,116 90	602,890	33,281 41	64,803	5,105 14

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A—Continued.

of Tolls hitherto collected, now free, during the season of Navigation in 1903.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	§ cts.		§ cts.		§ cts.		§ cts.		§ cts.	
204,503	212 16	136,819	887 94	122,697	960 07	43,778	875 60	121,075	636 40	1,440,458
862	3 61			1,355	22 86	684	13 68			2,869,955
9,516	41 73	117,086	1,639 13	37,508	604 48	74,526	1,493 21	27,553	74 15	175,481
699	3 71	12,559	300 17	8,019	155 66	105	2 21			276,822
215,580	261 21	266,464	2,827 24	169,579	1,743 07	119,073	2,384 70	148,628	710 55	4,762,746
No.		No.		No.		No.		No.		No.
24,345	298 31	16,424	219 35	15,501	373 61			34,976	252 39	32,410
Tons.		Tons.		Tons.		Tons.		Tons.		Tons.
224	4 23	2	0 12	223	5 78	1,284	12 84	60	0 60	684
137	2 59	176	3 52	881	23 27	1,796	17 96			14,878
20	0 39	13,173	771 41	8,874	207 56	84	0 84			15,435
		5	0 30	91	2 16	4,036	40 36			1,280
						375	3 75			
936	17 63			2	0 06	212	2 12			48,262
29	0 55			173	4 31	10	0 10			15,621
1,212	22 93	67	4 37	543	14 63	268	2 68	5	0 05	16,229
321	6 10	6	0 51	85	2 04	6	0 06			1,556
612	11 53			2,289	63 72	648	6 48			20,679
9	0 17			3	0 07	145	1 45			30
1,349	25 41	249	14 69	81	2 18	134	1 34			2,976
1,004	18 85			40	0 94	16	0 16			28,192
92	1 74	7	0 69	2	0 05	2	0 02			1,248
12	0 24			111	2 69	273	2 73			1,260
20	0 38			2	0 05					1,765
73	1 40	78	6 20	538	13 61	2,234	22 34			312,210
		3,422	322 98	1,500	35 34	1,026	10 26			1,891
129	2 50			150	3 78	793	7 93	7	0 07	14,406
1	0 02			6	0 24					1,576
206	3 88	935	84 27	934	37 25	2,906	29 96			35,289
198	3 72	1	0 06					291	2 91	
8	0 16	295	19 39	33	1 02	6,087	60 87			227
350	6 57									2,725
										67,760
336	6 43	1	0 10	23	0 66					91
				11	0 33	18	0 18			
782	14 70			868	20 31			1,226	12 26	967,018
697	13 31	13	1 14	14	0 40	131	1 31			
		5	0 30							
		586	46 73	1	0 03	13	0 13			26
		135	10 53					219	2 19	1
36	0 69	17	1 70	4	0 11					135
8	0 16	259	13 68	16	0 46					34
248	4 73			28	0 86	10	0 10			2
33	0 65			17	0 50	89	0 89			
20	0 38	7	0 65	103	2 55	132	1 32			4
		430	37 38	2	0 05	4	0 04			
30	0 58	11	1 08	7	0 17	3	0 03			
36	0 71			2	0 06					2,061
182	3 53	3,119	271 92	2,091	162 60	6	0 06			
9,350	176 80	2,990	1,613 52	19,748	609 84	22,831	228 31	1,808	18 08	1,575,551

4-5 EDWARD VII., A. 1905

APPENDIX

No. (A) 14.—STATEMENT of Traffic on the undermentioned Canals, and the amount

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Class No. 4.</i>		\$ cts.		\$ cts.		\$ cts.
Ashes, pot and pearl.	14	2 80	177	44 99		
Agricultural implements.	46	9 20	183	19 30	89	3 75
Crockery and earthenware	159	23 85	430	78 66	51	5 10
Dye woods and dye stuffs.			68	7 74	33	3 30
Furniture.	13	2 60	1,966	319 06	4	0 40
Glass (all kinds)	55	9 00	2,839	554 48		
Marble	1,460	219 00	7	0 70		
Manilla.			77	14 77		
Molasses.	322	61 10	660	72 06	175	14 16
Nails	1,054	159 05	5,048	913 49	54	1 88
Oil (in barrels).	17,508	3,483 05	2,480	416 80	108	4 19
Paint.	52	8 05	1,519	272 70		
Pitch and tar.			474	57 52	2,018	291 80
Rags	4	0 80	637	74 40		
Resin.	20	4 00	1,931	106 34	2,482	296 62
Soda ash	32	4 80	1,368	271 33		
Sugar.	1,435	215 25	2,814	477 54	137	8 33
Stone (wrought).			83	5 72		
Tin.			861	161 40		
Turpentine.			73	7 54	42	4 20
White lead.			355	66 20		
Whiting.			835	166 55		
Whisky and all other spirits.	407	61 30	2,474	362 22		
Merchandise (not enumerated)	34,643	5,262 01	33,360	4,893 61	5,967	467 05
Total, Class No. 4	57,224	9,525 86	60,719	9,365 12	11,160	1,010 83
<i>Class No. 5.</i>						
Bark						
Barrels, empty.			1,339	161 61	32	1 31
Boat knees						
Floats						
Firewood, in vessels.	3,705	178 99	120,457	7,561 04	155,902	5,188 29
" in rafts.						
Lumber, sawn, in vessels.	85,592	15,253 15	42,687	1,240 09	30,041	1,764 83
" in rafts	3	0 45	1,156	35 22		
Hoops.						
Railway ties, in vessels.	688	85 00			1,238	98 81
" in rafts			611	48 88		
Masts, spars and telegraph poles, in vessels	7	0 50				
Masts, spars and telegraph poles, in rafts			20,518	512 95	63	2 10
Square timber, in vessels.	26,324	3,948 60	860	35 50	744	27 49
" in rafts			5,357	135 26	256	8 55
Woodenware and wood partly manufactured			45	16 20		
Shingles.	54	38 46	74	15 28	91	20 77
Split posts and fence rails, in vessels.			10	1 00		
" in rafts.						
Saw-logs.	1,711	82 62				
Staves and headings, barrel			81	14 42		
" " pipe.						
" " West India						
" " salt barrel.						
Traverses						
Hop poles			2	0 10		
Total, Class No. 5.	118,084	19,587 77	193,197	9,777 55	188,367	7,112 15

SESSIONAL PAPER No. 20

A—Continued.

of Tolls hitherto collected, now free, during the Season of Navigation in 1903.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canals		Trent Valley Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.	
3	0 08									
14	0 36	14	2 07	216	22 93	21	0 21	6	0 18	
314	7 91	39	7 18	32	2 88	26	0 26			349
32	0 83	2	0 38	2	0 18					
268	6 93	100	12 10	108	9 83	31	0 31	3	0 05	182
735	18 44	81	14 46	66	5 88	17	0 17			957
4	0 10					50	0 50			
				1	0 09	31	0 31			999
5	0 13	1	0 14	64	5 62	330	3 30			220
225	5 67	2	0 28	125	12 89	143	1 43			5,131
1,297	32 53	6	1 04	296	26 35	550	5 50			710
800	20 08	2	0 38	42	4 17	11	0 11			219
6	0 15	132	28 88	9	0 81	118	1 18			66
70	1 77	101	18 02	21	1 87					
										1
98	2 46			19	1 65					38
822	20 62	2	0 28	310	29 85	225	2 25			2,445
19	0 48			7	0 62					2
67	1 69	4	0 48	4	0 36	122	1 22			197
6	0 15			2	0 18	2	0 02			1
2	0 05	2	0 38	72	6 96					141
85	2 14			10	0 97					
556	14 00	6	1 09	222	19 79	216	2 16			1,119
6,276	157 05	1,724	261 26	1,978	182 91	1,186	11 86	113	3 29	145,871
11,704	293 62	2,238	348 42	3,601	336 79	3,079	30 79	122	3 52	158,648
				6	0 52	13	0 13	106	4 15	84
32	0 78	64	8 04	85	6 37	106	1 06			35
		32,568	359 34	200	3 50			12,029	98 39	
3,288	27 40	12,698	418 03	8,958	172 10	316	3 16	15,086	253 92	355
				81	1 71					44
3,041	34 20	332,563	23,501 60	17,833	1,301 25	17,639	176 39	3,082	51 51	51,044
		400	42 00					1,877	30 00	
		1	0 09							
1,001	10 01	139	12 41	497	52 09	160	1 60	880	17 40	
										4
24	0 16			220	8 55	238	2 38			10
				360	15 00					149
		2,160	30 71			481	4 81	357	2 12	3,360
		1,454	16 29	400	7 48			50	0 50	5
				5	0 44					66
51	4 17	14	2 68	271	71 19	465	4 65	18	2 55	11,682
						2,094	20 94			1
		773	17 00	307	7 00	270	2 70	7,492	62 99	9,987
						15	0 15			
				20	0 13					
7,437	76 72	382,834	24,408 19	29,183	1,647 33	21,797	217 97	40,477	523 53	76,826

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APPENDIX

No. (A) 14—STATEMENT of Traffic on the undermentioned Canals, and

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Special Class.</i>		\$ cts.		\$ cts.		\$ cts.
Coal.....	147,884	29,576 80	316,423	41,973 49	79,894	7,779 94
Kryolite or chemical ore.....			464	23 20	348	16 68
Iron ore.....	18,323	916 15			1,999	99 95
Stone, unwrought, not suitable for cutting.....	1,356	50 64	9,867	201 15		
Ice.....	1,080	33 13				
Total, Special Class.....	168,643	30,576 72	326,754	45,197 84	82,241	7,896 57
Total freight and tolls.....	901,369	119,807 25	1,183,560	97,621 92	346,571	21,124 69
Timber and other wood, free.....	40,637	2,766 16				
Wheat, corn, flour, iron, salt, coal, &c., free.....	60,913	9,079 40	497,646	48,618 93		
Grand totals, passengers and tonnage of vessels not included.....	1,002,919	131,652 81	1,681,206	146,240.85	346,571	21,124 69

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

SESSIONAL PAPER No. 20

A—Continued.

the Amount of Tolls heretofore collected, now free, &c.—Continued.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	§ cts.		§ cts.		§ cts.		§ cts.		§ cts.	
1,057	19 85	552	22 29	8,245	289 13	37,760	377 60			998,780
						11	0 11			17,491
						5	0 05			2,683,500
841	8 41					5,381	53 81			1,072
1,898	28 26	552	22 29	8,245	289 13	43,157	431 57			3,700 843
30,389	575 46	408,623	26,392 62	60,782	2,883 09			42,407	1,508 07	5,511,868
		27,850								
				338	9 02					
30,389	575 46	436,473	26,392 62	61,120	2,892 11	90,864	3,293 34	42,407	1,508 07	5,511,868

RICHARD DEVLIN,
Compiler of Canal Statistics.

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SUPPLEMENTARY APPENDIX

No. (A) 15.—SUMMARY STATEMENT of Traffic on the undermentioned Canals during of each description of property passed through and

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
Vessels of all kinds.....	1,036,996	16,890 60	2,387,213	20,304 93	343,008	3,601 75
Passengers.....	No. 1,479	145 04	No. 109,506	5,262 62	No. 2,182	32 80
<i>Forest—Produce of Wood.</i>						
	Tons.		Tons.		Tons.	
Bark.....						
Boat knees.....						
Floats.....						
Firewood.....	3,705	178 99	120,457	7,561 04	155,902	5,188 29
".....	Free 40,026					
Hoops and hop poles.....			2	0 10		
Lumber, sawed.....	85,595	15,253 60	43,843	1,275 31	30,041	1,764 83
".....	Free					
Masts, spars, &c.....	7	0 50	20,518	512 95	63	2 10
Railway ties.....	688	85 00	611	48 88	1,238	98 81
".....	Free 611					
Saw-logs.....	1,711	82 62				
Staves, all kinds.....			81	14 42		
Shingles.....	54	38 46	74	15 28	91	20 77
Split posts and rails.....			10	1 00		
Timber, square.....	26,324	3,948 60	6,217	170 76	1,000	36 04
".....	Free					
Traverses.....						
Total.....	158,721	19,587 77	191,813	9,599 74	188,335	7,110 84
<i>Farm Stock.</i>						
Cattle.....			423	28 45	187	6 57
Hogs.....			29	1 44		
Horses.....	2	0 40	1,217	69 99	37	1 35
Sheep.....			101	6 92	150	5 15
Total.....	2	0 40	1,770	106 80	374	13 07
<i>Produce of Animals.</i>						
Bones.....			394	52 72	3	0 20
Horns and hoofs, hides and skins, raw.....			73	4 81		
".....	Free 6					
Lard and lard oil.....	9	1 35	505	69 17		
Meats, other than pork.....	1	0 15	89	9 48		
".....	Free 1					
Pork.....	159	31 45	883	65 59	5	0 19
Tallow.....	106	16 80	2	0 30		
".....	Free 482		3			
Wool.....		96 40	20	2 85		
Agricultural products not enumerated, = animal.....	1	0 15	5,234	561 41		
Total.....	765	146 30	7,203	766 33	8	0 39

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A.—Continued.

the Season of Navigation ended December 31, 1903, showing the Total Quantity the amount of Tolls heretofore collected, now free.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	§ cts.		§ cts.		§ cts.		§ cts.		§ cts.	Free.
215,580	261 21	266,474	2,827 24	169,579	1,743 07	119,093	2,384 70	148,628	710 55	4,762,746
No. 24,345	298 31	No. 16,424	219 35	No. 15,501	373 61	No.		No. 34,976	252 39	32,410
Tons.		Tons.		Tons.		Tons.		Tons.		
				6	0 52	13	0 13	106	4 15	84
		32,568	359 34	200	3 50			12,029	98 39	
		15,330								
3,288	27 40	12,698	418 03	9,039	173 81	316	3 16	15,086	253 92	399
		1	0 09							
3,041	34 20	332,963	23,543 60	17,833	1,301 25	17,639	176 39	4,459	81 51	51,044
		120								
24	16			520	23 55	238	2 38			159
1,001	10 01	139	12 41	497	32 09	160	1 60	880	17 40	4
		773	17 00	307	7 00	270	2 70	7,492	62 99	9,987
		14	2 68	271	71 19	15	0 15			
51	4 17					465	4 65	18	2 55	11,682
		3,614	47 00	400	7 48	2,094	20 94			
		12,400				481	4 81	407	2 62	3,365
				20	0 13					
7,405	75 94	410,620	24,400 15	29,093	1,640 52	21,691	216 91	40,477	523 53	76,725
		586	46 73	1	0 03	13	0 13			26
		135	10 53					219	2 19	1
8	0 16	259	13 68	16	0 46					34
		430	37 38	2	0 05	4	0 04			
8	0 16	1,410	108 32	19	0 54	17	0 17	219	2 19	61
		5	0 30							
36	0 39	17	1 70	4	0 11					135
248	4 73			28	0 86	10	0 10			2
33	0 65			17	0 50	89	0 89			
20	0 38	7	0 65	103	2 55	132	1 32			4
30	0 58	11	1 08	7	6 17	3	0 03			
36	0 71			2	0 06					2,061
152	3 53	3,119	271 92	2,091	162 60	6	0 06			
585	11 27	3,159	275 65	2,252	166 85	240	2 40			2,202

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No. (A) 15.—SUMMARY STATEMENT of Traffic on the undermentioned

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Agricultural Products.</i>						
		\$ cts.		\$ cts.		\$ cts.
Agricultural products not enumerated, vegetables.	1	0 20	2,359	343 36	4	0 40
Apples			7,992	1,100 85	699	47 64
Barley	14,656	1,465 60	7,095	555 75		
" " Free			2,206			
Buckwheat			802	56 69		
Cotton, raw			25	3 58		
" " Free	23					
Corn	210,758	21,075 80	125,701	4,007 38	17	1 70
" " Free			123,864			
Flax and Hemp	1,905	285 50	83	12 45		
Flour	25,998	4,540 63	17,762	1,358 58	955	33 45
" " Free			16,151			
Hay, pressed			7,434	347 00	34,856	2,879 46
Meals, all kinds	13,909	2,781 20	595	42 95		
" " Free	17		348			
Manilla			77	14 77		
Oats	7,911	802 96	17,033	1,032 36	1,317	43 97
" " Free			2,438			
Pease	85	8 50	1,346	104 85	13	0 44
" " Free			63			
Potatoes			148	9 75	6	0 21
Rye	4,904	490 40	8,693	392 04		
" " Free			4,260			
Seeds,—Flax, Clover and Grass	3,703	374 65	13,070	473 79	6	0 20
" " Free	325		3,643			
Tobacco, raw			44	5 27		
" " Free	2					
Wheat	259,031	25,971 01	204,363	6,918 91		
" " Free			226,746			
Total	543,228	57,796 45	794,341	16,780 33	37,873	3,007 47
<i>Manufactures.</i>						
Ashes, pot and pearl	14	2 80	177	44 99		
" " Free	2		2			
Agricultural implements	46	9 20	183	19 30	89	3 75
" " Free			58			
Barrels, empty			1,339	161 61	32	1 31
Bricks	200	23 68	8,371	500 23	38	2 41
" " Free	80					
Cement and water lime	1	0 15	9,029	1,146 80	1,702	114 25
" " Free	3,924					
Crockery and earthenware	159	23 85	430	78 66	51	5 10
" " Free	32					
Furniture	13	2 60	1,966	319 06	4	0 40
" " Free	1		3			
Glass, all kinds	55	0 09	2,839	554 48		
" " Free	1,207		15			
Iron, railway	408	73 95	43,477	6,477 67	369	34 59
" " Free	39,641					
" pig	177	26 55	4,436	563 79	338	33 80
" " Free	273					
" all other	5,230	897 96	36,116	2,906 57	8	0 54
" " Free	5,845		2,542			
Molasses	322	61 10	660	72 06	175	14 16
" " Free	6		240			
Nails	1,054	159 05	5,048	913 49	54	1 88
" " Free	2,878		19			
Oil	17,508	3,483 05	2,480	416 80	108	4 19
" " Free	16		14,619			
Oil cake	1,994	398 80	9,441	473 60		
" " Free			462			

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Canals and the amount of Tolls collected, &c.—Continued.

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault Ste. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.	Free.
697	13 31	13	1 14	14	0 40	131	1 31			
1,349	25 41	249	14 69	81	2 18	134	1 34			2,976
1,004	18 85			40	0 94	16	0 16			28,192
92	1 74	7	0 69	2	0 05	2	0 02			1,248
12	0 24			111	2 69	273	2 73			1,260
20	0 38			2	0 05					1,765
73	1 40	78	6 20	538	13 61	2,234	22 34			312,210
129	2 50	3,422	322 98	1,500	35 34	1,026	10 26			1,891
				150	3 78	793	7 93	7	0 07	14,406
206	3 88	935	84 27	1	0 09	31	0 31			999
198	3 72	1	0 06	934	37 25	2,996	29 96			35,289
8	0 16	295	19 39	33	1 02	6,087	60 87	291	2 91	227
350	6 57									2,725
336	6 43	1	0 10	23	0 66					67,851
				11	0 33	18	0 18			
782	14 70			868	20 31			1,226	12 26	967,018
5,256	99 29	5,001	449 52	4,308	118 70	13,741	137 41	1,524	15 24	1,438,057
3	0 08									
14	0 36	14	2 07	216	22 93	21	0 21	6	0 18	
32	0 78	64	8 04	85	6 37	106	1 06			35
224	4 23	2	0 12	223	5 78	1,284	12 84	60	0 60	684
137	2 59	176	3 52	881	23 27	1,796	17 96			14,878
314	7 91	39	7 18	32	2 88	26	0 26			349
268	6 93	100	12 10	108	9 83	31	0 31	3	0 05	182
735	18 44	81	14 46	66	5 88	17	0 17			957
936	17 63			2	0 06	212	2 12			48,262
29	0 35			173	4 31	10	0 10			15,621
1,212	22 93	67	4 37	543	14 63	268	2 68	5	0 05	16,229
5	0 13	1	0 14	64	5 62	330	3 30			220
225	5 67	2	0 28	125	12 89	143	1 43			5,131
1,297	32 53	6	1 04	296	26 35	550	5 50			710
1	0 02			6	0 24					1,576

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No. (A) 15.—SUMMARY STATEMENT of Traffic on the undermentioned

Articles.	Welland Canal.		St. Lawrence Canals.		Chambly Canal.	
	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.
<i>Manufactures—Concluded.</i>						
		\$ cts.		\$ cts.		\$ cts.
Paint.....	52	8 05	1,519	272 70		
" ".....Free.	158		5			
Pitch and tar.....			474	57 52	2,018	201 80
" ".....Free.	58					
Resin.....	20	4 00	1,931	106 34	2,482	296 62
" ".....Free.	1		20			
Soda ash.....	32	4 80	1,368	271 33		
" ".....Free.	264					
Spirits, whisky, &c.....	407	61 30	2,474	362 22		
" ".....Free.	452		2			
Steel.....	754	100 23	5,787	408 99		
" ".....Free.	332					
Sugar.....	1,435	215 25	2,814	477 54	137	8 38
" ".....Free.	204					
Tin.....			861	161 40		
" ".....Free.	209					
White lead.....			355	66 20		
" ".....Free.	80					
Turpentine.....			73	7 54	42	4 20
" ".....Free.	1					
Whiting.....			835	166 55		
" ".....Free.	22					
Woodenware.....			45	16 20		
Total.....	85,647	5,565 37	162,515	17,023 64	7,647	727 38
<i>Merchandise.</i>						
Brimstone (crude).....			2,014	204 09		
" ".....Free.	23					
Clay, lime and sand.....	2,363	168 03	53,857	2,364 30	23,438	1,843 13
" ".....Free.	481					
Coal.....	147,884	29,576 80	316,423	44,973 49	79,894	7,779 94
" ".....Free.	401		99,219			
Dye woods and dye stuffs.....			68	7 74	33	3 30
Fish.....	36	5 40	145	14 38		
" ".....Free.	8					
Gypsum.....			1,123	14 11		
Ores (all kinds).....	18,323	916 15	464	23 20	2,347	116 63
Marble.....	1,460	219 00	7	0 70		
Rags.....	4	0 80	637	74 40		
" ".....Free.	29		4			
Salt.....	2,554	479 00	5,407	560 76	655	55 49
" ".....Free.	87		132			
Stone (all kinds).....	1,356	50 64	10,122	214 20		
" ".....Free.	150					
All other goods and merchandise (not enumerated).....	35,723	5,295 14	33,360	4,893 61	5,967	467 05
" ".....Free.	3,674		582			
Total.....	214,556	36,710 96	523,564	53,345 08	112,334	10,265 54
Grand totals (passengers and tonnage of vessels not included).....	1,002,919	136,842 89	1,681,206	123,189 47	346,571	24,759 24

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

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Canals and the amount of Tolls collected, &c.—*Concluded.*

Murray Canal.		Ottawa Canals.		Rideau Canal.		St. Peter's Canal.		Trent Valley Canals.		Sault St. Marie Canal.
Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.	Tolls.	Tons.
	\$ cts.		\$ cts.		\$ cts.		\$ cts.		\$ cts.	Free.
800	20 08	2	0 38	42	4 17	11	0 11			219
6	0 15	152	28 88	9	0 81	118	1 18			66
										1
98	2 46			19	1 65					38
556	14 00	6	1 09	222	19 79	216	2 16			1,119
321	6 10	6	0 51	85	2 04	6	0 06			1,556
822	20 62	2	0 28	310	29 85	225	2 25			2,445
67	1 69	4	0 48	4	0 36	122	1 22			197
2	0 05	2	0 38	72	6 96					141
6	0 15			2	0 18	2	0 02			1
85	2 14			10	0 97					
				5	0 44					66
8,195	188 22	726	85 32	3,600	208 26	5,494	54 94	74	0 88	110,683
20	0 39	13,173	771 41	8,874	207 56	84	0 84			15,435
1,057	19 85	552	22 29	8,245	289 13	37,760	377 60			998,780
32	0 83	2	0 38	338	0 18					
		5	0 30	91	2 16	4,036	40 36			1,280
						375	3 75			
						16	0 16			2,700,991
4	0 10					50	0 50			
70	1 77	101	18 02	21	1 87					
612	11 53			2,289	63 72	648	6 48			20,679
869	9 06			10	0 69	5,526	55 26			1,104
6,276	157 05	1,724	261 26	1,978	182 91	1,186	11 86	113	3 29	145,871
8,940	200 58	15,557	1,073 66	21,848	748 22	49,681	496 81	113	3 29	3,884,140
30,389	1,134 98	486,473	29,439 21	61,120	4,999 77	90,864	3,293 34	42,407	1,508 07	5,511,868

RICHARD DEVLIN,
Compiler of Canal Statistics.

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APPENDIX A—Continued.
 No. (A) 16.—STATEMENT showing the amount of Tolls accrued each month during the Season of Navigation ended December 31, 1903.

Canals and Offices.	January		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
WELLAND CANAL.																								
Chippawa.....							9 02	14 53	28 52	32 74	22 15	4 57	5 86					4 57	5 86				117 39	
Colborne.....							13,105 25	15,888 60	12,833 17	11,824 70	10,721 48	15,901 53	10,386 41	1,013 89				15,901 53	10,386 41	1,013 89			96,574 39	
Dunnville.....							7,353 98	5,807 24	4,767 12	5,031 91	4,769 25	5,954 95	2,119 43	43 25				5,954 95	2,119 43	43 25			38,923 14	
St. Catharines.....							235 49	141 45	110 21	145 40	133 89	102 78	133 95	8 00				102 78	133 95	8 00			1,011 67	
							39 23	21 16	38 73	44 14	21 29	32 82	18 01					32 82	18 01				216 30	
Total, Welland Canal.....							20,743 97	21,872 98	17,777 75	17,078 89	15,668 06	21,996 65	12,663 66	1,065 14				21,996 65	12,663 66	1,065 14			136,842 89	
ST. LAWRENCE CANAL.																								
Beauharnois.....							24 98	23 79	28 85	20 25	29 44	19 58	6 13					19 58	6 13				153 02	
Cardinal.....							568 25	142 74	520 67	319 78	245 40	228 46	229 28	5 94				228 46	229 28	5 94			2,260 52	
Cornwall.....							6,844 93	8,006 05	6,747 53	7,717 24	6,416 52	5,150 28	2,383 83	184 41				5,150 28	2,383 83	184 41			44,050 81	
Kingston.....							1,544 55	1,528 29	2,463 36	2,895 07	1,869 34	2,446 33	1,466 13					2,446 33	1,466 13				14,671 31	
Lachine.....							383 65	555 13	846 00	788 82	591 92	527 47	240 81					527 47	240 81				3,933 80	
Montreal.....							5,503 64	6,613 34	8,531 53	8,490 76	7,444 77	4,609 82	4,609 82	29 96				4,609 82	4,609 82	29 96			47,648 82	
Soulanges.....							1,369 12	1,619 51	1,523 65	1,446 82	1,131 77	2,034 24	1,346 08					2,034 24	1,346 08				10,471 19	
Total, St. Lawrence Canals.....							16,239 14	19,988 85	20,661 59	21,588 74	17,669 16	16,922 76	10,281 28	220 31				16,922 76	10,281 28	220 31			123,189 47	
CHAMBLY CANAL.																								
Chamby.....							825 37	1,793 82	2,245 36	2,285 39	1,729 32	1,657 71	982 79					1,657 71	982 79				11,519 76	
St. John's.....							2,114 88	2,012 17	3,293 20	2,039 39	1,183 31	1,357 67	461 22					1,357 67	461 22				12,482 04	
St. Ours.....							44 90	110 12	113 65	120 33	100 61	153 06	85 40					153 06	85 40				757 44	
Total, Chamby Canal.....							2,984 25	3,916 11	5,652 21	4,465 31	3,013 24	3,168 44	1,529 41					3,168 44	1,529 41				24,759 24	
OTTAWA CANALS.																								
Ottawa.....							4,342 51	4,345 22	3,659 69	2,347 14	1,939 75	1,939 75	1,822 76					1,939 75	1,822 76				20,877 58	
Carleton.....							41 70	40 69	40 52	16 68	11 62	20 26	27 56					20 26	27 56				199 03	
Grenville.....							456 63	942 25	894 25	1,182 58	1,160 15	1,142 58	744 51					1,142 58	744 51				6,531 70	
St. Anne's.....							162 15	289 84	317 52	313 71	294 12	281 55	141 16					281 55	141 16				1,830 90	
Total, Ottawa Canals.....							5,002 99	5,618 00	4,802 80	4,572 66	3,813 03	3,384 14	2,235 99					3,384 14	2,235 99				29,439 21	

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RIDEAU CANAL.												
Kingston Mills.....	131 16	137 80	170 15	250 40	217 08	157 16	150 01	1,222 76				
Ottawa.....	252 35	448 92	537 42	303 06	441 97	487 80	363 21	2,834 73				
Smith's Falls.....	103 93	147 09	259 12	184 03	115 80	84 74	47 57	942 28				
Total, Rideau Canal.....	487 44	733 81	966 69	746 49	774 85	729 70	560 79	4,999 77				
ST. PETER'S CANAL.												
St. Peter's.....	28 34	391 42	502 73	582 99	364 09	392 02	330 04	3,293 34				
TRENT VALLEY CANALS.												
Bobcaygeon.....	12 81	91 55	75 25	79 39	51 50	47 36	34 30	449 64				
Buckhorn.....	2 50	12 12	27 05	31 45	22 74	0 50	3 10	100 96				
Burlington.....	2 50	16 45	9 83	28 19	40 23	103 69	31 45	241 63				
Fenelon Falls.....		13 40	45 89	41 30	41 75	9 50		178 09				
Hastings.....		1 00	7 75	7 55	8 59	4 75		34 30				
Peterborough.....	2 90	47 55	121 61	122 65	81 55	38 10	12 45	503 45				
Total, Trent Valley Canals.....	20 71	227 76	287 38	310 53	246 27	203 90	81 30	1,508 07				
MURRAY CANAL.												
Brighton.....	22 48	120 90	219 09	254 81	147 43	185 85	77 25	1,134 98				
Grand total.....	28 34	0 42	8,697 24	45,998 92	51,969 83	50,870 24	49,600 42	41,696 13	46,983 46	27,759 72	1,562 25	325,166 97

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
 OTTAWA, May 16, 1904.

APPENDIX A—Continued.

No. (A) 17.—SUMMARY STATEMENT showing the Number, Tonnage and Nationality of Vessels passed through all the Canals during the Season of Navigation ended December 31, 1903, and the amount of Tolls heretofore collected, now free.

Vessels.	Total Number.		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.	Amount of Tolls. \$ cts.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
WELLAND CANAL.														
Canadian vessels, steam.....	700	95,950	108,222	8,096	310	.....	.....	.....	7,258	58,151	188,008	174,469	362,477	5,662 84
" sail.....	255	24,844	25,602	908	607	.....	.....	.....	.....	25,254	51,055	51,764	102,819	2,198 82
Total, Canadian.....	955	120,794	133,824	9,004	917	.....	.....	.....	7,258	83,405	239,063	226,233	465,296	7,861 66
United States vessels, steam.....	620	175	70	2,901	200,797	164,535	1,836	86,931	1,836	255,690	254,437	510,127	7,638 09	
" sail.....	212	6	173	1,438	18,849	12,310	601	16,006	601	31,646	29,927	61,573	1,370 85	
Total, United States.....	832	181	243	4,339	219,646	176,845	2,437	102,937	2,437	287,336	284,364	571,700	9,028 94	
Grand Total, Welland Canal.....	1,787	120,975	134,067	13,343	220,563	176,845	9,695	186,342	9,695	526,399	510,597	1,036,996	16,890 60	
ST. LAWRENCE CANALS.														
Canadian vessels, steam.....	3,561	444,024	370,857	.....	.....	114	.....	.....	.....	35,055	468,055	406,026	874,081	6,124 74
" sail.....	4,885	636,511	507,571	368	.....	339	.....	.....	.....	69,496	674,133	577,874	1,252,907	12,081 72
Total, Canadian.....	8,446	1,080,535	878,428	368	.....	453	.....	.....	.....	104,551	1,142,188	983,900	2,126,988	18,206 46
United States vessels, steam.....	808	3,182	3,715	.....	18,502	18,170	203	68,357	203	89,241	90,242	179,483	1,208 06	
" sail.....	444	1,801	9,356	.....	342	2,086	16,379	26,025	16,379	44,175	37,467	81,642	890 41	
Total, United States.....	1,252	4,983	13,071	.....	18,844	20,256	16,582	94,382	16,582	133,416	127,709	261,125	2,098 47	
Grand Total, St. Lawrence Canals.....	9,698	1,085,518	891,599	368	18,844	20,709	16,582	198,629	16,582	1,275,604	1,111,609	2,387,213	20,304 93	

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CHAMBLEY CANAL.											
Canadian vessels, steam.....	337	38,945	38,925	28	38,945	38,953	77,898	259 70
" sail.....	599	6,687	7,713	6,396	.....	.....	11,754	13,083	19,467	32,550	452 24
Total, Canadian.....	936	45,632	47,638	6,396	.....	.....	11,782	52,028	58,420	110,448	711 94
United States vessels, steam.....	27	89	.....	58	.....	.....	287	147	287	434	7 34
" sail.....	2,482	82	2,356	98,776	.....	.....	130,912	98,858	133,268	232,126	2,882 47
Total, United States.....	2,509	171	2,356	98,834	.....	.....	131,199	99,005	133,555	232,560	2,889 81
Grand Total, Chambley Canal.....	3,445	45,803	6,994	105,230	.....	.....	142,981	151,033	191,975	343,008	3,601 75
OTTAWA CANALS.											
Canadian vessels, steam.....	988	40,175	96,694	.....	.....	.....	.....	40,175	96,644	136,819	887 94
" sail.....	977	4,010	108,941	4,135	.....	.....	.....	4,010	113,076	117,086	1,639 13
Total Canadian.....	1,965	44,185	205,585	4,135	.....	.....	.....	44,185	209,720	253,905	2,527 07
United States vessels, steam.....	129	1,813	.....	.....	.....	.....	.....	1,813	10,746	12,359	300 17
" sail.....	129	1,813	.....	10,746	.....	.....	.....	1,813	10,746	12,359	300 17
Total United States.....	2,094	45,998	205,585	14,881	.....	.....	.....	45,998	220,466	266,464	2,827 24
Grand Total, Ottawa Canals.....	2,154	49,278	47,489	12,080	.....	.....	.....	61,308	61,389	122,697	969 07
Canadian vessels, steam.....	1,519	18,118	18,300	436	109	.....	.....	18,554	18,954	37,508	604 48
" sail.....	3,673	67,396	65,789	12,466	109	.....	.....	74,862	80,343	160,205	1,564 55
Total Canadian.....	89	189	86	469	.....	.....	.....	611	697	1,355	22 86
United States vessels, steam.....	264	1,551	3,199	446	2,449	.....	.....	1,997	6,022	8,019	155 06
" sail.....	263	1,740	3,285	915	2,449	.....	.....	985	2,655	6,719	178 52
Total United States.....	3,906	69,136	69,074	13,381	2,558	.....	.....	15,430	87,062	169,379	1,743 07
Grand Total, Rideau Canal.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ST. PETER'S CANAL.											
Canadian vessels, steam.....	325	23,873	19,905	.....	.....	.....	.....	23,873	19,905	43,778	875 21
" sail.....	1,424	35,738	38,465	328	36,061	38,465	74,526	1,463 60
Total Canadian.....	1,749	59,611	58,370	328	59,934	58,370	118,304	2,368 81

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No. (A) 17.—SUMMARY STATEMENT showing the Number, Tonnage and Nationality of Vessels, &c.—*Concluded.*

Vessels.	Total Number.		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.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
<i>ST. PETER'S CANAL—Concluded</i>														
United States vessels, steam.....	6	201	224									312	684	13 68
" sail.....	5	33	49				88					56	105	2 21
Total United States.....	11	234	273			88				194		361	789	15 89
Grand Total, St. Peter's Canal.....	1,760	59,840	58,643			88				194		60,312	119,093	2,384 79
<i>TRENT VALLEY CANALS.</i>														
Canadian vessels, steam.....	2,283	60,233	60,842									60,233	121,075	636 40
" sail.....	316	14,300	13,253									14,300	27,533	74 15
Total Canadian.....	2,599	74,533	74,095									74,533	148,628	710 55
United States vessels, steam.....														
" sail.....														
Total United States.....														
Grand Total, Trent Valley Canal.....	2,599	74,533	74,095									74,533	148,628	710 55
<i>MURRAY CANAL.</i>														
Canadian vessels, steam.....	526	80,009	73,592			157						97,205	204,503	212 16
" sail.....	207	3,226	3,842			1,361						4,587	9,516	41 73
Total Canadian.....	733	83,235	77,434			157				24,543		111,885	214,019	253 89
United States vessels, steam.....	16	96	196							86		543	862	3 61
" sail.....	13	9	265							152		282	699	3 71
Total United States.....	29	105	461							239		825	1,561	7 32
Grand Total, Murray Canal.....	762	83,340	77,895			157				24,781		112,710	215,580	261 21

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SAULT STE. MARIE CANAL.																				
Canadian vessels, steam	2,464	454,256	513,922	118,014	82,150	6,101	2,629	128,394	134,992	796,765	733,693	1,440,458								
" sail	247	31,686	34,784	3,110	47,691			52,916	5,894	87,112	88,369	163,481								
Total Canadian	2,711	485,342	548,766	121,124	129,841	6,101	2,629	181,310	140,886	793,877	822,062	1,615,939								
United States vessels, steam	1,432	4,126	3,832	6,235	36,443	1,371,485		70,885	6,095	1,452,130	1,417,855	2,869,985								
" sail	298	661	647	425	11,182	126,813	120,791	16,303		144,292	132,629	276,822								
Total United States	1,640	4,787	4,479	6,660	47,625	1,497,697	1,492,276	87,188	6,095	1,596,382	1,550,475	3,146,807								
Grand Total, Sault Ste. Marie Canal.	4,351	490,129	553,185	127,784	177,466	1,503,798	1,494,905	268,498	146,981	2,390,269	2,372,537	4,762,746								

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1903.

No. (A) 17.—SUMMARY STATEMENT showing the Number, Tonnage and Nationality of Vessels, &c.—*Concluded*.
RECAPITULATION.

Vessels.	Total Number	From Canadian Ports.		From Canadian to United States Ports.		From United States to United States Ports.		From United States to Canadian Ports.		Tons.		Total Tons.	Amount of Tolls.
		Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
CANADIAN VESSELS.													
<i>Steam and Sail.</i>													
Welland	455	129,794	133,824	110,094	9,004	917	.....	7,258	83,405	239,063	226,233	465,296	7,861 66
St. Lawrence	8,446	1,080,535	878,728	61,653	368	.....	453	.....	104,551	1,142,188	983,900	2,126,088	18,206 46
Chambly	1,936	45,632	46,638	6,396	.....	.....	.....	.....	11,782	52,028	58,420	110,448	711 94
Ottawa	1,965	44,185	205,585	.....	4,135	.....	.....	.....	14,445	44,185	209,720	258,905	2,527 07
Rideau	3,673	67,399	63,789	12,466	109	.....	.....	.....	.....	79,892	80,343	160,235	1,504 55
St. Peter's	1,749	59,606	58,370	.....	.....	.....	.....	328	.....	39,954	58,370	118,304	2,368 81
Trent Valley	2,539	74,533	74,045	.....	.....	.....	.....	.....	.....	74,533	74,045	148,628	710 55
Murray	733	83,235	77,434	.....	157	.....	.....	.....	24,543	111,885	162,134	214,019	253 89
Sault Ste. Marie	2,711	485,312	548,706	121,124	129,811	6,101	2,629	181,310	140,886	793,877	822,062	1,615,939	.....
Total Canadian	23,797	2,061,258	2,088,969	340,383	143,614	7,015	3,082	188,896	379,612	2,597,555	2,615,277	5,212,832	34,204 93
UNITED STATES VESSELS.													
Welland	832	181	243	65,072	4,339	219,646	176,845	2,437	102,037	287,336	284,364	571,700	9,028 94
St. Lawrence	1,252	4,983	13,071	93,007	.....	18,844	20,256	16,582	91,382	133,416	127,769	261,125	2,098 47
Chambly	2,509	171	2,356	98,834	.....	.....	.....	.....	131,199	99,065	133,555	232,560	2,889 81
Ottawa	129	1,813	.....	.....	10,746	.....	.....	.....	.....	1,813	10,746	12,559	300 17
Rideau	293	1,740	3,285	915	2,449	.....	.....	.....	.....	2,635	6,719	9,374	178 52
St. Peter's	11	234	273	.....	88	.....	.....	194	.....	428	361	789	15 89
Trent Valley .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Murray	29	105	461	720	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sault Ste. Marie	1,640	4,787	4,479	6,660	47,625	1,497,697	1,492,276	87,188	6,095	1,506,332	1,550,475	3,146,807	7 32
Total United States	6,695	14,014	24,168	265,208	65,217	1,736,187	1,689,414	106,401	335,836	2,121,810	2,114,665	4,236,475	14,519 12
Grand total, Canadian and United States	30,492	2,075,272	2,113,137	605,591	208,831	1,743,205	1,692,496	295,297	715,448	4,719,365	4,729,942	9,449,307	48,724 05

RICHARD DEVLIN,
Compiler of Canal Statistics.

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

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APPENDIX A—Continued.

No. (A) 18.—COMPARATIVE STATEMENT of Grand Total Freight passed through the undermentioned Canals during the Seasons of Navigation 1902 and 1903, and the Amount of Tolls hitherto collected, now free, on the same, including Tolls on Vessels and Passengers.

Canals.	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.	Amount of Tolls.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.		
												\$ cts.
1902.												
Wolland	38,395	178,665	11,365	25,793	44,928	224,110	66	152,125	81,754	580,633	665,387	98,601 50
St. Lawrence	273,590	656,612	6,944	160	486	996	9,499	114,892	802,449	802,684	1,693,133	65,081 11
Chambly	12,667	16,286	294,160	.....	.....	.....	.....	396,439	266,767	112,675	379,442	22,713 31
Ottawa	82	411,655	.....	33,545	.....	.....	.....	.....	82	444,600	444,682	24,852 37
Rideau	28,632	10,104	4,250	4,108	.....	.....	.....	1,385	32,282	18,597	50,879	3,831 15
St. Peter's	31,716	41,422	.....	200	.....	.....	200	.....	31,916	41,622	73,538	3,134 14
Trent Valley	29,495	12,195	.....	.....	.....	.....	.....	.....	29,495	12,195	41,690	1,328 98
Murray	17,112	10,294	5,601	.....	.....	.....	.....	2,171	22,713	12,465	35,178	1,060 80
Sault Ste. Marie	108,126	727,927	25,892	278,678	470,414	2,775,536	180,478	162,217	784,910	3,941,358	4,729,268	No Tolls.
Grand Total	529,085	2,064,480	308,212	342,184	515,828	3,000,636	190,243	562,229	1,543,368	5,969,829	7,513,197	229,503 36
1903.												
Wolland	64,380	189,802	51,763	30,350	149,151	221,074	4,796	291,603	270,090	732,829	1,002,919	136,842 89
St. Lawrence	322,851	852,190	117,407	.....	338	5,664	18,001	361,758	458,597	1,222,600	1,681,206	123,189 47
Chambly	6,534	7,975	218,597	.....	.....	.....	.....	113,195	223,101	121,470	346,571	24,739 24
Ottawa	922	396,561	.....	38,990	.....	.....	.....	.....	922	435,551	436,473	29,439 21
Rideau	24,168	21,640	1,913	6,317	.....	.....	.....	7,082	26,081	35,039	61,120	4,999 77
St. Peter's	39,427	51,062	.....	375	.....	.....	.....	.....	39,427	51,437	90,864	3,293 34
Trent Valley	26,094	16,313	.....	.....	.....	.....	.....	.....	26,094	16,313	42,407	1,508 07
Murray	12,118	11,585	6,066	.....	.....	.....	.....	620	18,184	12,245	30,389	1,134 98
Sault Ste. Marie	151,656	844,238	34,458	332,468	713,848	2,904,081	359,639	180,160	1,259,621	4,261,247	5,511,868	No Tolls.
Grand Total	648,150	2,391,366	430,174	408,500	863,437	3,130,816	373,456	958,018	2,315,117	6,888,700	9,203,817	325,466 97

DEPARTMENT OF RAILWAYS AND CANALS,
OTTAWA, May 16, 1904.

RICHARD DEVLIN,
Compiler of Canal Statistics.

4-5 EDWARD VII., A. 1905

No. (A) 19.—COMPARATIVE STATEMENT of the Traffic on all the Canals, for the Years ended December 31, 1902 and 1903.

Articles.	1902.	1903.	Increase.	Decrease.
<i>Class No. 1.</i>	Tons.	Tons.	Tons.	Tons.
Canadian vessels, steam	2,814,214	3,383,786	569,572	
United States vessels, steam.....	3,318,779	3,562,930	244,151	
Canadian vessels, sail	1,671,481	1,829,046	157,565	
United States vessels, sail	767,660	673,545		94,115
Total, class No. 1.....	8,572,134	9,449,307	971,288	94,115
<i>Class No. 2.</i>	No.	No.	No.	No.
Passengers	188,086	236,823	48,737	
<i>Class No. 3.</i>	Tons.	Tons.	Tons.	Tons.
Bricks	17,934	11,086		6,898
Brimstone.....	785	2,014	1,229	
Cement and water lime	22,614	23,600	5,986	
Clay, lime and sand.....	102,654	117,244	14,590	
Fish	4,339	5,593	1,254	
Gypsum.....	831	1,498	667	
Iron, railway.....	43,794	93,746	49,952	
" pig.....	20,147	20,784	637	
" all other.....	54,975	59,678	4,703	
Steel.....	2,104	8,515	6,411	
Salt	29,451	32,844	3,393	
Stone, for cutting.....	3,228	359		2,869
Apples.....	7,695	13,480	5,785	
Barley	38,137	51,003	12,866	
Buckwheat	1,039	2,153	1,114	
Corn.....	81,645	338,132	256,487	
Cotton, raw.....	24	25	1	
Flax and hemp.....	635	3,775	3,140	
Four.....	357,104	359,848	2,744	
Hay, pressed.....	41,537	50,129	8,592	
Meals, all kinds.....	29,321	29,989	668	
Oil cake.....	6,677	13,018	6,341	
Oats	46,717	66,621	19,904	
Pease.....	1,820	1,934	114	
Potatoes	4,802	6,804	2,002	
Rye.....	23,058	16,672		6,386
Flax seed.....	64,665	78,162	13,497	
Seeds, all kinds.....	8,303	6,828		1,475
Tobacco, raw	39	73	34	
Wheat.....	1,309,218	1,433,288	124,070	
All other agricultural products, vegetable.....	9,178	3,219		5,959
Bones	41	402	361	
Cattle	1,538	1,236		302
Hogs.....	314	384	70	
Hides and skins, horns and hoofs.....	286	265		21
Horses.....	1,258	1,573	315	
Lard and lard oil	2,868	802		2,066
Meats, other than pork	141	229	88	
Pork	1,740	1,313		427
Sheep.....	743	687		56
Tallow.....	478	159		319
Wool.....	2,188	2,601	413	
All other agricultural products, animal.....	7,965	10,633	2,668	
Total, class No. 3.....	2,354,080	2,877,398	523,318	26,778
<i>Class No. 4.</i>				
Ashes, pot and pearl.....	23	194	171	
Agricultural implements.....	873	589		284
Crockery and earthenware	947	1,400	453	
Dye woods and dye stuffs.....	142	137		5
Furniture.....	1,858	2,675	817	
Glass, all kinds.....	3,522	4,750	1,228	
Marble.....	1,262	1,521	259	
Manilla.....	737	1,108	371	
Molasses.....	1,426	1,777	351	
Nails	7,999	11,782	3,783	
Oil, in barrels	19,240	22,955	3,715	
Paint.....	1,953	2,645	692	
Pitch and tar.....	2,273	2,843	570	

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No. (A) 19.—COMPARATIVE STATEMENT of the Traffic on all the Canals for the Years ended Dec. 31, 1902 and 1903.—*Concluded.*

ARTICLES.	1902.	1903.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.
<i>Class No. 4—Concluded.</i>				
Rags.....	847	833		14
Resin.....	4,639	4,434		205
Soda ash.....	1,150	1,555	405	
Sugar.....	14,353	8,190		6,163
Stone, wrought.....	1,407	111		1,296
Tin.....	2,869	1,255		1,614
Turpentine.....	290	126		164
White lead.....	450	572	122	
Whiting.....	664	930	266	
Whisky and all other spirits.....	2,876	5,000	2,124	
Merchandise, not enumerated.....	188,854	231,118	42,264	
Total, class No. 4.....	260,654	308,500	57,591	9,745
<i>Class No. 5.</i>				
Bark.....	478	209		269
Barrels, empty.....	1,067	1,693	626	
Boat knees.....				
Floats.....	61,252	44,797		16,455
Pirewood, in vessels.....	307,172	320,765	13,593	
" in rafts.....	3,222	125		3,097
Lumber sawn, in vessels.....	557,607	583,522	25,915	
" in rafts.....	1,146	2,936	1,790	
Hoops.....		1	1	
Railway ties, in vessels.....	7,653	4,603		3,050
" in rafts.....	32	615	583	
Masts, spars and telegraph poles, in vessels.....	207	499	292	
" " in rafts.....	25,857	21,030		4,827
Square timber, in vessels.....	26,281	34,286	8,005	
" in rafts.....	19,593	7,522		12,071
Woodenware and wood partly manufactured.....	301	116		185
Shingles.....	9,817	12,720	2,903	
Split posts and fence rails, in vessels.....	374	2,105	1,731	
" " in rafts.....	20			20
Saw-logs.....	24,144	20,540		3,604
Staves and headings, barrel.....	85	96	11	
" " pipe.....				
" " West India.....				
" " salt barrel.....				
Traverses.....	100	20		80
Hop poles.....	18	2		16
Total, class No. 5.....	1,046,426	1,058,202	55,450	43,674
<i>Special Class.</i>				
Coal.....	782,053	1,590,595	808,542	
Kryolite or chemical ore.....	19,894	18,314		1,490
Iron ore.....	2,556,279	2,703,827	147,548	
Stone, unwrought, not suitable for cutting.....	30,193	13,517		11,676
Ice.....	15	1,080	1,065	
Total, special class.....	3,388,344	4,332,333	957,155	13,166
Total, freight.....	7,049,504	8,576,433	1,526,929	
Timber and other wood, free.....	68,615	68,487		128
Wheat, corn, flour, iron, salt, coal, &c, free.....	395,078	558,897	163,819	
Grand total, passengers and tonnage of vessels not included.....	7,513,197	9,203,817	1,690,748	128
Total, increase and decrease.....			1,784,111	93,491
Freight, grand total, increase.....			1,690,620	

OTTAWA, May 16, 1904.

RICHARD DEVLIN,
Compiler of Statistics.

4-5 EDWARD VII., A. 1905

APPENDIX A—Continued.

No. (A) 20.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1903.

WELLAND CANAL.

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
8	20	160	4	32	22	176	3	24
10	8	80	2	20	2	80	13	130
15	5	75			6	90	2	30
20	3	60	1	20	2	40		
25	9	225			5	125	4	100
30	9	270	3	90	3	90	3	90
35	2	70			2	70		
40	3	120			1	40	1	40
50			2	100	1	50	1	50
55			2	110			2	110
60	3	180	5	300	1	60	1	60
65			1	65	1	65		
70					1	70	1	70
75			1	75	1	75	3	225
80							1	80
85	4	340	1	85	1	85		
90								
95	1	95			1	95		
100	1	100					3	300
110					2	220		
130					1	130		
150			1	150				
160					1	160		
165	2	330						
175			1	175	2	350		
190					1	190	1	190
195	1	195	1	195			1	195
220	1	220			1	220	2	440
230			1	230	2	460		
260					2	520		
265	1	265	1	265				
270			2	540			1	270
285			1	285			1	285
295			1	295				
300	1	300	1	300			1	300
305							1	305
310	1	310	1	310				
315	1	315	1	315	2	630	5	1,575
320	1	320	1	320			2	640
330	1	330	2	660	2	660		
360	2	720			2	720	1	360
400	1	400	2	800	2	800		
415	2	830			1	415		
435							3	1,305
455	1	455						
460	1	460	1	460	1	460	2	920
485	1	485	5	2,425	1	485	2	970
495	2	990						
500	1	500						
520							1	520
525			1	525				
530	1	530	1	530			1	530
540	1	540			1	540		
555	1	555			1	555		
560					1	560		
575	1	575						
585							3	1,755
595					1	595	1	595

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No. (A) 20.—STATEMENT of the Number and Tonnage of all kinds of Vessels, &c.—
Continued.

WELLAND CANAL—*Concluded.*

CANADIAN.				UNITED STATES.				
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
600	1	600					1	600
615					1	615	1	615
645			1	645	1	645		
660					2	1,320		
665	1	665						
675							1	675
690	1	690			1	690	1	690
719			1	719	1	719		
739							1	739
742	1	742	1	742				
771					1	771		
802					4	3,208	3	2,406
870					1	870	1	870
882			1	882				
908			1	908	4	3,632		
929					3	2,787		
940					3	2,820		
959					2	1,918		
977	1	977			1	977		
989	1	989	1	989	3	2,967		
994	2	1,988					1	994
1,023	2	2,046						
1,029					1	1,029		
1,035	1	1,035			2	2,070		
1,041			1	1,041	1	1,041		
1,054					1	1,054		
1,078					1	1,078		
1,079	1	1,079						
1,118	1	1,118			2	2,236		
1,160	2	2,320						
1,172	6	7,032			1	1,172		
1,202	1	1,202						
1,203	2	2,406			2	2,406		
1,330	1	1,330			1	1,330		
1,425					3	4,275		
1,441					1	1,441		
1,547	3	4,323			1	1,547		
1,550					4	6,200		
1,565					3	4,695		
1,762					1	1,762		
1,930					1	1,930		
Total...	121	41,942	54	15,603	131	69,086	77	20,053

ST. LAWRENCE CANALS.

8	25	200	2	16	2	16		
10	6	60	1	10	2	20	1	10
15	5	75	1	15	1	15		
20	5	100	2	40	2	40	1	20
25	8	200			3	75		
30	13	390	1	30	1	30		
35	3	105	1	35	2	70	1	35
40	5	200	2	80	4	160	3	120
45	3	135	1	45	1	45		
50	6	300	4	200	1	50	1	50
55	2	110			1	55		

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N o. (A) 20.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1903.

ST. LAWRENCE CANALS—*Continued.*

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
60	4	240	12	720	3	180		
65	1	65			2	130		
70	3	210	1	70			1	75
75			1	75				
80			1	80				
85	2	170	6	510			2	170
90	4	360	8	720			7	630
95	3	285	3	285	2	190	42	3,990
100	4	400	15	1,500			46	4,600
105	5	525	8	840	2	210	7	735
110	3	330	6	660	1	110	4	440
115	3	345	9	1,035	1	115	4	460
120	2	240	4	480	1	120	2	240
125	1	125	3	375			2	250
130	3	390			1	130		
135	1	135	4	540				
140	1	140	6	840	1	140	1	140
145	2	290	10	1,450				
150	1	150	18	2,700				
155	2	310	22	3,410				
160	1	160	12	1,920			2	320
165			7	1,155				
170			2	340				
175			4	700				
180					1	180		
185			5	925			1	185
190			1	190	1	190		
195	2	390	2	390				
200	1	200			1	200		
210	1	210			1	225		
225								
230	1	230	3	690				
240	1	240						
255			3	765				
260			1	260				
265	1	265	3	795				
275			1	275				
280	1	280						
285							2	570
290			2	580				
295			2	590				
300			5	1,500				
305			3	915				
310	1	310	1	310				
315			3	945				
320	1	320	3	960	1	320		
325	1	325	2	650				
330	1	330	1	330	1	330		
335			4	1,340				
340	1	340	1	340				
345			2	690			1	345
360	2	720	3	1,080				
365			3	1,095				
370			2	740				
375	1	375	2	750				
380			1	380				
385			1	385				
395			2	790				
412	2	824						
413			1	413				

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No. (A) 20.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1903.

ST. LAWRENCE CANALS—*Concluded.*

CANADIAN.				UNITED STATES.				
Steam Vessels.			Sailing Vessels.		Steam Vessels.		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
419			2	838			1	419
434			1	434				
439			2	878			1	439
440			1	440				
450	1	450						
462			1	462				
471	2	942						
475			1	475			1	475
479			2	958				
480	1	480	2	960				
484	1	484						
487			1	487				
499	1	499	1	499				
500	1	500						
508	1	508						
516			2	1,032				
518			2	1,036				
530	1	530						
539	1	539	1	539				
541	1	541	2	1,082				
544	1	544						
567			1	567				
578	1	578	1	578				
585			1	585			1	585
586	1	586	1	586				
590			1	590				
599	1	599						
607	1	607	2	1,214				
620					1	620		
648	2	1,296			1	648		
680			2	1,360				
715	1	715						
719			1	719				
740	1	740	1	740				
781	1	781						
803			1	803				
920					2	1,840		
929					1	929		
944					1	944		
952					1	952		
955					1	955	1	955
970	1	970						
987					2	1,974		
997	1	997			1	997		
1,020	1	1,020						
1,038	2	2,076						
1,041			1	1,041				
1,147					1	1,147		
1,171	1	1,171						
1,187	1	1,187						
1,190	1	1,190						
1,197	1	1,197						
1,201	1	1,201						
1,609					1	1,609		
2,080	1	2,080						
Total	177	37,112	274	58,852	53	15,961	136	16,258

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No. (A) 20.—STATEMENT of the Number and Tonnage of all kinds of Vessels passed through the Canals during the Season of Navigation in 1903.

RIDEAU, OTTAWA AND CHAMBLY CANALS.

CANADIAN.					UNITED STATES.			
Steam Vessels.			Sailing Vessels.		Steam Vessels		Sailing Vessels.	
Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.	Number.	Total Tonnage.
8	93	744	62	496	8	64	1	8
10	3	30	7	70	3	30		
15	12	180	4	60			1	15
20	6	120	5	100				
25	3	75	3	75	2	50		
30	1	30	1	30				
35	1	35	2	70	1	35		
40	2	80	2	80				
45	4	180	6	270				
50	4	200	6	300				
55	1	55	2	110				
60	1	60	2	120			1	60
65								
70	1	70						
75			3	225				
80			2	160			1	80
85	1	85	2	170			11	935
90			1	90			46	4,140
95	2	190	9	855			281	26,695
100	3	100	7	700			89	8,900
105			3	315			35	3,675
110			6	660			38	4,180
115							15	1,725
120	1	120	2	360			3	360
125	1	125	2	250			2	250
130			3	390			1	130
135			5	675			3	405
140	1	140	8	1,120				
145	1	145	6	870			1	45
150	1	150	15	225				
155			17	2,635				
160			5	800				
165			6	990				
170			2	340				
175			1	175				
180								
185			3	555				
190								
195	1	195	1	195				
200								
228	2	456						
262	1	262						
298	1	298						
300			3	900				
372	1	372						
374			1	374				
397	1	397						
Total...	150	4,894	215	15,810	14	179	529	51,603

APPENDIX A—*Continued.*
 No. (A) 21.—Statement showing the Classified Tonnage of all kinds of Vessels passed through the Canals, during the Season of Navigation in 1903.

WELLAND CANAL.

CANADIAN.

UNITED STATES.

Steam Vessels.		Sailing Vessels.		Total.		Steam Vessels.		Sailing Vessels.		Total.	
Class	No.	Tonnage.	Class	No.	Tonnage.	Class	No.	Tonnage.	Class	No.	Tonnage.
1	250 to 1,930 tons ..	39,422	1	250 to 1,930 tons ..	13,956	1	250 to 1,930 tons ..	66,145	1	250 to 1,930 tons ..	17,919
2	200 " 249 " ..	1	2	200 " 249 " ..	230	2	200 " 249 " ..	680	2	200 " 249 " ..	2
3	150 " 199 " ..	3	3	150 " 199 " ..	529	3	150 " 199 " ..	700	3	150 " 199 " ..	2
4	100 " 149 " ..	1	4	100 " 149 " ..	520	4	100 " 149 " ..	350	4	100 " 149 " ..	3
5	50 " 99 " ..	8	5	50 " 99 " ..	615	5	50 " 99 " ..	7	5	50 " 99 " ..	3
6	Under 50 " ..	59	6	Under 50 " ..	1,050	6	Under 50 " ..	711	6	Under 50 " ..	26
Total		41,942	Total		15,663	Total		69,086	Total		29,953

ST. LAWRENCE CANALS.

1	250 to 2,080 tons ..	44	1	250 to 1,009 tons ..	35,781	1	250 to 1,009 tons ..	13,245	1	250 to 455 tons.....	8
2	200 " 249 " ..	4	2	200 " 249 " ..	880	2	200 " 249 " ..	425	2	200 " 249 " ..	3
3	150 " 199 " ..	6	3	150 " 199 " ..	1,010	3	150 " 199 " ..	370	3	150 " 199 " ..	3
4	100 " 149 " ..	25	4	100 " 149 " ..	2,920	4	100 " 149 " ..	825	4	100 " 149 " ..	66
5	50 " 99 " ..	23	5	50 " 99 " ..	1,740	5	50 " 99 " ..	605	5	50 " 99 " ..	53
6	Under 50 " ..	73	6	Under 50 " ..	1,465	6	Under 50 " ..	171	6	Under 50 " ..	6
Total		177	Total		37,112	Total		15,961	Total		16,258

RIDEAU, OTTAWA AND CHAMBLAY CANALS.

1	250 to 397 tons.....	1	1	250 to 374 tons.....	1,329	1	250 to 374 tons.....	1,274	1	250 to 200 tons.....	.....
2	200 " 249 " ..	2	2	200 " 249 " ..	456	2	200 " 249 " ..	.....	2	200 " 249 " ..	.....
3	150 " 199 " ..	2	3	150 " 199 " ..	845	3	150 " 199 " ..	5,915	3	150 " 199 " ..	.....
4	100 " 149 " ..	7	4	100 " 149 " ..	730	4	100 " 149 " ..	5,340	4	100 " 149 " ..	.....
5	50 " 99 " ..	10	5	50 " 99 " ..	660	5	50 " 99 " ..	2,030	5	50 " 99 " ..	.....
6	Under 50 " ..	125	6	Under 50 " ..	1,474	6	Under 50 " ..	1,251	6	Under 50 " ..	.....
Total		150	Total		4,894	Total		15,810	Total .....		.....

DEPARTMENT OF RAILWAYS AND CANALS,
 OTTAWA, May 16, 1904.

RICHARD DEVLIN,
Compiler of Canal Statistics.

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CANALS

CONSOLIDATED

No. 22.—RATES OF TOLLS ON THE CANALS

WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA, CHAMBLY AND MURRAY CANALS.

(O. C., April 18, 1873.)

The Rates of Tolls are divided into Six Classes, as under, and are per ton, unless otherwise specified.	Welland Canal, westward.		Welland Canal, eastward.		Lake Erie to Montreal.		St. Lawrence Canals, each way.		Chambly Canal and St. Ours Lock.		Rideau Canal, each way.		Ottawa Canals, and St. Ann's Lock, each way.		Ottawa to St. Johns, each way.		Murray Canal, each way.			
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.		
<i>Class No. 1.</i>																				
Vessel, steam.....per ton	0	01 ¹ / ₂	0	01 ¹ / ₂	0	02 ¹ / ₄	0	00 ¹ / ₂	0	00 ¹ / ₂	0	01 ¹ / ₂	0	00 ¹ / ₂	0	01 ¹ / ₂	0	00 ¹ / ₂	0	00 ¹ / ₂
" sail and other.....	0	02 ¹ / ₄	0	02 ¹ / ₄	0	03 ³ / ₄	0	01 ¹ / ₂	0	01 ¹ / ₂	0	02 ¹ / ₄	0	01 ¹ / ₂	0	02 ¹ / ₄	0	00 ¹ / ₂	0	00 ¹ / ₂
<i>Class No. 2.</i>																				
Passengers, 21 years of age and upwards...	0	10	0	10	0	20	0	10	0	05	0	08	0	02 ¹ / ₄	0	09 ³ / ₄	0	11	0	11
" under 21 years each.....	0	05	0	05	0	10	0	05	0	02	0	04	0	01 ¹ / ₂	0	04 ¹ / ₂	0	05	0	05
<i>Class No. 3.</i>																				
Bricks, cement and water lime.....	}	15	0	20	0	20	0	15	0	10	0	07	0	06	0	10 ³ / ₄	0	11	0	11
Clay, lime and sand.....																				
Brimstone.....																				
Corn.....																				
Flour.....																				
Iron, railway.....																				
" pig.....																				
" all other, including steel (O. C., Feb. 1, 1888).....																				
Plaster, gypsum.....																				
Salt.....																				
Salt meats or fish, in barrels or otherwise...	}	15	0	20	0	20	0	15	0	10	0	26	0	14	0	29	0	23	0	23
Agricultural products, vegetable, not enumerated.....																				
Agricultural products, animal, not enumerated.....																				
Stone, for cutting.....																				
Wheat.....																				
<i>Class No. 4.</i>																				
All other articles not enumerated.....	0	15	0	20	0	20	0	20	0	10	0	26	0	14	0	29	0	23	0	23

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REVENUE.

TARIFF OF TOLLS.

OF THE DOMINION OF CANADA, 1902.—(1903—Free, O.C., April 27, 1903.)

TRENT VALLEY CANALS.

(O. C., July 25, 1888.)

1ST SECTION.	2ND SECTION.	3RD SECTION.	4TH SECTION.	THROUGH.	Peterborough to Hastings, each way.
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	Tolls Chargeable at Peterborough and Hastings.
Tolls Charge- able at Fenelon Falls.	Tolls Charge- able at Bobcaygeon.	Tolls Charge- able at Buckhorn.	Tolls Charge- able at Burleigh.	Tolls Charge- able at Fenelon Falls.	
§ cts.	§ cts.	§ cts.	§ cts.	§ cts.	§ cts.
0 00 $\frac{3}{15}$ 0 00 $\frac{1}{4}$	0 00 $\frac{3}{15}$ 0 00 $\frac{1}{4}$	0 00 $\frac{3}{15}$ 0 00 $\frac{1}{4}$	0 00 $\frac{3}{15}$ 0 00 $\frac{1}{4}$	0 00 $\frac{3}{4}$ 0 01	0 00 $\frac{3}{5}$ 0 00 $\frac{1}{4}$
01 0 00 $\frac{1}{2}$	0 01 0 00 $\frac{1}{2}$	0 01 0 00 $\frac{1}{2}$	0 01 0 00 $\frac{1}{2}$	0 04 0 02	0 01 0 00 $\frac{1}{2}$
0 01	01	01	01	0 04	0 01
0 03	0 03	0 03	0	0 1	0 0

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RATES OF TOLLS

WELLAND, ST. LAWRENCE, RIDEAU, OTTAWA, CHAMBLY AND MURRAY CANALS

	Welland Canal, westward.	Welland Canal, eastward.	Lake Erie to Montreal.	St. Lawrence Canals, each way.	Chambly Canal and St. Ours Lock, each way.	Rideau Canal, each way.	Ottawa Canals and St. Ann's Lock, each way.	Ottawa to St. Johns, each way.	Murray Canal, each way.
The Rates of Tolls are divided into Six Classes, as under, and are per ton, unless otherwise specified.									
<i>Class No. 5.</i>									
Bark	0 20	0 20	0 20	0 15	0 10	0 07	0 06	0 19 $\frac{1}{4}$	0 017
Barrels, empty, each	0 02	0 02	0 02	0 02	0 02	0 02	0 01	0 03 $\frac{3}{4}$	0 00 $\frac{1}{4}$
Boat knees, each	0 05	0 05	0 05	0 02	0 02	0 02	0 01	0 03 $\frac{3}{4}$	0 00 $\frac{1}{4}$
Floats, per 1,000 lineal feet	1 40	1 40	1 40	1 40	1 20	1 05	0 50	2 05	0 17 $\frac{3}{4}$
Firewood, per cord, in vessels	0 20	0 20	0 20	0 20	0 10	0 15	0 08	0 23	0 02 $\frac{3}{4}$
" " rafts	0 25	0 25	0 25	0 25	0 15	0 19	0 09	0 30 $\frac{1}{4}$	0 03 $\frac{3}{4}$
Hoops	0 25	0 25	0 25	0 20	0 15	0 13	0 10	0 30	0 02 $\frac{3}{4}$
Masts and spars, telegraph poles, per ton of 40 cubic feet, in vessels	0 15	0 15	0 15	0 05	0 05	0 08	0 07	0 13 $\frac{1}{4}$	0 00 $\frac{3}{8}$
Masts and spars, telegraph poles, per ton of 40 cubic feet, in rafts	0 20	0 20	0 20	0 10	0 10	0 15	0 10	0 22 $\frac{1}{2}$	0 01 $\frac{1}{4}$
Railway ties, in vessels, each	0 01	0 01	0 01	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 01 $\frac{1}{4}$	0 0 $\frac{1}{8}$
" rafts, each	0 02	0 02	0 02	0 01	0 01	0 02	0 01	0 02 $\frac{1}{4}$	0 00 $\frac{3}{8}$
Sawed stuff, boards, plank, scantling and sawed timber, per M feet, board measure, in vessels	6 30	0 30	0 30	0 15	0 10	0 11 $\frac{1}{4}$	0 06 $\frac{3}{4}$	0 20	0 017
Sawed stuff, boards, plank, scantling and sawed timber, per M feet, board measure, in rafts	0 60	0 60	0 60	0 30	0 20	0 19	0 09	0 36 $\frac{1}{2}$	0 03 $\frac{3}{4}$
Square timber, per M cubic feet, in vessels	3 00	3 00	3 00	1 00	1 00	0 56	0 44	1 69	0 12 $\frac{1}{2}$
" rafts	4 50	4 50	4 50	2 00	2 00	1 12	0 63	3 13	0 25
Wagon stuff, woodenware and wood, partly manufactured, per ton of 40 cubic feet	0 40	0 40	0 40	0 40	0 25	0 30	0 20	0 55	0 05
Shingles, per M	0 06	0 06	0 06	0 06	0 04	0 04 $\frac{1}{2}$	0 02 $\frac{1}{2}$	0 08	0 00 $\frac{3}{8}$
Split posts and fence rails, per M, in vessels	0 40	0 40	0 40	0 40	0 20	0 23	0 12	0 42	0 05
" rafts	0 80	0 80	0 80	0 80	0 40	0 38	0 17	0 77	0 10
Saw-logs, each, standard log	0 08	0 08	0 08	0 08	0 05	0 06	0 06	0 13	0 01
Staves and headings, barrel, per M	0 08	0 08	0 08	0 04	0 15	0 15	0 10	0 30	0 02 $\frac{1}{2}$
" " pipe, per M	1 50	1 50	1 50	1 00	1 00	0 75	0 50	1 75	0 12 $\frac{1}{2}$
" " West India, per M	0 75	0 75	0 75	0 60	0 25	0 45	0 25	0 65	0 07 $\frac{1}{2}$
" " salt barrel, sawn or cut, per M	0 08	0 08	0 08	0 04	0 03	0 03	0 02	0 06	0 00 $\frac{1}{2}$
Traverses, per 100 pieces	0 50	0 50	0 50	0 50	0 40	0 38	0 15	0 67 $\frac{1}{2}$	0 06 $\frac{1}{4}$
Hop poles, per 1,000 pieces	2 00	2 00	2 00	2 00	1 50	1 50	0 65	2 65	0 25
<i>Special Class.</i>									
Gypsum, crude (per O.C., Oct. 28, 1892)	0 15	0 05	0 05	0 05	West ward				
Coal	0 20	0 20	0 20	0 15	0 10	0 08	0 05	0 17 $\frac{1}{4}$	0 017
Stone, unwrought, corded, and not suitable for cutting, per cord	0 75	0 75	0 75	0 60	0 37 $\frac{1}{2}$	0 28	0 24	0 77 $\frac{1}{2}$	0 07 $\frac{1}{2}$
Kryolite, iron ore or chemical ore	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Ice	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 11	0 0

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ON THE CANALS—Continued.

TRENT VALLEY CANALS.

1ST SECTION.	2ND SECTION.	3RD SECTION.	4TH SECTION.	THROUGH.	Peterborough to Hastings, each way.
Fenelon Falls to Bobcaygeon.	Bobcaygeon to Buckhorn.	Buckhorn to Burleigh.	Burleigh to Lakefield.	Fenelon Falls to Lakefield.	
Tolls Charge- able at Fenelon Falls.	Tolls Charge- able at Babcaygeon.	Tolls Charge- able at Buckhorn.	Tolls Charge- able at Burleigh.	Tolls Charge- able at Fenelon Falls.	Tolls Charge- able at Peterborough and Hastings.
§ cts.	§ est.	§ cts.	§ cts.	§ cts.	§ cts.
0 01	0 01	0 01	0 01	0 04	0 01
0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 01	0 00 $\frac{1}{4}$
0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 01	0 00 $\frac{1}{4}$
0 13	0 13	0 13	0 13	0 52	0 13
0 03	0 03	0 03	0 03	0 10	0 03
0 04	0 04	0 04	0 04	0 14	0 04
0 02	0 02	0 02	0 02	0 08	0 02
0 02	0 02	0 02	0 02	0 08	0 02
0 01	0 01	0 01	0 01	0 04	0 01
0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$
0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 00 $\frac{1}{4}$	0 01	0 00 $\frac{1}{4}$
0 03	0 03	0 03	0 03	0 10	0 03
0 04	0 04	0 04	0 04	0 14	0 04
0 07	0 07	0 07	0 07	0 28	0 07
0 14	0 14	0 14	0 14	0 56	0 14
0 04	0 04	0 04	0 04	0 16	0 04
0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 03	0 00 $\frac{3}{4}$
0 03	0 03	0 03	0 03	0 12	0 03
0 05	0 05	0 05	0 05	0 20	0 05
0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 03	0 00 $\frac{3}{4}$
0 02	0 02	0 02	0 02	0 08	0 02
0 10	0 10	0 10	0 10	0 40	0 10
0 05 $\frac{1}{2}$	0 05 $\frac{1}{2}$	0 05 $\frac{1}{2}$	0 05 $\frac{1}{2}$	0 22	0 05 $\frac{1}{2}$
0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 00 $\frac{1}{2}$	0 02	0 00 $\frac{1}{2}$
0 05	0 05	0 05	0 05	0 20	0 05
0 20	0 20	0 20	0 20	0 80	0 20
Free.	Free.	Free.	Free.	Free.	Free.
0 01	0 01	0 01	0 01	0 04	0 01
0 03 $\frac{1}{4}$	0 03 $\frac{1}{4}$	0 03 $\frac{1}{4}$	0 03 $\frac{1}{4}$	0 14	0 03 $\frac{1}{4}$
0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 00 $\frac{3}{4}$	0 03	0 00 $\frac{3}{4}$
Free.	Free.	Free.	Free.	Free.	Free.

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St. Peter's Canal.

Sec. 2. On each and every vessel passing through the said canal, two cents per ton on the vessel and one cent per ton on the freight, each way. O. C. June 23, 1883. Con. O. C. Oct. 26, 1889, sec. 109. Free, O. C., April 27, 1903.

SPECIAL REGULATIONS RELATING TO TOLLS ON SOME OF THE CANALS.

Sec. 3. Coal may pass up all canals, except the Welland Canal, free of toll. O. C. June 6, 1869. Con. O. C. Oct. 26, 1889, sec. 83. Free, O. C., April 27, 1903.

Sec. 4. Logs, lumber or other produce may pass free of toll down the Chippawa Creek, between the Aqueduct and Port Robinson. O. C. May 18, 1863. Con. O. C. Oct. 26, 1889, sec. 84.

Sec. 5. (a.) In view of the dam constructed across the Ottawa River at Carillon whereby the passage of the rapids at that point through the river is rendered difficult and at times impracticable, it appears necessary, owing to the continued difficulty attending passage through the slide built in the dam, that the canal should be used by rafts and until otherwise ordered, free passage be given to rafts through the Carillon Canal, subject to such regulations as the Department of Railways and Canals may find necessary in the interest of the traffic of the canal to adopt. O. C. July 6, 1888.

Sec. 5. (b.) "Save in cases for which special permission may be given the Grenville Canal is closed to the passage of rafts, or any portion of a raft of any kind whatever." O. C. June 27, 1890.

Sault Ste. Marie Canal.

Sec. 6. All vessels and freight shall be permitted to pass through the Sault Ste. Marie Canal free of toll upon such vessels and freight, until otherwise ordered.

Sec. 7. (a.) All up bound goods on which full tolls have been paid for passage through the whole of the St. Lawrence Canals, or for passage through the Lachine Canal, the Ottawa and Rideau Canals or for passage through the Ottawa and Rideau Canals shall be entitled to pass free through the Welland Canal, or any portion thereof, and tolls paid for passage through the Chambly Canal, on goods thereafter so becoming entitled to the above privilege, shall be refunded at Montreal. All down bound goods on which full tolls have been paid for passage through the Welland Canal shall be entitled to pass free through any or all of the above mentioned Canals, or through any portion thereof. O. C. May 17, 1897.

(b.) All articles, goods or merchandise, not enumerated above, shall be charged to class No. 4. O. C. April 18, 1873. Con. O. C. Oct. 26, 1889, sec. 86.

Sec. 8. Goods shipped to any port west of the St. Lawrence Canals, tolls upon which have already been paid for passage through such canals, may be re-shipped from such port and be passed through the Welland Canal free of tolls, in the same way as if they had been shipped through direct in the first instance; and goods going eastward, having paid Welland Canal tolls, may be transhipped at any port on Lake Ontario, and thereafter pass free through the St. Lawrence Canals, as if they had been shipped through direct in the first instance. O. C. June 23, 1883. Con. O. C. Oct. 26, 1889, sec. 87.

Sec. 9. Iron ore, kryolite or chemical ore, may pass through one section, or through all the canal sections aforesaid, for 5 cents per ton. Free, O. C., April 27, 1903.

Sec. 10. No let-passes shall be issued to steam tugs or other small vessels for less than 25 cents, as a minimum charge; but such vessels, not carrying freight or passengers, can obtain, on payment of \$30 a season "Let-Pass," which will pass them up and down the canals as often as desired. O. C. April 18, 1873. Con. O. C. Oct. 26, 1889, sec. 86. Free, O. C., April 27, 1903.

Sec. 11. All vessels owned or chartered by persons having contracts for the enlargements or repair of any of the canals, and employed by them in removing earth or carrying materials necessary for the prosecution of such works, shall be entitled to pass through such canals free of toll upon such vessel and cargo. O. C. April 22, 1884. Con. O. C. Oct. 26, 1889, sec. 35.

Sec. 12. Government dredges and scows shall be permitted to pass through the canals free of tolls, but that such dredges and scows shall not be so passed as to interfere with the passage of other vessels of any kind whatever. O. C. May 18, 1891.

HARBOUR DUES.

Sec. 13. Vessels receiving or discharging freight at the premises of the Welland Railway, at Ports Colborne or Dalhousie, are to be free from harbour dues; but all other vessels discharging or receiving cargo at Port Dalhousie, Port Colborne or Port Maitland, shall pay on every ton of freight so received or discharged, two cents. O. C. April 18, 1873. Con. O. C. Oct. 26, 1889.

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WAY RATES.

Sec. 14. The following way rates are to be levied on vessels and property passing the several subdivisions of the Canals:—

Welland Canal.

Rate.

- 1. From Port Maitland, Dunnville and Port Colborne to Port Robinson or Allanburg, not passing the lock, each way.
- 2. From Chippawa Cut, or any part thereof, to Dunnville, Port Maitland or Port Colborne.
- 3. From Dunnville to Port Colborne.
- 4. From Thorold to St. Catharines or Port Dalhousie.
- 5. From Maitland, Dunnville, Colborne or Port Robinson to Marshville and intermediate places.
- 6. From Marshville or intermediate places to Port Maitland, Dunnville, Port Colborne and Port Robinson.
- 7. From Port Robinson to Allanburg or Thorold.
- 8. From Port Robinson to St. Catharines or Port Dalhousie.
- 9. From St. Catharines to Port Dalhousie.
- 10. From Dunnville to Maitland.
- 11. From Port Robinson through the Lock and Chippawa Cut.
- 12. From Port Colborne to Port Maitland.
- 13. From Chippawa Cut through Lock to Port Robinson.
- 14. From Colborne, Dunnville, Maitland and Marshville to Thorold.
- 15. From Colborne, Dunnville, Maitland and Marshville to St. Catharines.
- 16. Through the Chippawa Cut only.
- 17. Through the Port Robinson Lock only.

St. Lawrence Canals.

Sec. 15. The navigation is divided into four sections, viz., Cardinal, Cornwall, Beauharnois or Soulanges and Lachine. Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.

Chambly Canal.

Rate.

- Sec. 16. Vessels and property passing from Sorel to Chambly, to pay.
- Vessels and property passing from Chambly to St. Johns, to pay.

Ottawa Canals.

Sec. 17. The navigation is divided into three sections, viz., Grenville, Carillon and Ste. Anne's. Tolls are to be levied on all vessels and property in proportion to the number of sections passed through.

Rideau Canal.

Sec. 18. The navigation of this canal is divided into three sections, viz., Ottawa, Smith's Falls and Kingston Mills. Vessels and freight passing one section are to be charged one-third; two sections, two-thirds. O.C. April 18, 1873. Con. O.C. Oct. 26, 1889, secs. 77, 78, 79, 80 and 81.—

Tay Canal to be part of the Rideau Canal and the following rates of tolls to be levied upon the said Tay Branch of the Rideau Canal system, viz.:—

- Perth to Smith's Falls, 1 section, or one-third of Rideau Canal rates, each way.
- Perth to Kingston, 2 sections, or two-thirds Rideau Canal rates, each way.
- Perth to Ottawa Basin, 2 sections, or two-thirds Rideau Canal rates, each way.
- Perth to River Ottawa, 3 sections, full Rideau Canal rates, each way. O.C. Sept. 27, 1890.

General.

Sec. 19. (a.) Any fraction of a ton freight is to be charged one ton, and portions of sections are to be charged as a whole section on all the above canals.

(b.) The passing of saw-logs or other lumber through any of the canals, or sections thereof, shall be at all times governed by the regulations for their management. O.C. April 18, 1873. Con. O.C. Oct. 26, 1889, sec. 82.

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Sec. 20.—STANDARD FOR ESTIMATING WEIGHTS, FOR CANAL TOLLS.

	Tons.		Tons.
2,000 lbs. avoirdupois.	1	Sheep, 20	1
Per M. is per thousand feet		Stone, 12 cubic feet	1
Per mile is per thousand pieces		Stone, 1 cord	7½
Green fruit, 9 barrels are	1	Whisky, 4 barrels or 215 gallons	1
Ashes, 3 barrels are	1	Empty barrels, 10	1
Bark, 4 cords	1	Barrel hoops, 10 mille	1
Beef, 7 barrels	1	Board and other sawed lumber, 600 feet board measure	1
Biscuit and crackers, 9 barrels	1	Boat knees, 4	1
Bricks, common, 1,000	2	Firewood, 1 cord	3
Butter, 22 kegs or 7 barrels	1	Hop poles, 60 or 40 cubic feet	1
Cattle, 3	1	Shingles, 12 M. or bundles	1
Cement and water lime, 7 barrels	1	Split posts and fence rails, 1 mille	1
Fire-bricks, 1,000	3	Staves and headings, pipe, 1 mille	8
Fish, 7 barrels	1	" " W. India, 1 mille	4
Flour, 9 barrels	1	" " barrel, 1 mille	2½
Gypsum and manganese, 6 barrels	1	" " salt barrel, 1 mille	0½
Horses, 2	1	Saw-logs, standard, 1	0½
Lard and tallow, 7 barrels or 22 kegs	1	Square timber, 50 cubic feet	1
Liquors and spirits, 215 gallons	1	Telegraph poles, 10, or 40 cubic feet	1
Liquids, all others, 215 gallons	1	Masts and spars, 40 cubic feet	1
Nuts, 9 barrels	1	Railroad ties, 16, or 50 cubic feet	1
Oysters, 6 barrels	1	All other woodenware, or partly manufac- tured wood, 40 cubic feet as per tariff	1
Pork, 7 barrels	1	Traverses, 40 cubic feet, or 5 pieces	1
Refined oil in bulk, 250 gals., O.C., July 24, '00	1	Floats, 50 lineal feet	1
Salt, 7 barrels	1		
Seeds, 9 barrels	1		

NOTE.—By the Weights and Measures Act, chapter 104 of the Revised Statutes of Canada, section 14, all the following named articles are to be estimated by the cental of 100 lbs.

The weight equivalent to a bushel being as follows:—Wheat, 60 lbs.; Indian corn, 56 lbs.; rye, 56 lbs.; peas, 60 lbs.; barley, 48 lbs.; oats, 34 lbs.; beans, 60 lbs.; clover seed, 60 lbs.; timothy seed, 48 lbs.; buckwheat, 48 lbs.; flax seed, 50 lbs.; blue grass seed, 14 lbs.; hemp seed, 44 lbs.; malt, 36 lbs.; castor beans, 40 lbs.; potatoes, turnips, carrots, parsnips, beets and onions, 60 lbs.; bituminous coal, 70 lbs.

TOLLS AT SHEDS AT LACHINE CANAL BASIN.

Sec. 21. The following tolls shall be levied upon property stored at the sheds at the Lachine Canal Basin:—

	Cents.
Wheat and other grain, per week, per bushel	1
Meal " " per barrel	4
Pork, beef, butter and lard " "	5
Muscovado sugar " " per hhd., 10 cents; per brl	5
Liquors " " f per pipe, 15 cents; per pun	12
" " (per hhd., 10 cents; per qr. cask	7
Iron, bars " " per ton	24
Iron, pig " " " "	12
Salt, except at the St. Gabriel sheds " " per 100 minots	36
Salt at the St. Gabriel sheds, Montreal, after the first 48 hours " " per bag	½
Bales, crates, cases, &c. " " per ton weight or measurement	24
Coals " " per chaldron	12

Sec. 22. (a.) No charge shall be made for property stored in the sheds of the Lachine Canal Basin for the first forty-eight hours, after which period, except in the case of flour, the foregoing rate of storage for the use of the sheds are to be raised, levied and collected.

(b.) Articles unenumerated are to be charged according to the above rates as nearly as the same can be computed.

(c.) All property stored in the sheds remaining after the first forty-eight hours will be liable to one week's storage, although it should only have been stored for a portion of the same, and so on for each succeeding week.

(d.) The labour of receiving property into the sheds and delivering the same shall be at the expense of and be furnished by the owners of the property or their agents.

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(e.) All property stored in these sheds shall be at the risk of the proprietor from damage by fire or otherwise.

(f.) All dues for storage shall be paid before the removal of the property. O. C. August 21, 1846, October 28, 1846. Con. O. C. Oct. 26, 1889, secs. 90 and 91.

Flour.

Sec. 23. (a.) Flour shall be allowed to remain in the sheds for two whole days free of charge.

(b.) If kept there beyond two days or 48 hours, such flour shall be liable to a charge of one cent per day per barrel for the first four days after the expiration of the 48 hours of the exemption.

(c.) Should the flour be kept in the sheds beyond four days at one cent per day per barrel, it shall be liable to pay two cents per day per barrel for every day subsequent to the expiration of such four days.

(d.) Any part of a day shall be considered as one day. O. C. May 31, 1856. Con. O. C. Oct. 26, 1889, sec. 92.

WHARFAGE DUES ON COAL FOR LOCAL CONSUMPTION IN MONTREAL.

Sec. 24. Coal for local consumption in Montreal, landed on canal property between Montreal Harbour and Lachine, O.C., April 22, 1902, from vessels other than sea-going, and entering the Lachine Canal from Montreal Harbour, shall be charged wharfage dues at the rate of five cents a ton.

Coal screening shall be charged 3 cents a ton. Con. O. C. Oct. 26, 1889, sec. 93. O. C. May, 18, 1892.

CHARGES FOR WHARFAGE ON FIREWOOD ON WHARFS AND BANKS OF LACHINE CANAL.

Sec. 25. The following rates of tolls shall be collected as herein mentioned that is to say:—

(a.) Firewood landed on wharfs or banks of the Lachine Canal, or in boats, barges or other craft occupying any of the basins between Wellington Street Bridge and Lock No. 3, four cents per cord, and for every day the wood is allowed to remain in either the canal or basin, or on the wharfs or banks after the first five days, an additional charge of four cents per cord. O. C. August 7, 1860. Con. O. C. Oct. 26, 1889, sec. 94.

(b.) The clause next preceding shall not only apply to the rates of toll to be collected on firewood on wharfs at Lachine and the Lachine Canal and basin, but are also extended and made applicable to the banks and grounds at Côte St. Paul and at Lachine. O. C. Jan. 27, 1862. Con. O. C. 1889, sec. 94.

CANAL BASINS IN MONTREAL PART OF MONTREAL HARBOUR.

Sec. 26. Whereas under existing regulations for the collection of canal tolls, eastern bound vessels having paid the charges one way in full through the Welland Canal are chargeable one Section Canal Toll if re-entering the Lachine Canal;

And whereas vessels loaded with grain destined for the Montreal Harbour frequently unload only part of their cargoes on board sea-going vessels in the harbour, and re-enter the Lachine Canal for the purpose of unloading the balance of their cargoes either in elevators or mills located along the canal basins;

It is ordered that the Lachine Canal basins, within the Montreal city limits, be considered as part of the Montreal Harbour, in so far only as regards the collection of tolls on the class of vessels above referred to, which re-enter that portion of the canal for the purpose of unloading the balance of their cargoes, but that the same shall not apply any further, as in the event of vessels returning to the harbour to take cargo, in which case the usual toll shall be charged against them on passing out of the canal a second time into the harbour. O. C. Aug. 8, 1878. Con. O. C. Oct. 26, 1889, sec. 95. Free O.C. April 27, 1903. W117

PHOSPHATES.

Sec. 27. Whereas vessels laden with grain for delivery in Montreal Harbour frequently carry also deck loads of phosphates, and being compelled to proceed at once to the harbour for the discharge of the grain, they pay tolls through to that point, subsequently re-entering the Lachine Canal for the storage of the phosphates, and in accordance with the existing regulations, paying canal dues a second time for such re-entry;

It is ordered that the Lachine Canal basins, within the Montreal city limits, be considered as part of the Montreal Harbour, for the purpose of the unloading of phosphates carried by vessels in addition to their grain cargoes as described in this section; it being, however, provided that in the event of their returning to the harbour to take cargo, the usual tolls shall be charged against such vessels on their passing out of the canal a second time. O. C. July 12, 1881. Con. O. C. Oct. 26, 1889, sec. 96. Free, O.C., April 27, 1903.

Extract from the Act, Canada, 1894, c. 48, amending and consolidating the Acts relating to the Harbour Commissioners of Montreal.

HARBOUR RATES WHARFAGE DUES IN ALL BASINS OF THE LACHINE CANAL ON SEA-GOING VESSELS.

Sec. 28. The corporation may, from time to time, levy such rates as are approved of by the Governor in Council, upon all goods landed or shipped in the harbour, moved by rail on the harbour tracks, or deposited within the harbour, except arms, ammunition and military accoutrements, and other munitions of war for the use of the Government or for the defence of the Dominion. 40 V., c. 53, s. 2, part 2. For the purposes of this section, the lower basins of the Lachine Canal shall be held to form part of the harbour of Montreal, and the corporation may levy from all vessels entering the same through the harbour for the purpose of discharging or loading there, except canal craft trading between Montreal and places above Montreal, the same rates as may be levied in the harbour and under the same regulations and penalties. In all other respects the said lower basins shall be and remain under the jurisdiction of the Minister of Railways and Canals. 18 V., c. 143, s. 18; 40 V., c. 53, s. 2, part 2.

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All property delivered or received by sea-going vessels in the Lachine Canal basins at Montreal (except the old lower basin) shall be charged wharfage dues as follows:—

All goods, wares and merchandise not elsewhere specified.....	25 cents per ton.
Hay, straw, pig and scrap iron, pot and pearl ashes.....	20 "
Apples, crates and their contents, flour and meal, fish, meats, pitch, potatoes, tar, horses, neat cattle, sheep and swine.....	15 "
Ballast, clay, fire-bricks, gypsum, lime, marble, phosphate, sand, salt.....	10 "
Coal and coke, grain and seeds of all kinds.....	6 "
<i>Special</i> —Bricks, 10 cents per 1,000; cordwood, 5 cents per cord; lumber, 10 cents per 1,000 feet, board measure.	
Bullion specie.....	Free.
Coal screenings.....	3 "
Each entry shall pay not less than 5 cents.	
All property landed on the canal wharfs for re-shipment, or transhipped in canal waters, shall pay one wharfage only.	

Lumber upon which tolls have been paid for passage down the Lachine Canal, and which is re-shipped from the wharfs or vessels into sea-going vessels, shall pay wharfage dues equal to one section of canal tolls, viz., 3 $\frac{3}{4}$ cents per 1,000 feet board measure. O.C. Jan. 26, 1883. Con. O.C. Oct. 26, 1889, secs. 98, 99, 100 and 101. O.C. May 18, 1892.

Sec. 29.—Standard for Estimating Weights.

Ashes, pot or pearl.....	3 brls. to 1 ton.
Apples, flour, meal, potatoes.....	9 " 1 "
Fish, meat, pitch, tar.....	7 " 1 "
Horses.....	2 to 1 ton.
Neat cattle.....	3 to 1 "
Sheep.....	15 to 1 "
Swine.....	10 to 1 "

O.C. April 1, 1881. Con. O.C. Oct. 26, 1889, sec. 102.

TOLLS ON FLOATED TIMBER, ETC., ENTERING THE BASIN AT LACHINE.

Sec. 30. The following rates of tolls shall be collected on floated timber, lumber and firewood entering the basin at Lachine and Lachine Canal:—

Kinds of Timber.	For receiving Timber, &c., to include use of Basin and Wharf for one Month.	For each succeeding month during the Season of Navigation.	For Wintering in Basin or on Wharf.
	Cents.	Cents.	Cents
Timber, square or round, of all kinds, above 12 x 12, per M cubic feet.....	25	20	35
Timber, round or flatted, of all kinds, under 12 x 12, per M lineal feet.....	20	15	30
Planks and boards to include all kinds of sawed lumber in rafts, per M feet, board measure.....	3	2	3
Saw logs, 12 feet long, if longer in same proportion per log.....	1	$\frac{1}{2}$	2
Floats, per 100.....	10	5	10
Traverses, per 100.....	10	5	10
Fence posts and rails, per M.....	10	5	10
Staves, barrel, per M.....	8	4	8
" pipe.....	8	4	8
" West India, per M.....	8	4	8
Firewood on bank of canal between Lock No. 3 and Lock No. 5, and also on wharfs in canal basin at Lachine.....	3	3	3

Note.

Sec. 31. (a.) No allowance shall be made for fractional parts of a month or winter season.
 (b.) The firewood shall be corded across the bank while being delivered from the boat in such manner and at such points as the superintending engineer may direct.
 (c.) The rates on timber to take effect upon the completion of the booms in Lachine Canal. O.C. June 8, 1860. Con. O.C. Oct. 26, 1889, secs. 103 and 104.

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DRY DOCK CHARGES.

Trent Valley Canal.

Sec. 38. The following tolls and dues shall be charged for the use of the dry dock at Bobcaygeon, and of any of the locks on the Trent Valley Canal, during the winter or other shorter period:—

For Vessels	Wintering.	Per day.	Per week.
Over 15 tons.....	\$30 00	\$4 00	\$12 00
15 tons and under.....	20 00	3 00	10 00

(O. C. Oct. 31, 1890.)

Rideau Canal.

Sec. 39. The following tariff of tolls and regulations shall be, and the same are hereby established for the use of the dry dock on the Rideau Canal at Ottawa:—

(1) Steamers entering dock.....	\$ 8 00
Each day or portion of a day after day of entrance.....	2 50
(2) Barges entering dock.....	5 00
Each day or portion of a day after day of entrance.....	2 50
(3) Steam yachts or launches.....	5 00
Each day or portion of a day after day of entrance.....	2 50
(4) Boats wintering in the dry dock from the close to the opening of navigation.....	50 00
For every day such boat remains in the dock after the opening of navigation.....	8 00

(5) No vessel of any class shall be in the dock over six days after notice is given in writing by the lockmaster that the dock is required for another vessel unless a satisfactory agreement between all parties interested is arrived at.

(6) All entrances and discharge of vessels are covered by entrance fee.

(7) All drying off of vessels of all classes in the locks at Ottawa or Hartwell's during the season of navigation is prohibited unless for special reasons.

The owners of vessels of all classes to render the required assistance to open and close the gate under the supervision of the superintending engineer.

Vessel owners to supply all blocks, &c., to shove their boats up to make the necessary repairs and all refuse to be properly cleared out to the entire satisfaction of the lockmaster before leaving the dock.

(O. C. Dec. 28, 1893.)

Sec. 40. The use of horses for towage purposes between the lower entrance of the Cornwall Canal and lock No. 20, be prohibited during the works of enlargement of that portion of the Cornwall Canal.

(O. C. Aug. 20, 1890.)

Sec. 41. As the prohibition of the use of horses for towing purposes, between the lower entrance of the Cornwall Canal and Lock No. 20 during the progress of the works of canal enlargement, has entailed the use of tugs and consequently expenses to the parties concerned, that all tugs, used solely for the purposes of towing on the section in question, be permitted to pass free of toll, up and down the canal between the lower entrance of the canal and lock No. 20, until the completion of the enlargement of the works on that section. (O. C. Sept. 27, 1890.)

SPECIAL RATES FOR 1902 ONLY.—1903. Free.

Sec. 42. For season of 1902 the Canal Tolls for the passage of the following food products:—wheat, Indian corn, peas, barley, rye, oats, flax seed and buckwheat, for through passage eastward through the Welland Canal, be ten cents per ton, and for through passage eastward through the St. Lawrence Canals only, ten cents per ton; payment of the said toll of ten cents per ton through the Welland Canal to entitle these products to free passage through the St. Lawrence Canals, or any portion thereof. (O. C. April 1, 1902.) Also special rates, are granted to grain, &c., carried on the O. A. & P. S. and Canada Atlantic Railway systems, from Depot Harbour to Coteau Landing and thence by Canal to Montreal, as follows, viz.:—Wheat, Indian corn, peas, barley, rye, oats, flaxseed and buckwheat, 2½ cents per ton, and all rolling and package freight, 5 cents per ton. (O. C. April 1, 1902.) Free, O. C., April 27, 1903.

Sec. 43. (a.) That for the current season of navigation of 1902, there shall be allowed in the case of steamships specially chartered for the conveyance of excursion parties, going and coming the same day, a reduction of one-half of the usual passenger tolls for passage through the Government canals, it being distinctly understood that no freight is to be carried by the said steamers on such excursions. (O. C. April 25, 1902.) Free, O. C., April 27, 1903.

Sec. 43. (b.) Whereas the Canal Tolls payable for passage through the Welland and St. Lawrence Canals of barrel staves and headings, are 40 cents per 1,000 in the case of ordinary materials, such as those for sugar and flour barrels; while in the case of staves and headings for salt barrels the charge is 8 cents per 1,000 only.

And whereas application is made to have this distinction removed on the ground that sugar and flour cooperage is of the same weight as salt cooperage.

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His Excellency in virtue of the provisions of chapter 38 of the Revised Statutes of Canada, intituled "An Act respecting the Department of Railways and Canals," and by and with the advice of the Queen's Privy Council for Canada, is pleased to order that Class 5 of the existing Tariff of tolls for passage through the Canals of the Dominion, established by the Order in Council of the 25th March, 1895, shall be and the same is hereby amended to the effect, and to that effect only, of removing the distinction between ordinary and salt barrel staves and headings, and making the tolls payable for these articles the same, namely, those at present charged on salt barrel staves and headings, on all the Canals of the Dominion. (O. C. May 28, 1897.)

SPECIAL RATES ON SAND AND STONE.

Sec. 43. (c.) On the recommendation of the Acting Minister of Railways and Canals, the rate of tolls on sand and stone used in the construction of the bridge being built at Cornwall by the Ottawa and New York Railway was reduced from 15 and 20 cents to $7\frac{1}{2}$ and 10 cents respectively. (O. C. August 27, 1898.)

APPENDIX B

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.....	33
3. Cornwall Canal.....	11
River St. Lawrence.....	5
4. Farran's Point Canal.....	1
River St. Lawrence.....	10
5. Rapide Plat Canal.....	3½
River St. Lawrence.....	4
6. Galops Canal.....	7¼
River St. Lawrence and Lake Ontario.....	236
7. Welland Canal.....	26¾
Lake Erie, Detroit River, Lake St. Clair, Lake Huron, &c.	580
8. Sault Ste. Marie Canal.....	1¼
Lake Superior to Port Arthur.....	266
Total	1,223¼
To Duluth.....	1,357
Chicago.....	1,286

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 the 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 2,200 statute miles. The distance to Duluth is 2,343 statute miles. The distance to Chicago, 2,272 miles.

From the Straits of Belle Isle, at the mouth of the St. Lawrence, to Montreal, the distance is 986 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 73 miles; total lockage (or height directly overcome by locks), 551 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.

LACHINE CANAL.

Length of canal	8½ statute miles.
Number of locks	5
Dimension of locks	270 feet by 45 feet.
Total rise or lockage	45 feet.
Depth of water } at two locks.	18 "
} at three locks.	14 "
Average width of new canal	150 "

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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 986 miles distant from the Straits of Belle Isle.

SOULANGES CANAL.

Length of canal.....	14 statute miles.
Number of locks { lift.....	4
guard.....	1
Dimensions of locks.....	280 feet by 45 feet.
Total rise or 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.

Length of canal.....	11 statute miles.
Number of locks.....	6
Dimensions of locks.....	270 feet by 45 feet.
Total rise or lockage.....	48 feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	100 "
Breadth of canal at water surface.....	164 "

The old lift locks, 200 feet by 45 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 $32\frac{3}{4}$ 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.

Length of canal.....	1 mile.
Number of locks.....	1
New lock.....	800 feet by 45 feet.
Old lock.....	200 "
Total rise or lockages.....	$3\frac{1}{2}$ 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 "

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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.

Length of canal.....	3 $\frac{3}{8}$ miles.
Number of locks.....	2
Dimensions of locks.....	270 feet by 45 feet.
Total rise or lockage.....	11 $\frac{1}{2}$ 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 10 $\frac{1}{2}$ miles. This canal was formed to enable vessels ascending the river to pass the rapids at that place. Descending vessels run the rapids safely.

GALOPS CANAL.

Length of canal.....	7 $\frac{1}{2}$ miles.
Number of locks.....	3
Dimensions of locks. { one of which is }	2-270 by 45.
{ a guard lock. }	1-800 by 45.
Total rise of lockage.....	15 $\frac{1}{2}$ feet.
Depth of water on sills.....	14 "
Breadth of canal at bottom.....	80 "
Breadth of canal at surface of water.....	144 "

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

MURRAY CANAL.

Length between eastern and western pier heads..	5 $\frac{1}{6}$ miles.
Breadth at bottom.....	80 feet.
Breadth at water surface.....	120 "
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 Quinté and Lake Ontario, and thus enabling vessels to avoid the open lake navigation.

WELLAND CANAL.

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

	Old Line.	Enlarged or New Line.
Length of canal.....	27 $\frac{1}{2}$ miles	26 $\frac{3}{4}$ miles.
Pairs of guard-gates (formely 3) ..		2
Number of locks { lift.....	26	25
{ guard.....	1	1
Dimensions.....	{ 1 lock 200 x 45 1 lock 200 x 45 1 (tidal) 230 x 45 24 locks 150 x 45	{ 270 feet x 45 feet.
Total rise or lockage 326 $\frac{3}{4}$ feet....	326 $\frac{3}{4}$ feet	326 $\frac{3}{4}$ feet.
Dept of water on sills.....	10 $\frac{1}{4}$ "	14

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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	{ 1 of 150 by 26½ feet. 1 of 200 by 45 "
Total rise or lockage	7 to 8 feet.
Depth of water on sills	9 feet.

PORT MAITLAND BRANCH.

Length of canal	1¾ miles.
Number of locks	1
Dimensions of locks	185 feet by 45 feet.
Total rise of lockage	7½ feet.
Depth of water on sills	11 "

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

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

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

From the head of the Welland canal there is a deep water navigation through Lake Erie, the Detroit River, Lake St. Clair, the St. Clair River, Lake Huron and River St. Mary to the Sault canal, a distance of about 580 miles. From the Sault the distance through Lake Superior to Port Arthur is 266 miles, and to Duluth 400 miles.

SAULT STE. MARIE CANAL,

Length of canal, between the extreme ends of the entrance piers	5,967 feet.
Number of locks	1
Dimensions of locks	900 ft. by 60 ft.
Depth of water on sills (at lowest known water level)	20 ft. 3 inches.
Total rise or lockage	18 feet.
Breadth of canal at bottom	141 ft. 8 inches.
Breadth at surface of water	150 feet.

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

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territory between Lakes Huron and Superior. The masonry pier of the bridge carrying the Canadian Pacific Railway over the canal, which stood in the channel of the canal, forming an obstruction to navigation, has been removed; the swing now spanning the full width of the channel or prism of the canal.

MONTREAL, OTTAWA AND KINGSTON.

This route extends from the harbour of Montreal to the port of Kingston, passing through the Lachine canal, the navigation section of the lower River Ottawa, and the Ottawa canals, to the city of Ottawa; thence by the River Rideau and the Rideau canal to Kingston, on lake Ontario—a total distance of 245 $\frac{5}{8}$ miles.

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

Ottawa River Canals.

The Ste. Anne's Lock.
Carillon Canal.

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

STE. ANNE'S LOCK.

	Old Lock.	New Lock.
Length of canal.....	$\frac{1}{8}$ mile.	$\frac{1}{8}$ mile.
Number of locks.....	1	1
Dimensions of locks.....	190 x 45 feet	200 x 45 feet.
Total rise 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, 23 $\frac{1}{2}$ miles from Montreal harbour.

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THE CARILLON CANAL.

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.

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

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.

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

Length of navigation waters.....	$126\frac{1}{4}$ miles.
Number of locks going from Ottawa to Kingston... {	$\left. \begin{array}{l} 35 \text{ ascending.} \\ 14 \text{ descending.} \end{array} \right\}$
Total, lockage..... $446\frac{1}{2}$ feet {	$\left. \begin{array}{l} 282\frac{1}{4} \text{ rise and} \\ 164 \text{ fall} \end{array} \right\}$ at high water.
Dimensions of locks.....	134 x 33 feet.
Depth of water on sills.....	5 feet.
Navigation depth through the several reaches.....	$4\frac{1}{2}$ feet.
Breadth of canal reaches at bottom. {	$\left. \begin{array}{l} 60 \text{ feet in earth.} \\ 54 \text{ feet in rock.} \end{array} \right\}$
Breadth of canal at surface of water.....	80 feet in earth.

PERTH BRANCH.

Length of canal.....	6 miles.
Number of locks.....	2
Dimensions of locks.....	134 feet x 32 feet.
Total rise or lockage.....	26 "
Depth of water on sills.....	5 " 6 inches.
Length of dam.....	200 "
Breadth of canal at bottom.....	40 "
Breadth of canal at surface at water..... {	$\left. \begin{array}{l} 40 \text{ " in rock.} \\ 60 \text{ " in clay.} \end{array} \right\}$

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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 Catarqui. 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 south-west 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 Catarqui. 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.

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

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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.

Length of canal.....	12 miles.
Number of locks.....	9

Dimensions of locks :—

Guard lock, No. 1 at St. Johns.....	122 feet.	} From 22½ to 24 feet wide.
Lift " 2.....	124 "	
" " 3, 4, 5, 6.....	118 "	
" " 7, 8, 9 combined.....	125 "	
Total rise or lockage.....	74 "	
Depth of water on sills.....	7 "	
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 165 miles from Trenton; from Lake Balsam by a canal and the River Talbot to Lake Simcoe; thence by the River Severn to Georgian bay, Lake Huron; the total distance being about 200 miles, of which only about 15 or 20 miles will be actual canal.

The full execution of the scheme, commenced by the Imperial government in 1837, was deferred. By certain works, however, below specified, sections of these waters have been made practicable for navigation, and the whole scheme 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 190 miles from Trenton.

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

	Navigable Miles.	Unnavigable Miles.
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	51¾	—
Peterborough to Lakefield	—	9
Lakefield to a point across Balsam lake	61	—
	132¼	32¾
Total distance, Bay of Quinté to a point across Balsam lake . .		165
From Sturgeon Point on Sturgeon lake, 48¾ miles from Lake- field, 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 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. The lock here, it should be observed, is controlled by the Provincial government.

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

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

At Bobcaygeon, 15¾ miles from Buckhorn Rapids, a dam, 553 feet long, controls the water level up 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 (a Provincial government work)	134' x 33' x 5' 0" to 14' 0" depth water on mitre sill.
1	" Peterborough	134' x 33' x 5' 0" to 10' 0" depth water on mitre sill.
1	" Hastings	134' x 33' x 7' 0" to 10' 6" " "
1	" Chisholm's	134' x 33' x 5' 0" to 8' 6" " "

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ST. PETER'S CANAL, CAPE BRETON.

Length of canal.....	About 2,400 feet.
Breadth at water line.....	55 feet.
Lock.....	One tidal lock, 4 pairs of gates.
Dimensions.....	200 feet by 48 feet.
Depth of water on sills.....	18 " at lowest water.
Depth through canal.....	19 "
Extreme rise and fall of tide in St. Peter's Bay.....	4 "

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:

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, it is to be presumed that the Beauharnois canal will be abandoned for navigation purposes.

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ST. LAWRENCE NAVIGATION—TABLE OF DISTANCES.

FROM STRAITS OF BELLE-ILE TO PORT ARTHUR, AT HEAD OF LAKE SUPERIOR, BY WATER.

From	To	Sections of Navigation.	Statute Miles.	
			Inter-mediate.	Total to Straits of Belle-Isle.
Straits of Belle-Isle	Cape Whittle	Gulf of St. Lawrence	240	240
Cape Whittle	West Point, Anticosti	"	201	441
West Point, Anticosti	Father Point	River St. Lawrence	202	643
Father Point	Rimouski	"	6	649
Rimouski	Bic	"	12	661
Bic	Isle Verte	"	39	700
Isle Verte (opp. Saguenay)	Quebec	"	126	826
Quebec	Three Rivers	" to Tide-water	74	900
Three Rivers	Montreal	"	86	986
Montreal	Lachine	Lachine Canal	8 $\frac{1}{2}$	994 $\frac{1}{2}$
Lachine	Beauharnois	Lake St. Louis	15 $\frac{1}{4}$	1,009 $\frac{3}{4}$
Beauharnois	Ste. Cécile	Beauharnois Canal	11 $\frac{1}{4}$	1,021
Ste. Cécile	Cornwall	Lake St. Louis	52 $\frac{3}{4}$	1,053 $\frac{3}{4}$
Cornwall	Dickinson's Landing	Cornwall Canal	11 $\frac{1}{2}$	1,065 $\frac{1}{2}$
Dickinson's Landing	Farran's Point	River St. Lawrence	5	1,070 $\frac{1}{2}$
Farran's Point	Upper end of Croyle's Island	Farran's Point	3 $\frac{1}{4}$	1,071
Upper end Croyle's Island	Williamsburg or Morrisburg	River St. Lawrence	10 $\frac{1}{2}$	1,081 $\frac{1}{2}$
Williamsburg	Rapide Plat	Rapide Plat Canal	4	1,085 $\frac{1}{2}$
Rapide Plat	Point Iroquois Village	River St. Lawrence	4 $\frac{1}{2}$	1,090
Point Iroquois Village	Upper end Presqu'Isle	Point Iroquois Canal	3	1,093
Presqu'Isle	Point Cardinal, Edwardsburg	Junction Canal	2 $\frac{5}{8}$	1,095 $\frac{5}{8}$
Point Cardinal	Head of Galops Rapids	Galops Canal	2	1,097 $\frac{5}{8}$
Galops Rapids	Prescott	River St. Lawrence	7 $\frac{3}{8}$	1,105
Prescott	Kingston	"	59	1,164
Kingston	Port Dalhousie	Lake Ontario	170	1,334
Port Dalhousie	Port Colborne	Welland Canal	26 $\frac{3}{4}$	1,360 $\frac{3}{4}$
Port Colborne	Amherstburg	Lake Erie	232	1,592 $\frac{3}{4}$
Amherstburg	Windsor	River Detroit	18	1,610 $\frac{3}{4}$
Windsor	Foot of St. Mary's Island	Lake St. Clair	25	1,635 $\frac{3}{4}$
Foot of St. Mary's Island	Sarnia	River St. Clair	33	1,668 $\frac{3}{4}$
Sarnia	Foot of St. Joseph's Island	Lake Huron	270	1,938 $\frac{3}{4}$
Foot of St. Joseph's Island	Foot of Sault Ste. Marie	River St. Mary	47	1,985 $\frac{3}{4}$
Sault Ste. Marie	Head of Sault Ste. Marie	Sault Ste. Marie Canal	1	1,986 $\frac{3}{4}$
Head of Sault Ste. Marie	Pointe aux Pins	River St. Mary	7	1,993 $\frac{3}{4}$
Pointe aux Pins	Port Arthur	Lake Superior	266	2,259 $\frac{3}{4}$
Port Arthur to Lake Shebandowan			45	
Lake Shebandowan to North-west Angle			312	
North-west Angle to Winnipeg			95	
Pointe aux Pins to Duluth			390	

Of the 2,259 $\frac{3}{4}$ miles from the Straits of Belle-Isle to the head of Lake Superior, 71 miles are artificial navigation, and 2,188 $\frac{3}{4}$ open navigation.

Straits of Belle-Isle to Liverpool, 1,942 geographical or 2,234 statute miles.

The total fall from Lake Superior to Tide-water is about 600 feet.

The steamboat voyage from Collingwood to Port Arthur is 532 miles.

4-5 EDWARD VII., A. 1905

TABLE of distances of Stations between the cities of Ottawa and Kingston,

No. of Station.	Name of Station.	Distances from Ottawa.	Locks.		Dams.			Length of Artificial Canal at each Station in miles.
			No.	Lift at Low Water.	No.	Length.	Height.	
		Miles.		Rise. Ft. In.		Feet.	Feet.	
1	Ottawa	0	8	82 0	3	{ 230 1,320 1,616	13	
2	Hartwell's	4 $\frac{1}{2}$	2	22 0	...		100		28
3	Hogsback	5 $\frac{1}{2}$	2	13 6	1	320	60	
4	Black Rapids	9 $\frac{1}{2}$	1	10 0	1	300	12	
5	Long Island	14 $\frac{3}{4}$	3	27 0	3	850	68	
6	Burritt's	40 $\frac{1}{2}$	1	10 6	1	240	14	
7	Nicholson	43 $\frac{3}{4}$	2	15 2	1	500	9	
8	Clowes	44 $\frac{1}{2}$	1	10 0	1	481	16	
9	Merrickville	46 $\frac{3}{4}$	3	25 0	1	150	6	
10	Maitland	55	1	4 9	1	270	8	
11	Edmunds	59 $\frac{1}{2}$	1	10 10	1	343	8	
12	Old Slys	60 $\frac{3}{4}$	2	15 6	1	250	20	
13	Smith's Falls	61 $\frac{1}{2}$	4	33 9	2	600	24	
14	First Rapids or Poonamalie	64	1	7 9	1	260	5	
15	Narrows	83 $\frac{1}{4}$	1	4 0	1	600	9	
	Total rise at low water			292 3				
				Fall.				
16	Isthmus	87 $\frac{1}{2}$	1	4 0				1 25
17	Chaffey's	92	1	12 6				0 13
18	Davis	94 $\frac{1}{2}$	1	9 0	1	300	15	0 06
19	Jones' Falls	97 $\frac{3}{4}$	4	60 0	1	300	60	0 25
20	Brewer's Upper Mills	108 $\frac{1}{4}$	2	19 0	1	200	20	1 75
21	" Lower Mills	110	1	14 2	1	200	12	4 25
22	Kingston Mills	120 $\frac{1}{4}$	4	46 8	1	6,042	14	0 25
23	Kingston	126 $\frac{1}{4}$						
	Total fall at low water			165 4				
	Total		47		24	15,472		16 46

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