

DOMINION OF CANADA

ANNUAL REPORT

OF THE

DEPARTMENT OF RAILWAYS
AND CANALS

For the Fiscal Year from April 1, 1927,
to March 31, 1928

Submitted in accordance with the provisions of the Revised Statutes of Canada,
Chapter 35, Section 33



OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

*To His Excellency the Right Honourable Viscount Willingdon, G.C.S.I.,
G.C.M.G., G.C.I.E., G.B.E., Governor General and Commander in Chief
of the Dominion 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 fiscal year ending March 31, 1928.

C. A. DUNNING,
Minister of Railways and Canals.

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REPORT

OF THE

DEPUTY MINISTER OF RAILWAYS AND CANALS

FOR THE FISCAL YEAR ENDED MARCH 31, 1928

To the Hon. C. A. DUNNING,

Minister of Railways and Canals.

SIR,—I have the honour to submit herewith the annual report of the Department of Railways and Canals for the fiscal year ended March 31, 1928. In so far as the report deals with the operation of the Canadian National Railways the record is for the calendar year 1927. This year, the Canadian National report is submitted in two parts—the eastern lines being separately dealt with, as required by the Maritime Freight Rates Act, 1927. This Act became effective on July 1, 1927, from which date the revenues and expenses of the lines east of Levis and Diamond Junction have been separately recorded. The change is in accounting only, and does not affect either the management or the operation of the system as a whole. The eastern lines thus separately dealt with total 3,108.04 miles of main track; the balance of the system comprises 19,090.99 miles of line, so that the total system steam mileage at December 31 last was 22,199.03.

The year 1927 was a year of expansion in Canadian railway business, of which increase the Canadian National lines secured reasonable share. There was a general increase in operating revenue from all sources, which increase totalled \$3,199,069, notwithstanding certain reductions in rates. The revenues for 1927 were adversely affected also by the early harvest of 1926, and by the late harvest of 1927. Operating expenses were increased by \$8,989,097, principally in two departments—maintenance of ways and structures, and transportation. An increase of \$3,046,750 in maintenance of ways and structures was due partly to increased wages and partly to a higher standard of maintenance. The increase of \$4,563,602 in the item of transportation was due partly to increased wages and partly to higher fuel costs, and also to the increased business handled. The result was a decrease of \$5,790,028 in net earnings from operation, and an increase in operating ratio from 81.09 per cent to 83.59 per cent.

NINE YEARS OF GOVERNMENT OPERATION AND CONTROL

The net earnings from operation for the year were \$42,113,976, as compared with \$47,904,004 for 1926. These figures were exclusive of eastern lines during the final half of each year. Nine years have elapsed since it became necessary for the Government to safeguard, in the national interests, the railway situation in Canada by taking over the privately-owned lines which had fallen into difficulties during the war. The transition period may, so far as the physical properties are concerned, be said to have occupied three years, and was not completed until 1921. In 1922 the management was reorganized, and control of the consolidated system established under a single board and a unified management, with most encouraging results. During the first three years of the nine-year period referred to, the Government had to meet operating deficits amounting to \$60,299,794. Since the reorganization in 1922 operating surplusses have replaced operating deficits, and these operating surplusses at December 31 last totalled \$162,844,008 for the six-year period subsequent to the change

of management. Setting the operating deficits of the first three years against the operating surplusses of the last six gives a favourable balance of more than 102 million dollars. From year to year, the record has been as follows:—

1919.....	\$14,223,713 00 (deficit)
1920.....	34,532,703 00 "
1921.....	11,543,378 00 "
1922.....	2,886,711 55 (surplus)
1923.....	20,430,649 08 "
1924.....	17,244,251 48 "
1925.....	32,264,414 79 "
1926.....	47,904,004 66 "
1927.....	42,113,976 45 "

From the foregoing, it will be seen that twice during the period of surplusses there has been a falling away from the general trend of increase. This was the case in 1924, as compared with 1923, and again in 1927, as compared with 1926. The first break was followed in 1925 by a notable increase, resulting in the establishment of a new high in the record of operating surplusses, and there is every reason to believe that 1928 will establish a similar showing over 1927 and go well beyond the peak established by the exceptional results achieved in 1926.

Lest it be objected that the results of operation alone afford no proper criterion by which to determine the success or failure of government ownership and operation of these railways, it is well to set up also the total deficit after fixed or interest charges which, during the nine-year period, have been as follows:

1919.....	\$55,358,075 00
1920.....	80,478,828 00
1921.....	69,866,589 00
1922.....	57,960,097 78
1923.....	51,697,674 94
1924.....	54,860,419 22
1925.....	41,444,764 42
1926.....	27,247,740 98
1927.....	34,373,027 22

During the first three years of government operation these figures included the deficits on operation as well as on interest account, and at that time the item of interest due the Government was less than half the sum of the interest due the public. After three years, operating deficits ceased, and from that time on the final figure has related to interest charges only, which position improved each year until, in 1926, the railway for the first time was able to provide from its own revenues the entire interest charges due the public, which amounted to \$39,119,410. Thus, in recent years, the total deficit figure has consisted principally of interest due the Government. For instance, in 1927, the total deficit, after fixed charges, was \$34,473,027, and the item of Government interest alone, \$32,190,648.

The deficit figure is, of course, obtained from the income statement from which the net income deficit is carried to profit and loss account where certain debits and credits are taken into consideration. From profit and loss account the debit balance is carried into the balance sheet where corporate surplusses or deficits further affect the situation. Thus, while the total of the deficits, after fixed charges, given above, amounts to \$493,287,216, the total accumulated deficit, as shown in the balance sheet at December 31 last, has, by reason of credits and income surplusses, been reduced to \$438,413,818.

Included in this sum is the unpaid interest on loans and advances from the Dominion Government, amounting at the same date to \$226,142,005. In addition to swelling the deficit, this item of government interest also goes to swell each year the amount of the railway indebtedness to the Government, an aspect of the railway situation which will be dealt with in a subsequent paragraph.

FINANCIAL REQUIREMENTS OF THE NINE-YEAR PERIOD

Loans from the Dominion of Canada dating back, in some instances to 1911, are outstanding to the amount of \$595,538,349. The cash interest of the investing public is represented by the unmatured funded debt, amounting to \$981,381,736, \$657,181,329.89 of which is guaranteed by the Dominion Government and \$93,574,380.26 by the various provinces. The total of this government and private financing now outstanding is \$1,576,920,085.

In the nine years under review—April 1, 1919, to March 31, 1928—it has been necessary to provide new funds to meet Canadian National requirements to the extent of \$878,884,053.94.

These funds were, over the same period, utilized as follows:—

Income deficits.....	\$206,142,969 42
Retiring maturing obligations.....	297,678,068 76
Additions and betterments.....	375,063,015 76
	<u>\$878,884,053 94</u>

These funds have been provided from the following sources:—

Dominion cash loans.....	\$429,237,595 89
Bond and note issues guaranteed by Dominion.....	\$381,488,279 86
Unguaranteed issues.....	76,375,000 00
Less discounts, etc., on above.....	8,216,821 81
	<u>449,646,458 05</u>
	<u>\$878,884,053 94</u>

The provision of these funds does not mean that the debt of the National Railways has been increased to the extent of \$878,884,053.94 during this nine-year period. To find the net increase in debt it is necessary to deduct the sum of \$297,678,068.76 which went to meet maturing obligations already forming part of the debt of the railways. In that way, one obligation merely cancelled another, and the actual increase in debt over the nine years referred to was, therefore, \$581,205,985.18, and of that sum, as already shown, three hundred and seventy-five millions went into the property in the shape of additions and betterments.

The interest of the Dominion of Canada is not represented solely by cash loans and advances. Interest which has accrued on these loans, and remains unpaid, has gone to swell the obligations of the railways to the Dominion to the extent of \$226,142,005. In addition, there must be considered the appropriations on account of the original Canadian Government lines, amounting to \$436,416,387, on which appropriations no interest is accrued.

Including cash loans, unpaid interest, and moneys contributed on account of the original Government lines, the interest of the Dominion in the Canadian National Railways as shown in the balance sheet of the company at December 31, 1927, was \$1,258,096,742.03, while the investment of the general public at the same date was, as already stated, \$981,381,736.52. The interest of the Canadian taxpayer in the Canadian National Railways is, therefore, the preponderating interest.

WAR-TIME DIFFICULTIES RECALLED

In reviewing the results of nine years of government ownership and operation, it may be of assistance at this time to restate briefly the circumstances that led to the nationalization of three out of the four principal privately-owned railways in Canada a decade ago. While the nationalization of these Canadian railways followed in part the recommendations of the majority finding of a Royal Commission appointed to study the problem, it was not the result

of deliberate public policy. It was, rather, the outcome of a situation which arose largely as a result of the war. Originally, the Canadian Government lines consisted of the former Intercolonial Railway between the Maritime Provinces and Montreal. With the Intercolonial Railway was associated for operation the Prince Edward Island line. The Transcontinental Railway, between Moncton and Winnipeg, was constructed by the Government, not with a view to operation as a Government line, but to be leased by the Grand Trunk Pacific for operation as the eastern section of the Company's Transcontinental project, under an agreement which was repudiated by the Grand Trunk Pacific in 1915, at which time the Government, while reserving its legal rights in the premises, took over the Transcontinental for operation in the interests of the struggling colonists who had gone into the territory served by the railway. In 1917, the Canadian Northern Railway, after some years of difficult financing, passed under government control, following the purchase by the Government of the common stock outstanding. The formal transfer to government ownership took place late in 1918, when the Canadian Northern Board took charge of the operation, for the Government, of the original Government lines and the Transcontinental, as well as the Canadian Northern lines. From the date of this new operating alignment, the Canadian Northern Railway Company was authorized to use the collective and description designation, "Canadian National Railways."

In 1919, the Grand Trunk Pacific, unable to get further support from the parent organization—the Grand Trunk—was obliged to cease operation, and the service, which was important to many struggling communities in Western Canada, was continued under the receivership of the Minister of Railways. Actual operation, however, was under the direction of the new Canadian National Board.

The Grand Trunk had little, if any, choice in the matter of abandoning the Grand Trunk Pacific. The unforeseen conditions arising out of the war had entirely altered for the time being the railway outlook in Canada, and had greatly weakened the financial position of the parent organization, which, in 1920, also concluded an arrangement by which the Grand Trunk was, in 1921, acquired by the Government and included in the Canadian National system for operation.

CASH LOANS AND GUARANTEES DIMINISH

The financial requirements of the railways during this period of difficulty were very great, money being needed for the completion of partially constructed lines, for maintenance which had been unavoidably deferred, for refinancing and for the meeting of deficits on both income and operation account. The uncertainty of outlook made for dear money in financing from private sources, and largely upon the Government fell the task of providing the immense sums necessary to tide the railways over the lean years until reorganization could be effected and the railways placed in a more satisfactory position. The heavy burden of financing which fell upon the Government during the reconstruction period is reflected in the following statement, showing the situation as it developed from year to year during the period of greatest difficulty:—

Fiscal Year	Dominion Cash Loans
1919-20.....	\$ 71,739,107 66
1920-21.....	110,329,351 52
1921-22.....	111,940,957 42
1922-23.....	80,678,179 29
1923-24.....	24,550,000 00
1924-25.....	10,000,000 00
1925-26.....	10,000,000 00
1926-27.....	10,000,000 00
1927-28.....	Nil
	<hr/>
	\$429,237,595 89

It may be urged that in this connection there should be included a statement also of the guarantees given by the Government on the bond issues put out by the railway. As to that, it may be stated that during all but two of the nine years under review bond issues were put out carrying the guarantee of the Government, as will be seen from the following statement:—

GUARANTEED BOND ISSUES

1919-20.....	\$ 17,109,027 00
1920-21.....	50,000,000 00
1921-22.....	61,000,000 00
1922-23.....	Nil
1923-24.....	72,500,000 00
1924-25.....	81,000,000 00
1925-26.....	Nil
1926-27.....	34,879,252 86
1927-28.....	65,000,000 00
	<hr/>
	\$381,488,279 86

The guarantee of thirty-four million odd in 1926-27 was not a matter of ordinary railway financing, but was required in consequence of the settlement effected with the holders of Grand Trunk Pacific 4 per cent debentures and was a compromise arrangement under which 2 per cent of the guaranteed 4 per cent interest became available for a sinking fund which will of itself redeem the entire issue in thirty-two years. The Grand Trunk Pacific was, of course, in receivership, there was no guarantee of the original issue, and in effecting the settlement in question it became possible to write off arrears of interest amounting to \$8,138,492, which the property had been unable to earn.

The statement of guarantees does not indicate any tendency on the part of the Government to avoid railway financial responsibilities by resorting unduly to the market on strength of guarantee; as, aside from the adventitious Grand Trunk Pacific guarantee above referred to, the guarantees of the last three fiscal years consisted only of the sixty-five million issue of 4½ per cent thirty-year bonds of July 1, 1927.

The guarantees above referred to have to do with both principal and interest, and it should perhaps be added that there were also, in 1920, guarantees in perpetuity of interest on Grand Trunk stocks and debentures totalling \$216,207,141. This was a condition of the Grand Trunk acquisition agreement.

THE ITEM OF GOVERNMENT INTEREST

Reference was made in a previous paragraph to the rapidly mounting item of interest due the Government which, appearing as a deficit, also appears as an addition to the obligations of the railways under Dominion of Canada account. This interest is not compounded, but the item grows quickly, the yearly accrual now being more than double that of a decade ago. This item had accumulated to \$226,142,005.41 at December 31 last, and by the end of the current year will have passed the quarter billion mark. This matter of unpaid interest, therefore, becomes of increasing importance with each succeeding year. In the early stages of the financial complications of the railways this situation was dealt with for the time being by the expedient of adding the item to the debt of the railway to the Government. This procedure was somewhat in the nature of a promissory note. However, the obligation has reached such proportions as to call for early consideration on the part of both the railway management and the Government. The Government loaned to certain railways large sums which became a charge on the physical properties of the companies. It also guaranteed many bond issues on which private moneys were raised. To that extent the Government backed the notes of the railways. Finally, as chief

creditor and principal endorser, the Government found it necessary to take over the lines in order to protect its position and the interests of the Canadian public dependent upon the railways. In ordinary business, that would have ended any question of further interest on the loans, the properties being accepted in satisfaction of claims. Owing, however, to bookkeeping requirements and the necessity to preserve an absolute statement of corporate financing and the Government's part therein, the record of these obligations was continued after the Government took control, and from year to year was augmented as fresh financial requirements had to be met. In this way, the old obligations were, from the standpoint of record, merged with the newer, until to-day the railways are carrying not only the financial load that proved too much for private ownership, but the additional financing of the intervening years since reorganization. Had the affairs of the railways been liquidated by court process when the roads went under, financial reorganization would have taken place at that time, and the problem would, to that extent, have been less complicated. The taking over by the Government of the railways as going concerns when they were virtually insolvent, and the necessity to deal first with more insistent questions connected with the co-ordination of the physical properties and the reorganization of their management, postponed for a time the possibility of giving effective consideration to the position of the financial structure, which consideration now becomes a matter of prime importance.

WHERE THE MONEY WENT

The \$562,490,349.30 represented by the cash loans to the railways—and here we are not discussing the nine-year period only, but loans dating back to 1911—did not all go to meet operating and income deficits. Of the foregoing sum, \$245,341,700.36 went to meet such deficits, largely in the earlier years following the taking over of the roads. The remainder of the loans were used for the following purposes: Redemption of debt to the public, \$86,605,038.54; investment in road and equipment, \$202,014,616.74; working capital, \$28,528,993.66. From this it will be seen that a considerable sum went to the retirement of the debt to the public. That decreased to the extent of eighty-six million dollars the stake of the investing public in the railways, and increased to the same extent the interest of the Government. At the same time, more than two hundred millions of Government money went into investment in road and equipment. There would seem to be no reason why those sums should be regarded as other than an investment capable of eventual return.

Lest in any quarter the supposition that Canada obtained these formerly privately-owned railways at little cost still obtains, it will do no harm to state that up to December 31 last the former Canadian Northern Railway had required and received in cash loans and advances, \$344,799,978.66; the Grand Trunk, \$118,582,182.33; and the Grand Trunk Pacific, \$96,878,806.56. These moneys were used by the several corporations for the following purposes:—

	Operation and income deficits		Redemption of public debt		Capital expenditure		Working capital	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Canadian Northern Railway.....	149,973,731	60	60,754,580	32	130,884,200	18	3,187,466	56
Grand Trunk Railway.....	30,788,886	75	25,564,392	78	44,126,863	98	18,102,038	82
Grand Trunk Pacific Railway.....	64,579,082	01			25,060,236	27	7,239,488	28

It must not be supposed that the foregoing represents the complete financial requirements of these railways since their assumption by the Government.

Since April 1, 1919, the Government has as well guaranteed bond issues of Canadian National railways to the extent of \$381,488,279.86, the proceeds of which, amounting to \$375,537,637.14, were utilized as follows:—

Operating and income deficits.....	\$35,820,702 54
Redemption of debt to public.....	190,071,325 16
Redemption of debt to Government.....	3,394,707 95
Capital expenditure.....	132,351,760 65
Working capital.....	11,652,963 62
Unused balances (December 31, 1927).....	2,246,177 22
	\$375,537,637 14

A complete list of the issues guaranteed by the Dominion as well as by the various provinces, and also the unguaranteed issues, will be found in the statement of the unmatured funded debt appearing in the Canadian National Railway report incorporated elsewhere in this publication.

SUBSTANTIAL IMPROVEMENT IN EVERY DIRECTION

The analysis and review of the results of nine years of Government operation and control of the National lines—six of which years are to the credit of the present management—discloses substantial improvement in every conceivable direction. The property has grown greatly in value and importance. Its mileage has been extended into potentially valuable territory. Its rolling stock and motive power have kept pace with the requirements of increasing traffic and more ardent competition. So much for the physical side. On the financial side, operating deficits have given place to surplusses that may now be expected to take care of the interest charges of the public investors and provide something for other requirements. The net deficit after fixed charges is now largely a matter of interest due the Government on loans to properties it now owns, loans definitely indicated as “non-active” in the Dominion Public Accounts, but remaining active on the books of the railways. In that connection, it may be remarked that interest on appropriations connected with the original Government lines has never been accrued. Those railways were regarded as public works and the moneys provided from consolidated revenues.

New capital requirements of the national lines tend to grow less, and there being no longer necessity to provide for operating deficits, and the railways having reached the point where they may be expected to provide their own interest charges to the investing public, such new funds as are required go either into refunding or to the betterment and extension of the property. Without desire to deal extravagantly with the situation, nor to make invidious comparison with private ownership and operation, so successfully demonstrated in competition with Canadian National lines, it is nevertheless a satisfaction to be able to point to such substantial improvement in a situation which, a short ten years ago, was admittedly a matter of grave national concern. The present financial structure must be brought into line with the changed situation as affecting the properties. It is understood that the management has for some time been making a very careful study of all the considerations involved and that before long definite recommendations may be looked for. Once the financial structure has had attention it is felt that the Canadian National lines may look forward with confidence to even greater progress and freer and untrammelled usefulness to the public it seeks to serve.

CANADIAN NATIONAL RAILWAYS—EASTERN LINES

The Maritime Freight Rates Act, 1927, is chapter 44 of the Statutes of Canada for 1927.

Section 6 of the Act is as follows:—

“For accounting purposes, but without affecting the management and operation of any of the Eastern Lines, the revenues and expenses of the Eastern Lines (including the reductions herein authorized which shall be borne by the Eastern Lines) shall be kept separately from all other accounts respecting the construction, operation and management of the Canadian National Railways. In the event of any deficit occurring in any railway fiscal year in respect of the Eastern Lines the amount of such deficit shall be included in a separate item in the estimates submitted to Parliament for or on behalf of the Canadian National Railways at the first session of Parliament following the close of such fiscal year.”

The Act became effective as of July 1, 1927. For that reason the comparative earnings shown elsewhere in this report cover the six months' periods in the years 1926 and 1927 from July 1 to December 31 in each year.

—	1927		1926		—	
	\$	cts.	\$	cts.		\$	cts.
Revenue.....	12,128,570	21	12,811,171	00	Dec.	682,600 79
Expenses.....	14,713,852	43	14,231,983	11	Inc.	481,869 32
Net earnings. (Deficit).....	2,585,282	22	1,420,812	11		1,164,470 11
Operating ratio.....	121·32%		111·09%			

The above figures include actual receipts only.

But for the “20 per cent” reduction in freight rates the above 1927 revenue figure would have been increased by approximately \$931,809.89, with the result that the deficit in net earnings would have been reduced by this amount to \$1,653,472.33, so that for the six months' period the 1927 deficit would have exceeded the 1926 deficit by \$232,660.22 only.—

The Maritime Freight Rates Act also provides that companies other than the Canadian National, operating in the affected territory, shall be reimbursed the amount of the difference between normal tolls and the preferred rates under the 20 per cent reduction arrangement. As provided by this legislation, the following payments were made to privately-owned railways east of Levis and Diamond Junction for losses of revenues due to the operation of the Act during the six months ended December 31, 1927:—

Atlantic, Quebec and Western Railway Co.....	\$ 9,974 20
Canada and Gulf Terminal Railway Co.....	890 39
Canadian Pacific Railway, including Fredericton and Grand Lake Coal and Railway Company, New Brunswick Coal and Railway Company.....	130,962 64
Cumberland Railway and Coal Company.....	13,597 03
Dominion Atlantic Railway Company.....	86,971 71
Maritime Coal, Railway and Power Company.....	10,980 96
Quebec Oriental Railway Company.....	4,905 52
Sydney and Louisburg Railway Company.....	150,408 00
Témiscouata Railway Company.....	12,964 11
	<u>\$421,654 56</u>

CANADIAN NORTHERN INCOME DEBENTURE STOCK SETTLEMENT

During the year the unsatisfactory position of the Canadian Northern Railway Company's 5 per cent income charge convertible debenture stock was terminated by an arrangement reached with the stockholders whereby the principal of the stock outstanding, amounting to \$24,137,846.08, was to

become due and payable at 94 per cent of par on May 6, 1928. This was in accordance with a scheme of arrangement and compromise effected with the holders of the stock in question which was approved by the shareholders by unanimous consent at a meeting held in London on November 15, 1927, and afterwards ratified by the Canadian Parliament by chapter 11, 18-19 George V, assented to on March 30, 1928. By the same Act, authority was given the railway to issue securities sufficient to realize \$22,689,575.32, the amount required by the compromise arrangement, or its equivalent in sterling money. No interest has been earned on the security thus retired since the Canadian Northern fell into difficulties in 1914, and it was the desire of the shareholders themselves that they should be paid out as proposed in order that they might be in a position to reinvest their capital and secure a return. The capital, reinvested, would, in the two years the issue otherwise would have had to run, more than earn the difference between the 94 per cent which was paid for the stock and the full 100 per cent which would have been called for at the latter date.

A "YARD-STICK" OF RAILWAY PERFORMANCE

In view of the references occasionally made to the greater volume of traffic and higher rates enjoyed by United States railways, the following summarized contrast of operating results obtained by Class I American roads and similar lines on the Canadian side of the border during 1927 will, no doubt, be of interest. Canadians generally, will also be interested in the comparative statement of the Canadian National and Canadian Pacific operating results for the same period. The figures affecting the United States lines are taken from summaries published by the United States Bureau of Railway Economics, Washington, D.C.; those affecting Canadian roads as a whole are compiled by the Transportation Branch, Dominion Bureau of Statistics. The figures relating to Canadian National and Canadian Pacific lines are compiled from the annual reports of those companies. "Eastern lines" are the maritime province lines of the Canadian National System.

OPERATING REVENUES, 1927

United States railways—\$6,138,725,622, a decrease of \$248,222,585, or 3.88 per cent under 1926.
 Canadian railways—\$493,574,322, an increase of \$5,414,075, or 1.1 per cent.
 Canadian National—\$256,575,724, an increase of \$3,199,069, or 1.26 per cent.
 Eastern Lines—\$12,128,570, a decrease of \$682,600, or 5.33 per cent.
 Canadian Pacific—\$201,145,752, an increase of \$3,120,160, or 1.57 per cent.

OPERATING EXPENSES

United States railways—\$4,575,882,651, a reduction of \$96,294,002, or 2.06 per cent.
 Canadian railways—\$402,759,965, an increase of \$18,144,900, or 4.7 per cent.
 Canadian National—\$214,461,748, an increase of \$8,989,098, or 4.37 per cent.
 Eastern Lines—\$14,713,852, an increase of \$481,869, or 3.38 per cent.
 Canadian Pacific (including taxes)—\$161,630,180, an increase of \$8,549,715, or 5.53 per cent.

OPERATING RATIOS

	1927		1926
United States railways.....	74.6	p.c.	74.54 p.c.
Canadian railways.....	81.60	"	78.79 "
Canadian National.....	83.59	"	81.09 "
Eastern Lines.....	121.32	"	111.09 "
Canadian Pacific.....	77.87	"	74.41 "

NET EARNINGS FROM OPERATION

United States railways—\$1,562,842,971, a decrease of \$151,928,583, or 8.85 per cent under 1926.
 Canadian railways—\$90,814,357, a decrease of \$2,720,825, or 3 per cent.
 Canadian National—\$42,113,976, a decrease of \$5,790,028, or 12.09 per cent.
 Eastern Lines (deficit)—\$2,585,282, an increase of \$1,164,470, or 4.50 per cent.
 Canadian Pacific—\$39,515,571, a decrease of \$5,429,555, or 12.03 per cent.

FREIGHT REVENUE

United States railways—\$4,634,141,531, a decrease of \$166,803,046, or 3·47 per cent.
 Canadian railways—\$355,513,784, an increase of \$2,917,084, or 0·83 per cent.
 Canadian National—\$193,541,353, an increase of \$1,753,887, or 0·91 per cent.
 Eastern Lines—\$7,633,573, a decrease of \$582,510, or 7·09 per cent.
 Canadian Pacific—\$144,155,931, an increase of \$2,950,312, or 2·08 per cent.

TONS OF FREIGHT CARRIED

United States lines—2,364,899,801, a decrease of 102,211,987 tons or 4·14 per cent.
 Canadian railways—121,616,686, an increase of 1,120,521 tons, or 1·8 per cent.
 Canadian National—60,531,058, an increase of 1,290,540, or 2·18 per cent.
 Eastern Lines—3,060,615, an increase of 206,287 tons, or 7·22 per cent.
 Canadian Pacific—34,374,152, an increase of 780,655 tons, or 2·32 per cent.

REVENUE TON MILES

United States railways—443,848,629,000, a decrease of 15,055,662,000, or 3·39 per cent.
 Canadian railways—34,800,203,879, an increase of 750,834,070 ton miles, or 2·2 per cent.
 Canadian National Railways—18,587,960,341, an increase of 157,006,325, or 0·85 per cent.
 Eastern Lines—876,890,066, an increase of 65,269,249, or 8·04 per cent.
 Canadian Pacific—14,514,230,389, an increase of 671,649,603, or 4·85 per cent.

AVERAGE FREIGHT REVENUE PER TON MILE (CENTS)

	1927	1926
United States railways.....	1·081	1·082
Canadian railways.....	1·022	1·036
Canadian National.....	1·041	1·041
Eastern Lines.....	0·871	1·012
Canadian Pacific.....	0·982	1·009

PASSENGER EARNINGS

United States railways—\$974,778,739, a decrease of \$67,105,499, or 6·44 per cent.
 Canadian railways—\$81,102,501, an increase of \$992,728, or 1·2 per cent.
 Canadian National—\$36,080,488, an increase of \$509,817, or 1·43 per cent.
 Eastern Lines—\$1,793,864, an increase of \$3,730, or 0·208 per cent.
 Canadian Pacific—\$34,763,973, an increase of \$613,545, or 1·79 per cent.

REVENUE PASSENGERS CARRIED

United States railways—830,178,937, a decrease of 32,511,279, or 3·76 per cent.
 Canadian railways—39,581,565, a decrease of 1,154,597, or 2·8 per cent.
 Canadian National Railways—18,843,962, a decrease of 1,048,936, or 5·27 per cent.
 Eastern Lines—1,793,864, an increase of 3,730, or 0·208 per cent.
 Canadian Pacific Railway—13,602,337, an increase of 96,474, or 0·71 per cent.

REVENUE PASSENGERS CARRIED ONE MILE

United States railways—33,657,499,000, a decrease of 1,831,326,000 or 5·16 per cent.
 Canadian railways—3,015,555,759, an increase of 52,842,737 revenue passenger miles, or 1·8 per cent.
 Canadian National—1,374,893,080, an increase of 48,641,911 revenue passenger miles, or 3·67 per cent.
 Eastern Lines—108,190,727, a decrease of 3,105,856 revenue passenger miles, or 2·79 per cent.
 Canadian Pacific—1,270,090,498, an increase of 15,640,142 revenue passenger miles, or 1·25 per cent.

HUDSON BAY RAILWAY AND TERMINALS

In 1926, the work of completing the Hudson Bay Railway was actively resumed by the department. Before the shut-down in 1918, track had been laid to Mile 332, the second crossing of the Nelson river at Kettle rapids, about 90 miles from Nelson. Although track had been laid to Mile 332, the railway had been in operation only to Mile 214. During the eight-year interval between the closing down of the work and the resumption of construction, nature had rendered useless much of the work that had gone into the line. The ties had

rotted and required replacing; the right of way had been badly heaved by successive frosts, and embankments had settled. Before additional construction could be undertaken it was necessary, therefore, to rehabilitate the entire mileage as formerly constructed. This was done by the construction forces of the Canadian National Railways, at the instance of the department. The resumption of work on the railway made it necessary either to confirm the choice of Nelson as the terminus of the road or reconsider the situation. In that connection, a special committee of the Senate had recommended that before making further important expenditures at Nelson, a new and thorough examination into the relative merits of Churchill and Nelson should be made. No authority on harbour development had previously been consulted in relation to Hudson Bay ports, and Mr. Frederick Palmer, of Rendel, Palmer and Tritton, London, England, was engaged by the Government to investigate the respective merits of the two ports. Concurrently, steps were taken to ascertain whether it was physically possible to construct a line to Churchill, doubt having been thrown on that possibility by engineers who had favoured the selection of Nelson. After close investigation by competent engineers, it was found that it would be no more difficult to construct a line of railway to Churchill than to Nelson. In August, 1927, Mr. Palmer, together with the Minister of Railways and Canals and the chief officials of the department, visited both places, and on their return Mr. Palmer reported that Churchill was undoubtedly the port to be selected as affording a real harbour in which shipping facilities could be provided in calm water, protected from all storms by the surrounding rocky cliffs. His report has been separately printed and is available in the department. In it, Mr. Palmer has supplied estimated costs of corresponding accommodation at Nelson and Churchill which show that, including interest during the period of construction, the cost at Churchill will be less than one-third of what would be required to complete at Nelson. Even after adding the cost of the extra 87 miles of railway to Churchill, the cost of developing a port at the latter point would be only about one-half of the Nelson estimate. It was stated also that the time for the completion of the works at Churchill, namely, three years, was one-half of the time that would be required to provide the necessary works at Nelson; also, the annual charges, including interest, operation and maintenance, would be about a million dollars greater at Nelson than at Churchill. An important consideration was the fact that approach to Nelson of vessels of 28 feet draught would be limited to a brief period around high water at neap tides, unless much expenditure were incurred in dredging, whereas at Churchill accommodation could readily be provided to admit of 28-foot draught vessels during twenty-four hours of each day.

Mr. Palmer estimated the cost, including interest, of the necessary works at Nelson at \$26,155,550, and at Churchill at \$8,450,159, and the annual charges \$1,474,594 at Nelson and \$413,980 at Churchill. The latter item includes interest on the extra capital cost of 87 miles of railway construction to Churchill.

In consequence of this recommendation by such an acknowledged authority on harbour problems, it was decided to extend the railway to Churchill and establish the Hudson Bay Railway terminal at that point, which, as a matter of fact, was the terminus named in the instructions to the engineers in charge of the original surveys of twenty years ago.

During the year, good progress has been made in the construction of the railway to Churchill, which leaves the original line at Mile 356. The mileage at Churchill is 510, as against 422 at Nelson. The grading and ditching of the Churchill extension has been let to contract, while the track and station work is being taken care of by Canadian National construction forces. To March 31, 1928, \$20,780,247.91 has been expended on the line. It is estimated that when the expenditures on the line to Churchill are completed, the total cost will be about twenty-eight and one-half million dollars. This last named

figure does not, of course, include the cost of the ocean terminals already referred to. As this summary is written, track has been laid to Mile 437, which means that 81 miles of new line have been constructed and that the end of steel is now 73 miles from Churchill. At the peak of operations during the year, 2,200 men were employed on Hudson Bay Railway work.

As soon as a decision had been reached regarding the establishment of the terminus at Churchill, active preparations were made to transfer from Nelson such equipment and material as could be usefully employed on the new location. Much of this was transported by lighters and tugs during the latter part of the 1927 season, and also during the recent season of navigation. Considerable material was also hauled during the winter months from Nelson to Churchill by tractors operating along the shore. During the past summer, about 16,000 tons of material have been sent in by sea from Halifax and Sydney, and unloaded at Churchill. Two dipper dredges—*Churchill No. 1* and *Churchill No. 2*, built at Montreal especially for the work—were delivered at Fort Churchill late in September. A hopper barge—the *Chesterfield*, built at Collingwood, Ont.—was also delivered at Churchill late in September, and is now available, with the other equipment, for an early start on the work next year. A second hopper barge—acquired by the Department of Marine and Fisheries last year, and taken to Port Nelson—has been towed to Fort Churchill, and is now available, with the other equipment, for next season's operations. On the operations at Churchill, 349 men were employed during the season, and the work was materially expedited by the use of airplanes between Churchill and the end of steel. About 3,000 tons of coal are now available, and the establishment is well supplied with materials for prosecuting the work during the coming year.

THE CANALS

During the fiscal year, the departmental expenditure chargeable to canals was \$16,720,404.20, of which \$13,722,925.75 was capital expenditure connected with the construction of the Welland Ship canal and \$2,938,154.45 general expenditure, including \$1,345,244.64 on staff account. Revenue received from canals during the year amounted to \$1,355,677.46, the largest single item, \$614,466.25, representing the earnings of the Port Colborne elevator. As is generally known, tolls are no longer charged for the use of the canals by shipping, and the revenue referred to is from elevator charges, leases, hydraulic rentals, etc.

Navigation in 1927 opened approximately two weeks earlier than in 1926 and closed somewhat later than the previous season. Traffic through the Welland and St. Lawrence canals was by far the heaviest carried, exceeding the previous record made in 1925 by 1,607,161 tons, or 28.5 per cent, for the Welland canal, and by 1,705,964 tons, or 27.5% for the St. Lawrence canals. The increase over the 1926 traffic on the Welland canal was, 2,032,945 tons, or 39 per cent, the chief increase being in grain, especially wheat, which was heavier by 1,265,759 tons, or 42,191,960 bushels. Cargoes up the St. Lawrence canals from salt water continue to increase, amounting, during the 1927 season, to 196 boats, with a total of 306,890 tons of freight. These included 57 cargoes of scrap iron from New York to Detroit, 92 cargoes of pulpwood from Newfoundland, Nova Scotia, New Brunswick and gulf ports, principally for Ogdensburg, Cornwall and Oswego, 14 cargoes of iron and steel and their products from Sydney to the head of the lakes and 3 cargoes to other points, 10 cargoes of coal from the United Kingdom to Toronto, Ogdensburg and Cardinal, 3 cargoes of china clay from England to lake Michigan ports, 7 cargoes of sugar from St. John and Halifax, 2 cargoes of sugar and 2 cargoes of sulphur from Philadelphia, and 6 miscellaneous cargoes. During 1926, only 131 such cargoes, totalling 177,679 tons, passed up the canals. The 1927 tally, however, included 23 cargoes of 52,212 tons of pulpwood from gulf ports, which territory was not included in the 1926 figures.

During the fiscal year, the Government elevator at Port Colborne received 77,621,713 bushels of grain, an increase over the record of the previous year of 15,086·14 bushels, which established the highest record in the history of the elevator. Of the total grain received 60 per cent was from Canadian ports and 40 per cent from United States ports.

The canal system of Canada comprises a series of canals and canalized waters by which a total waterway of 1,831 miles has been opened to navigation. These canals may be considered under two main classes: the through St. Lawrence and Great Lakes route and the subsidiary canals or branches. By the former, communication with seaports is made possible for vessels of not more than 14 feet draught which navigate the Great Lakes. The latter or branch system of canals serves for the most part the requirements of local traffic.

The through water route between Montreal, at the head of ocean navigation, and Fort William, and Port Arthur, on the west shore of lake Superior, comprises 74 miles of canal, with forty-nine locks and 1,140 miles of river and lake waters, or a total of 1,214 miles. The minimum depth of water on this route, at normal low water level, is 14 feet. From Montreal to Duluth, at the southwest end of lake Superior, the total distance of 1,337 miles, and to Chicago 1,244 miles.

Work on the Welland Ship canal, which, with interruptions due to the war, has been in progress since the latter part of the year 1913, is now well advanced. The total distance traversed from lake to lake by this new canal will be 25 miles. The difference in level between the two lakes, 325½ feet, will be overcome by seven lift locks, all of which are now well advanced towards completion, each having a lift of 46½ feet. There will also be one guard lock of variable lift. The locks are 829 feet long and 80 feet wide in the clear, and will provide a depth of 30 feet of water over the mitre sills. The width of the canal prism at bottom is to be 200 feet. A new breakwater now practically completed at Port Colborne extends 2,000 feet farther into the lake at right angles to the existing structure. At Port Weller, the lake Ontario entrance, the necessary harbour works have now been practically completed.

For the past six years work on the canal which, during the war years and for some years after, was greatly retarded or entirely at a standstill, has progressed in a very satisfactory manner, and the estimated quantities of the principal items of work involved in the construction of the entire canal, with percentages of each now completed, are as follows:—

Rock excavation.....	8,750,000 cu. yds.	86 p.c.
Earth excavation.....	50,657,000 "	79 "
Watertight embankments.....	5,434,000 "	67 "
Concrete, all classes.....	3,411,000 "	88 "
Reinforcing steel.....	26,000,000 pounds	97 "
Steel sheet piling.....	37,162,000 "	87 "

It is expected that construction will be completed during 1930.

BRANCH LINE CONSTRUCTION

At the 1927 session of Parliament sixteen branch line projects were authorized for a total mileage of 510·4 and a total expenditure of \$20,400,000 spread over a three-year period. During the calendar year 1927, \$3,191,604·63 was expended on this program, which is the second to be authorized by Parliament since the reorganization of the Canadian National management. In 1924, and 1925, proposals involving 652·3 miles of branch line construction were authorized at an estimated cost of \$18,002,000. Work on one line was not proceeded with, a joint arrangement having been made with the Canadian Pacific Railway instead, but, otherwise, all construction incidental to that program was completed during 1927, at a final cost of \$15,615,515. On the present program, it is expected that an expenditure of \$10,725,000 will be made during 1928, which would leave about \$7,533,396 for 1929 operations.

CANADIAN NATIONAL RAILWAYS

TABULAR SUMMARY OF REPORTS OF WORK DONE AND EXPENDITURES MADE DURING THE CALENDAR YEAR 1927 ON THE VARIOUS BRANCH LINES OF THE CANADIAN NATIONAL RAILWAYS, AUTHORIZED TO BE CONSTRUCTED UNDER CHAPTERS 12 TO 26, INCLUSIVE, OF 17, GEORGE V.

17 George V Chapter	Name of Branch	Authorized in schedule		Expenditure in year 1927 \$ cts.	Work done during year 1927			Estimated expenditure year 1928 \$
		Miles	Amount \$		Grading Percentage	Track-laying Miles	Ballast-ing Miles	
12 (2)	"a," St. Felicien—Mistassini River. "b,"	27.5	1,463,000	1,236,385 98	100	26.6	26.6	100,000
13 (1)	Hobertville—Savanne Falls	34.5	2,132,000	Nil	30			Nil
14 (1)	Grand Mere—East Burrills	7.9	1,683,000	459,034 25				1,000,000
15 (2)	Pilkington—Niagara Junction	16.7	1,164,000	5,437 28				800,000
16 (2)	Weyburn—Radville	22.7	570,000	194,487 28	91	7.01		250,000
17 (2)	Willowbrook, NW	22.0	616,000	43,338 88	12			500,000
	Sturgis—Peesane	100.0	3,395,000	200,636 94	Mile 0-21-95 " 21-100-1			2,000,000
18 (2)	Peesane Northerly	19.0	570,000	10,564 44				400,000
19 (2)	Shellbrook Westerly	77.0	2,480,000	279,888 71	20	5.83		1,700,000
20 (2)	Turtleford SE. (From Mile 6.7)	35.6	1,130,000	107,056 15	30			900,000
21 (1)	Kindersley—Glidden	18.0	640,000	9,319 91				525,000
22 (2)	Spruce Lake Westerly—(Sask.)	29.5	990,000	227,498 97	59			350,000
23 (3)	Hudson Bay Junction Southerly	32.0	1,088,000	18,164 85				600,000
24 (2)	Elk Point Easterly—(Alta.)	19.0	745,000	166,143 46	76			350,000
25 (2)	Ashmont—Bonnyville	38.0	1,415,000	225,881 32	66			1,000,000
26 (1)	Bretonga—Clover Bar	11.0	319,000	7,766 61				250,000
	Total	510.4	20,400,000	3,191,604 63		39.44	26.6	10,725,000

MONTREAL, QUE., February 22, 1928.

OPERATING RESULTS—UNITED STATES LINES AND CANADIAN LINES SEPARATELY SHOWN

The following statement gives the division of the Canadian National system's income account as between lines in Canada and lines in the United States, from which it will be seen that while the gross operating revenues of the United States lines were considerably greater than in 1926, the operating expenses increased proportionately, and the net operating revenue was, therefore, less in 1927 than in the previous year. In the same way, there was a slight reduction in the final figure of net income after fixed charges. This net on the American lines, 1927, amounted to \$1,512,683.30.

	1927		1926	
	\$	cts.	\$	cts.
<i>Gross Operating Revenues—</i>				
Canadian National Railway Lines in Canada.....	215,432	356 99	212,736	681 16
Canadian National Railway Lines in United States.....	41,143	367 08	40,639	973 38
Total.....	256,575	724 07	253,376	654 54
<i>Gross Operating Expenses—</i>				
Canadian National Railway Lines in Canada.....	183,932	853 24	175,941	287 89
Canadian National Railway Lines in United States.....	30,528	894 38	29,531	361 99
Total.....	214,461	747 62	205,472	649 88
<i>Net Revenue from Railway Operations—</i>				
Canadian National Railway Lines in Canada.....	31,499	503 75	36,795	393 27
Canadian National Railway Lines in United States.....	10,614	472 70	11,108	611 39
Total.....	42,113	976 45	47,904	004 66
<i>Tax Accruals, Uncollectible Revenues and Miscellaneous Operations—</i>				
Canadian National Railway Lines in Canada.....	3,001	161 74	3,058	102 94
Canadian National Railway Lines in United States.....	1,591	296 94	1,594	890 60
Total.....	4,592	458 68	4,652	993 54
<i>Total Operating Income—</i>				
Canadian National Railway Lines in Canada.....	28,498	342 01	33,737	290 33
Canadian National Railway Lines in United States.....	9,023	175 76	9,513	720 79
Total.....	37,521	517 77	43,251	011 12
<i>Non-Operating Income or Charges, Net—</i>				
Canadian National Railway Lines in Canada.....	7,382	072 40	7,387	308 28
Canadian National Railway Lines in United States.....	6,637	694 18	6,962	269 43
Total.....	744	378 22	425	038 85
<i>Total Income or Deficit Before Fixed Charges—</i>				
Canadian National Railway Lines in Canada.....	35,880	414 41	41,124	598 61
Canadian National Railway Lines in United States.....	2,385	481 58	2,551	451 36
Total.....	38,265	895 99	43,676	049 97
<i>Fixed Charges—</i>				
Canadian National Railway Lines in Canada—				
Interest due Public.....	39,575	476 16	38,233	647 27
Interest due Government.....	32,190	648 77	31,804	380 40
Canadian National Railway Lines in United States—				
Interest due Public.....	872	798 28	885	763 28
Total.....	72,638	923 21	70,923	790 95
<i>Net Income or (Deficit)—</i>				
Canadian National Railway Lines in Canada.....	35,885	710 52	28,913	429 06
Canadian National Railway Lines in United States.....	1,512	683 30	1,665	688 08
Total.....	34,373	027 22	27,247	740 98

The foregoing statement has to do with lines other than the lines east of Levis and Diamond Junction, in connection with which separate accounts are kept, as provided by the Maritime Freight Rates Act. The following statement sets out the results of the operation of these Eastern Lines in the same manner as the Canadian-United States operation is shown in the preceding set-up. The fixed charges referred to have to do with the former privately-owned line, the Halifax and South-Western, now included for operation with the former Government lines in the Maritime Provinces. No interest is accrued on the latter lines, money for the construction of which was provided by the Dominion from consolidated revenues:—

CANADIAN NATIONAL RAILWAYS

INCOME ACCOUNT—EASTERN LINES—SIX MONTHS ENDING DECEMBER 31,
1927 AND 1926

	1927		1926	
	\$	cts.	\$	cts.
Gross operating revenues.....	12,128,570	21	12,811,171	00
Gross operating expenses.....	14,713,852	43	14,231,983	11
Net revenue from railway operations.....	2,585,282	22	1,420,812	11
Tax accruals, uncollectible revenues and miscellaneous operations.....	123,051	01	501,109	65
Total operating income.....	2,713,333	23	1,921,921	76
Non-operating income or charges, net.....	153,953	84	167,886	41
Total income or deficit before fixed charges.....	2,872,287	07	2,089,808	17
Fixed charges—				
Interest due public.....	77,822	50	77,822	50
Interest due Government.....	314,584	93	286,073	26
Net income or (deficit).....	3,264,694	50	2,453,703	93

CANADIAN GOVERNMENT RAILWAYS, ORIGINAL LINES

In the present publication will be found not only the annual report of the Canadian National system as well as the separate statement concerning Eastern Lines, but a report dealing with the former Canadian Government Railways as a whole and not as restricted by the dividing line at Levis and Diamond Junction established for accounting purposes by the Maritime Freight Rates legislation. These original Government Railways are still vested in the Crown as represented by the Minister of Railways. They extend from Halifax and St. John, on the east, to Winnipeg, and include the Intercolonial and Prince Edward Island lines and eastern branch lines as well as the Transcontinental, from Moncton to Winnipeg, and the former Grand Trunk Pacific Lake Superior branch, which connects the Transcontinental with Fort William and Port Arthur, making a total operated mileage of 4,498.71.

The capital account of these original Government lines, that is, the investment in road and equipment, at December 31, 1927, was \$414,768,512.99. In addition, there are improvements on leased properties and other physical property, such as hotels, etc., representing a further investment of \$1,419,289.57. For all purposes connected with these railways, the Dominion had appropriated to December 31, 1927, \$436,416,387.32. The operating revenues of these original Government lines, expressed as a whole, were \$46,437,217.27, and the operating expenses, \$44,630,826.02, leaving a net revenue from railway operations of \$1,806,391.25. Tax accruals and miscellaneous operations reduced this operating net to a total operating income of \$1,501,940.17. Non-operating income, rentals, etc., of \$1,241,750.22 bring the gross income from these lines up to \$2,743,690.39. Deductions from gross income, debit rentals, etc., but not including any interest charges, amount to \$2,154,905.14, leaving a final total net income of \$588,785.25. The corresponding figure for 1926 operations

was \$1,908,235. Operation of the St. John and Quebec Railway—a leased line—resulted, in 1927, in a net deficit of \$214,246.54. In addition, a rental of \$108,116.84—40 per cent of operating revenues—had to be paid, which brought the total loss on the operation of this line for the year in question to \$332,362.38.

ACCOUNTANT'S REPORT

Included in the report, will be found the customary statement by the departmental accountant of the total expenditure and revenue of the department prior to and since Confederation, to March 31, 1928. During that lengthy period, the grand total expenditure of the department has been \$1,363,460,879.14, of which sum \$935,905,584.80 was expended on railways, \$272,385,797.85 on canals, \$78,785,471.09 on railway subsidies, \$54,473,429.34 on miscellaneous departmental expenditure, and \$21,910,596.06 on the Quebec bridge. Including the Quebec bridge and railway subsidies, the department paid on railway account during the period in question no less than \$1,036,601,651.95.

The total departmental expenditure for the fiscal year ended March 31, 1928, was \$26,608,706.47, of which \$4,636,643.13 was on railway account, \$16,720,404.20 on canals, and \$5,251,659.14 general expenditure.

During the entire period prior to and since Confederation a grand total revenue was received amounting to \$416,731,725.33, of which \$391,866,392.09 was from railways and \$24,865,333.24 from canals. The revenue received from canals during the last fiscal year was \$1,355,677.46. This was entirely from rentals, elevator charges, etc., and not from tolls—which were abolished a quarter of a century ago.

GOVERNMENT EMPLOYEES' COMPENSATION ACT

The Department of Railways and Canals is in charge, for all departments, of the administration of the Government Employees' Compensation Act (chapter 30, Revised Statutes of Canada, 1927). The concentration of this work with the Department of Railways and Canals—which had to maintain a considerable staff for the work as related to Canadian Government railways and canals—renders it unnecessary to maintain duplicate staffs in other departments.

From 1918, when the law was enacted, to March 31, 1928, a total of \$2,364,797.24 had been paid out in compensation, pensions, administration, etc. Of this sum, including amounts advanced, there has been received by:—

New Brunswick.....	\$594,436 31
Ontario.....	574,572 75
Manitoba.....	388,901 13
Quebec.....	356,066 30
Nova Scotia.....	277,203 49
British Columbia.....	100,859 79
Alberta.....	55,952 97
Prince Edward Island.....	3,015 74
Saskatchewan.....	1,115 00

Details of the items, by provinces, will be found in the accountant's report.

I have the honour to be, sir,
Your obedient servant,

G. A. BELL

Deputy Minister.

November 22, 1928.

CANADIAN NATIONAL RAILWAYS

MONTREAL, P.Q., March 31, 1928.

To the Hon. CHARLES A. DUNNING, M.P.,
Minister of Railways and Canals,
Ottawa.

SIR,—On behalf of the Board of Directors I have the honour to submit the report of the operation and affairs of the Canadian National Railway System for the year ended December 31, 1927. The Maritime Freight Rates Act, 1927, having become effective on July 1 the results of the Eastern Lines as described in that Act are eliminated from the Canadian National Railways accounts and are published separately. Due to receivership proceedings the accounts and mileages of the Central Vermont Railway System have been excluded from this report. The Canadian National Railways 1926 accounts have been restated in order to permit an accurate comparison with the year 1927.

MILEAGES

	Miles owned by constituent companies	Miles under lease or contract	Miles under trackage rights	Total mileage
Central Region (Lines west of Levis and Diamond Jct.).....	6,919·61	443·29	22·57	7,385·47
Grand Trunk Western Lines.....	841·81	121·12	27·78	990·71
Western Region.....	10,232·83	427·57	54·41	10,714·81
Total.....	17,994 25	991 98	104 76	19,090 99

Certain details are shown at the end of this report.

OPERATING RESULTS

The operating results for the year are shown in the following summary, which compares the principal items of revenue and expenses with the corresponding items for the previous year:—

REVENUE

	1927		1926		Increase	
	\$	cts.	\$	cts.	\$	cts.
Freight.....	193,541,352	73	191,787,465	76	1,753,886	97
Passenger.....	36,080,488	49	35,570,671	22	509,817	27
Express.....	13,163,925	34	12,774,453	93	389,471	41
Mail.....	3,147,755	27	3,142,219	50	5,535	77
Miscellaneous.....	10,642,202	24	10,101,844	13	540,358	11
Total.....	256,575,724	07	253,376,654	54	3,199,069	53

EXPENSES

	1927		1926		Increase	
	\$	cts.	\$	cts.	\$	cts.
Maintenance of way and structures.....	46,075,178	06	43,028,428	62	3,046,749	44
Maintenance of equipment.....	47,447,253	16	47,321,602	60	125,650	56
Traffic.....	7,124,864	67	6,440,087	63	684,777	04
Transportation.....	105,166,760	58	100,603,158	02	4,563,602	56
Miscellaneous operations.....	2,414,842	34	2,121,607	17	293,235	17
General.....	7,226,199	60	6,970,244	03	255,955	52
Transportation for investment <i>Credit</i>		993,350 79		1,012,478 24	Dec.	19,127 45
Total.....	214,461,747	62	205,422,649	88	8,989,097	74
Net earnings.....	42,113,976	45	47,904,004	66	Dec.	5,790,028 21
Operating ratio.....	83.59%		81.09%			

GENERAL REMARKS

Having regard for the various factors relating to the system the general results of the year's operations may be considered satisfactory. Although the net earnings were less by \$5,790,000 than those for 1926, they were much higher than in any previous year.

GROSS EARNINGS

Gross earnings exceeded those of 1926 by \$3,199,069 (1.26%). This increase was not in proportion to the increase in operating expenses, partly on account of reduced rates, the early harvest in 1926 and the late harvest in 1927.

OPERATING EXPENSES

Operating expenses exceeded those of 1926 by about \$8,989,000 (4.37%) represented substantially by increases in wages and in maintenance of way and structures.

MAINTENANCE OF WAY AND STRUCTURES

The increase of \$3,046,750 (7%) is due partly to increased wages and partly to a higher standard of maintenance. Part of the work involved in the extension of stone ballast and the introduction of heavier rails was responsible for a share of the increase. The balance of these two items is charged to capital account. While due economy is essential, it is felt that the introduction of a higher standard of maintenance has been wise.

Special items included \$136,000 for the widening of Victoria Bridge roadway, Montreal, also \$236,371 written off account changes involved in the Toronto Viaduct scheme. The work of replacing wooden trestles and culverts with permanent structures has been continued.

MAINTENANCE OF EQUIPMENT

The expenditures under this heading were only \$125,000 (.27%) more than those for the previous year. That the increased traffic did not require a larger increase in this item was largely due to increased efficiency in shops and yards and in shop operations. During the year a new class of locomotives—the 6100 class—was introduced. These locomotives serve both passenger and freight purposes and have given very satisfactory results. They were designed mainly by our own officers to meet our own requirements. As an instance of their capabilities they are operated without change between Sarnia and Montreal (511 miles), with consequent reduction in roundhouse and terminal expense and appreciable saving in other ways.

TRANSPORTATION EXPENSES

The increase of \$4,563,602 (4.5%) was to a great extent due to higher wages and to some extent to higher fuel costs; also partly to increased business.

BETTERMENTS

Work on the following items was included under this heading:—

New immigration facilities at the Halifax ocean terminals (now nearly completed); new train shed at Saint John (finished);

New stations at Summerside and Carleton, P.E.I., and at St. Fabien, P.Q.; car repair plant at Jonquiere;

Freight transfer yard at Oshawa; west bound freight yard at Niagara Falls; additional yard tracks at Mimico; 69 miles of automatic block signals for double track main line on Cornwall and Dundas subdivisions; 300 ton main line mechanical coaling plants at Paris and Belleville;

Various items in connection with the Toronto Viaduct scheme, including new engine facilities; also bridge over Spadina avenue; new through freight tracks to the south of the viaduct and retaining wall along Fleet street;

Tunnel yard extension at Port Huron; additional work on enlarged train yard at Pontiac;

2.74 miles of the Pontiac Belt Line; continuation of grade separation projects at Chicago, South Bend, Lansing and Detroit; various improvements at Flint, including passenger station and additional trackage;

New station at Edmonton and car shop at Prince Rupert; 6 mile loop line at Saskatoon.

TRAFFIC MOVEMENT

While the general business enjoyed by the company has been satisfactory, it is felt that a field exists for further and more intensive traffic solicitation together with the continued mobilization of every individual in the service of the company in the attraction of traffic to the company's lines. No aspect of the company's affairs is more important than continuous and vigorous activity in this direction.

The system revenue ton miles during 1927 show an increase of .85 per cent over the 1926 figure. The western grain crop totalled 996,510,000 bushels, an increase of 85,534,000 bushels (9.4%) over 1926. Due to adverse weather conditions both in the spring and fall harvesting was delayed, with the result that deliveries of grain during 1927 as compared with those of 1926 were 4.4 per cent lower to the head of the lakes and 1.7 per cent lower to Vancouver and Prince Rupert. The portion of the 1927 crop which did not move during that year will be handled in the first six months of this year.

Our passenger revenues were increased approximately 1.43 per cent. The average distance each passenger was carried during 1927 was 72.96 miles, as compared with 66.67 miles in 1926. The number of passengers ticketed ex-transatlantic steamers increased by 3.9 per cent over those ticketed in 1926. Chinese passenger traffic decreased 24 per cent, due to the disturbed situation in China.

Our express business showed a general increase, as compared with the previous year and resulted in an increase in revenue of 3.05 per cent.

TRAFFIC ITEMS

Freight revenues have been adversely affected during the year as a result of certain rate adjustments.

Under General Order No. 448 of the Board of Railway Commissioners, effective September 12, 1927, grain rates from all points in Western Canada to the head of the lakes were reduced appreciably; and grain rates to Vancouver

and Prince Rupert for export were reduced to the lakehead rate basis. Up to the end of 1927 the relative earnings were over \$600,000 less than they would have been but for the above order.

Freight and passenger revenues were seriously affected by floods in New England and the Mississippi valley.

Increased passenger train miles on new lines and new steam and motor car services amounted to 879,400 train miles.

Elimination of unprofitable and unnecessary steam trains to the extent of 194,500 train miles and the substitution of motor cars for steam services to the extent of 163,300 train miles resulted in a saving of about \$301,000 in operating expenses.

Our revenues continue to be adversely affected by competition of water carriers; also by motor truck and bus competition.

In order to offset competition by motor trucks and parcel post, a decrease in express rates on parcels weighing 15 pounds and less was put into effect on January 1, 1928.

FINANCE

In the Appropriation Act for 1927 \$22,500,000 was voted for Canadian National purposes covering the nine months' period to December 31, 1927.

As of July 1, 1927, an issue of \$65,000,000 4½ per cent Thirty-Year Guaranteed Gold Bonds was made for the following purposes:—

Refunding Three Year Guarantee Gold Notes, due July 1, 1927.....	\$20,000,000
Funding a temporary loan made in connection with the 1926-27 Budget requirements.....	15,000,000
Various expenditures under the above mentioned nine months' Budget.....	16,600,000
Expenditures for branch line construction and the Toronto Viaduct scheme.....	13,400,000
	<hr/>
	\$65,000,000

The balance of the requirements under the nine months' Budget will be provided from an issue of securities to be made during 1928.

As of May 1, 1927, an issue was made of \$15,000,000 of 4½ per cent Equipment Trust Certificates, Series "J", in connection with new equipment costing over \$20,000,000.

The Funded Debt Retirements during the year were:

Canadian National 4 p.c. Three Year Guaranteed Gold Notes, due July 1, 1927.....	\$20,000,000 00
Bay of Quinte Railway 5 p.c. First Mortgage Bonds, due January 2, 1927.....	730,000 00
Equipment Trust Certificates of various issues.....	5,291,400 00
Payments under various Sinking Funds and otherwise.....	1,433,107 97
	<hr/>
	\$27,494,507 97

On November 15 last a Scheme of Arrangement and Compromise was approved at a meeting held in London, England, of the holders of the Canadian Northern Railway Company 5 per cent Income Charge Convertible Debenture Stock, under which, subject to ratification by the Parliament of Canada, payment of the stock will be made on May 6, 1928, at 94 per cent of the par value. An act ratifying the scheme has been passed by the Parliament of Canada.

CONSTRUCTION

During the year 88 miles of line were graded in Saskatchewan and 43 miles in Alberta, in addition to which some track laying was completed as well as ballasting, fencing, telegraph facilities and buildings.

In the province of Quebec the St. Felicien to Mistassini line, 26.6 miles, was practically speaking completed and was opened for traffic in November.

HUDSON BAY LINE

On behalf of the Government considerable work towards rehabilitating this line was undertaken and preparations were started for the continuation of the line to Fort Churchill.

MANITOBA

Arrangements with the province of Manitoba were made under which a line about 88 miles in length will be constructed by the Manitoba Northern Railway Company from the Hudson Bay line to the Flin Flon Mines, which are controlled and will, it is expected, be developed by United States interests, as a result of which there should be opened up a new mining district which promises to afford substantial traffic.

The bonds of the Manitoba Company will be guaranteed by the Canadian National Railway Company, which will in consideration of such guarantee obtain the capital stock of the Manitoba Company and thus control it.

WAGE ADJUSTMENTS

Increases in pay were granted during the year to practically all classes of employees. Satisfactory agreements were reached by friendly negotiations. Boards of conciliation were applied for in two instances. These increases and other adjustments showed an operating payroll increase of about \$3,771,000.

HOTEL DEPARTMENT

The gross revenues amounted to about \$2,573,000, an increase of about \$278,000 over 1926; with a reduction in operating losses to about \$15,000, as compared with a loss of \$35,000 for 1926. Over \$211,000 of special maintenance expenses were charged against operating account as compared with about \$165,000 so charged in 1926.

The capacity of Jasper Park Lodge was increased. It is proposed to increase the accommodation of Pictou Lodge during the present year.

Our operation of the Highland Inn and of Nominigan and Minesing Camps will be discontinued this year.

The extension to the Chateau Laurier is well under way. The operating profits from this hotel show an appreciable increase as compared with those of the previous year.

TERMINALS

An arrangement was made with the city of Vancouver under which a settlement was reached covering various long outstanding matters in connection with the developments and expenditures required under the agreement made in 1910. This included the construction of a first class hotel, work on which will be started during the present year.

After prolonged investigation plans have been prepared for central terminal facilities in the city of Montreal. These plans if carried out will result in the consolidation of the passenger train services now operated into and out of the Bonaventure, the Tunnel, the Moreau Street and the Montreal and Southern Counties Stations. Until the suggestions have been approved by the city of Montreal, the Harbour Commissioners, the Board of Railway Commissioners and the Dominion Parliament, nothing in this respect can be considered as final.

Substantial progress was made during the year in connection with the Toronto Viaduct scheme. In August the New Union Station was opened by the Prince of Wales accompanied by Premier Baldwin. On account of the magnitude of the work involved and the necessity for settlement by way of

arbitration or otherwise in regard to the acquisition of certain properties considerable work still remains to be done before the permanent trackage can be completed; but in the meantime the passenger tracks on the ground level, extended and rearranged, are still in use.

INDUSTRIAL DEPARTMENT

During the year just passed, 456 new manufacturing establishments of various sorts were located on the lines of this railway in Canada, involving a capital expenditure of \$44,213,030, and 103 concerns already located on our lines in Canada made additions to their plants at an estimated expenditure of \$29,000,000. This is indicative of a healthy business condition and also affords ample justification for the establishment of the Industrial Department, the activities of which contributed much towards the location of the various enterprises on the lines of the railway.

CENTRAL VERMONT

In November very serious floods occurred in the New England States and the Eastern Townships, resulting in a partial tie-up in train movements and a loss in earnings resulting from traffic having to be detoured over foreign lines. In this connection arrangements were made to broadcast daily from Ottawa various news bulletins and reports of relief measures undertaken. This service was much appreciated by the people affected by the floods.

The damage to the Central Vermont properties was so great that in order to enable the raising of the moneys required to rehabilitate the line an application was made to the United States courts by the Canadian National Railways for the appointment of receivers for the Central Vermont System. The reasons for this application were so obvious that it was immediately granted by the appointment of Messrs. George A. Gaston and John W. Redmond as receivers. It was made in order to enable the Central Vermont to obtain advances (and give security therefor) to provide the funds required to restore its line to working conditions. The rehabilitation was undertaken without delay and has been carried on in the face of great difficulties, with the result that on February 4, 1928, the line was reopened as far as White River Junction.

Satisfactory arrangements have been made for the sale of Receivers' Certificates up to not exceeding \$5,000,000; also for the payment at par and accrued interest of Central Vermont bonds in New York on demand of the holders. These bonds mature in 1930. They were guaranteed by the Grand Trunk Railway Company, whose liability to pay is now that of its successor, the Canadian National Railway Company.

The receivership and the various matters ensuing therefrom have been of an amicable character. It may safely be said that a most friendly relationship exists between the Central Vermont and the Canadian National Railways on the one hand and the people of the state on the other.

ROUYN LINE

As of December 23, 1927, an issue of \$3,396,000 of National Transcontinental Railway Branch Lines Company First Mortgage 4½ per cent Thirty-Year Sinking Fund Gold Bonds dated October 1, 1925, was made for the purpose of funding loans obtained for the construction of that company's line from Rouyn to Taschereau, a distance of about forty-five miles.

WEST INDIES TRADE AGREEMENT

During the year contracts were placed by the Canadian National (West Indies) Steamships, Limited, for the construction of five twin screw, steam turbine vessels required for the services under the above agreement. All these

vessels will be approximately 430 feet long and 60 feet wide. It is expected that three of them will be in commission before the end of 1928 and will be operated all the year round from Saint John and Halifax to Bermuda and the Windward Islands as far south as Demerara. They will have accommodation for 103 first class passengers and 132 second and third class; and cargo capacity of about 283,000 cubic feet, deadweight tonnage 6,400 each.

The remaining two vessels will be operated to Bermuda, Nassau and Jamaica, in summer from Montreal, in winter from Saint John and Halifax. They should be available for service at the commencement of the 1929 St. Lawrence navigation season. They will have accommodation for 103 first class passengers and for 243,000 cubic feet of cargo, mostly bananas; deadweight tonnage 4,400 each.

COLONIZATION

In territory tributary to our lines about 190,000 acres of new land were broken in Saskatchewan and about 410,000 in Alberta. These lands should produce crops this year. 38,685 European settlers were brought out under our auspices in 1927 as compared with 31,536 in the previous year. About 9,000 were British. The balance came from other European countries.

Our work in connection with immigration has been considerably extended during the year and satisfactory relations with the Dominion and provincial Governments have been maintained.

Valuable work has been done by our station agents at many points in the western provinces in developing farm help applications and in meeting and directing newcomers. Their co-operation and assistance is much appreciated.

The Department of National Resources has been active in every province, more particularly in the Maritime Provinces, as a result of which much new development is under way.

LAND SALES

Seventy-four thousand two hundred and sixty-seven acres of land were sold during the year for \$994,231, representing an average price of \$13.39, as compared with 115,445 acres sold in 1926 for \$1,697,327, representing \$14.70 per acre. Cancellations of purchase contracts covered 20,797 acres in 1927 and 94,006 acres in 1926. As a result of the marked decrease in cancellations it will be seen that the net increase in land sales during the year amounted to 32,031 acres.

TELEGRAPH MATTERS

The operations under this heading show continued expansion and progress during the year. Our advocacy of the use of telegrams for ordinary business made it necessary to materially increase our facilities in order to handle growing business.

Improved automatic equipment have been installed on the following circuits: Toronto—Hamilton—Buffalo; Toronto—Montreal—Ottawa; also Winnipeg—Edmonton—Saskatoon.

The carrier current system, by which a number of messages may be transmitted simultaneously on one circuit is now in operation between Montreal and Toronto and between Toronto and Winnipeg. This system has substantially increased traffic owing to its reliability through not being affected by earth currents. It has enabled the Canadian National private long distance telephone system to be extended from the East to Winnipeg. Telephone and telegraph services can be carried on simultaneously, without interference of one with the other.

The net income from telegraph service increased from \$241,249 in 1926 to \$403,967 in 1927.

INSURANCE

The Insurance Reserve applicable to Canadian Government Merchant Marine has been transferred to the separate balance sheet of that company. The Canadian National Railways' Insurance Reserve increased during the year by \$1,285,421 and at the end of the year stood at \$7,494,400. The losses on property insured in the Railway Fund during the year were \$556,000. There was no large fire loss.

PURCHASING AND STORES DEPARTMENTS

At the end of the year there was some increase of coal in stock as compared with the corresponding amount in December, 1926. This was due to an extra supply having been put in to provide for possible emergencies resulting from the strike in the Pittsburgh and Ohio districts. This strike made it necessary for our mines in Ohio to be closed down and forced us to get our American coal largely from other fields. Our purchases of coal from Canadian mines during the year were nearly the highest on record. It is expected that imports of American coal will be very materially reduced in 1928. The stocks of general stores showed a substantial reduction during the year. There is no present indication of any great variation from last year in the price of railway materials.

PENSION

The following employees, with fifty or more years of service, were placed on pension during the year, and their records furnish a fine testimonial to the fidelity and loyalty with which they have served the company for more than half a century. The best wishes of the management are extended to them for a long and well-merited period of retirement:

	Service		Service		Service
Ackman, G. C.....	52	Ferguson, H.....	55	Reiffenstein, C. E....	52
Bell, J.....	52	Griffin, J.....	51	Ryan, F.....	56
Caron, F. X.....	51	Healey, P. J.....	55	Stone, G. M.....	54
Charters, S. C.....	52	Holmes, H. S.....	56	True, B.....	55
Clark, A.....	50	Jehu, L.....	53	Turnbull, D.....	54
Crowe, E.....	51	King, G. H.....	52	Turner, H.....	54
Desjardins, E. L.....	51	McCormack, J.....	52	Vandenberg, J.....	55
Dillon, M.....	57	Norton, R. S.....	51		
Ellis, W.....	51	Parsley, W. H.....	53		

Mr. J. Henderson was also retired on pension after fifty years' honourable service; but, we regret to note, he died shortly after retirement.

The board records with pride and admiration that the following employees deserve honourable mention for life-saving acts and efforts:—

Berry, Alonzo; Bundy, Charles S.; Candline, John; Gagne, Joseph E.; Ramsay, James; Robinson, Lucius A.; Smith, Henry E.

HALIFAX HOTEL

In 1926 a plan, which had been privately promoted for the erection of a modern hotel at Halifax, was presented to the Board of Directors for consideration. The plan was found to be unsatisfactory in its method of finance and was rejected. The need of more modern hotel facilities at Halifax was, however, apparent to the board, and it was recognized that, with the establishment in the winter of 1928-1929 of the new and important services of the Canadian National Steamships between Halifax and the West Indies, this need would become still more pressing. Protracted negotiations ensued between Halifax financiers and the National Railways in an effort to arrive at a satisfactory plan whereby such railways might participate in the promoters' under-

taking, although the inclination of the board was that the National Railways should itself construct and own a hotel at Halifax. After these negotiations had been in progress for some time the Canadian Pacific Railway was invited by the promoters to participate in their enterprise, but no decision was reached by the board of that company until September 26, 1927, when it decided to take up \$350,000 of the preferred stock in such enterprise. On July 14, 1927—more than two months prior to this action by the Canadian Pacific—Col. J. L. Ralston, Minister of National Defence, had announced that the possibility of the Canadian National Railways participating financially in the building of a hotel by Halifax promoters had been considered by the Cabinet and that approval would not, without the direct authority of Parliament, be forthcoming for the purchase by the National Railways of minority shares in a privately financed hotel.

On July 20, 1927, the National Railways announced that an appropriate amount for the provision of hotel facilities at Halifax would be included in its annual Budget to be submitted to Parliament. On September 23, 1927, further representations that the National Railways should purchase preferred shares in the privately promoted Halifax hotel were considered by the Cabinet; and Colonel Ralston immediately notified the president of the hotel company that the Cabinet had adhered to the decision reached on July 14 and emphasized the announcement of the intention of the National Railways management to include in the 1928 Budget a railway terminal hotel at Halifax. The decision of the Canadian Pacific to take up the preferred stock of the hotel company was made by the Executive Committee of that railway company three days later.

The site for the new combined station and hotel of the National Railways at Halifax, upon which foundation work is proceeding, is admirably situated to serve the transportation needs of the community being on the ocean terminals, and immediately adjoining the present station of the National System. Ample land was available without additional cost. The hotel is to have one hundred and sixty rooms with an ultimate capacity of three hundred rooms. Authority is asked in the railway estimates for the expenditure of \$1,250,000. The board believes that it has acted with wisdom and has followed that course which was essential for the protection of the interests of the National Railways.

EXECUTIVE COMMITTEE

On June 30 approval by Order in Council was given to the appointment of an Executive Committee consisting of six directors. This committee usually meets weekly except in a week when a meeting of the directors is held, and its existence has facilitated directoral functions.

GENERAL

The results for the year testify to the continued healthy economic condition of the country and are indicative of continued and improving opportunities for the investment of capital and settlement. No country offers more attractive field for hands and brains than the Dominion.

In closing this report the board again desires to express to all officers and employees its gratitude for the fine spirit and enthusiasm which has characterized the service of all in the employ of the company.

H. W. THORNTON,

Chairman and President.

CONSOLIDATED BALANCE SHEET AT DECEMBER 31, 1927

ASSETS

<i>Investments—</i>			
701	Investments in road and equipment.....	\$ 1,914,939,182 63	
702	Improvements on leased railway property.....	3,198,263 90	
703	Sinking funds:		
	System securities at par.....	\$9,422,666 79	
	Other assets at cost.....	4,183,218 16	
			13,605,884 95
704	Deposits in lieu of Mortgaged Property sold.....	5,196,173 04	
705	Miscellaneous physical property.....	55,488,465 10	
706	Investments in Affiliated Companies:		
	"A" stocks.....	\$ 1,516,785 91	
	"B" Bonds.....	16,456,591 80	
	"C" Notes.....	8,041,905 52	
	"D" Advances.....	14,098,303 16	
			40,113,586 39
707	Other investments.....	4,580,097 51	
			<u>\$2,037,121,653 52</u>
<i>Current Assets—</i>			
708	Cash.....	22,348,866 14	
711	Special deposits.....	10,089,677 40	
712	Loans and Bills receivable.....	14,803 93	
713	Traffic and Car Service balances receivable.....	1,644,516 73	
714	Net balances receivable from agents and conductors.....	6,006,066 50	
715	Miscellaneous accounts receivable.....	7,520,235 49	
	Dominion Government Operating deficit on Eastern Lines....	3,049,746 31	
716	Material and supplies.....	40,990,224 65	
717	Interest and dividends receivable.....	289,857 64	
718	Rents receivable.....	143,866 64	
719	Other Current assets.....	28,617 50	
			<u>92,126,478 93</u>
<i>Deferred Assets—</i>			
720	Working fund advances.....	266,047 46	
721	Insurance and other funds.....	7,941,346 23	
722	Other Deferred assets.....	9,469,989 62	
			<u>17,677,383 31</u>
<i>Unadjusted Debits—</i>			
723	Rents and insurance premiums paid in advance.....	45,633 36	
724	Discount on capital stock.....	189,500 00	
725	Discount on funded debt.....	7,004,553 28	
727	Other Unadjusted debits.....	4,752,995 21	
			<u>11,992,681 85</u>
			<u><u>\$2,158,918,197 61</u></u>

NOTE.—(a) The title of the Canadian Northern Ontario Railway and the Canadian Northern Quebec Railway Companies to lands carried in "Miscellaneous Physical Property" has been questioned by the Ontario and Quebec Provincial Governments.

(b) The investments in the Central Vermont Railway Company, now in receivership, are carried in "Investments in Affiliated Companies" at cost including interest unpaid to date of receivership.

LIABILITIES

<i>Stocks—</i>			
751	Capital stock.....	\$ 270,222,748 70	
752	Stock liability for conversion.....	10,600 00	
			<u>\$270,233,348 70</u>
<i>Governmental Grants—</i>			
754	Grants in aid of construction.....		16,603,115 19
<i>Long term debt—</i>			
755	Funded debt unmaturred.....	981,381,736 52	
<i>Dominion of Canada Account—</i>			
	Funded debt unmaturred.....	\$33,048,000 00	
	Loans from Dominion of Canada.....	562,490,349 30	
	Interest on above Accrued but unpaid.....	226,142,005 41	
	Appropriations account Can. Govt. Rys.....	436,416,387 32	1,258,096,742 03
			<u>2,239,478,478 55</u>

LIABILITIES—*Concluded*

<i>Current Liabilities—</i>		
758	Loans and bills payable.....	500 00
759	Traffic and car service balances payable.....	4,503,552 55
760	Audited Accounts and Wages payable.....	19,075,545 87
761	Miscellaneous accounts payable.....	4,983,709 74
762	Interest matured unpaid.....	7,243,020 37
764	Funded Debt matured unpaid.....	425,216 47
766	Unmatured interest accrued.....	8,163,705 81
767	Unmatured rents accrued.....	412,235 31
768	Other current liabilities.....	188,124 43
		44,995,610 55
<i>Deferred Liabilities—</i>		
769	Liability for Provident funds.....	31,139 41
770	Other deferred liabilities.....	4,520,087 79
		4,551,227 20
<i>Unadjusted Credits—</i>		
771	Tax liability.....	1,618,639 94
773	Insurance and casualty reserves.....	7,762,659 14
775	Accrued depreciation—Road.....	2,286,851 22
776	Accrued depreciation—Equipmeny.....	6,518,409 96
777	Accrued depreciation—Miscellaneous physical property.....	861,959 59
778	Other unadjusted credits.....	2,421,716 09
		21,470,235 94
<i>Corporate Surplus or Deficit—</i>		
779	Additions to property through income and surplus.....	1,729,890 53
780	Funded debt retired through income and surplus.....	986,000 00
781	Sinking fund reserves.....	636,343 69
783	Appropriated surplus.....	2,146,605 09
784	Profit and Loss balance— <i>Deficit</i>	443,912,657 83
		438,413,818 52
		\$2,158,918,197 61

J. M. ROSEVEAR,
General Comptroller.

We have examined the books and records of the companies comprising the Canadian National Railway System for the twelve months ended December 31, 1927. The investments in Road and Equipment appearing in the books of the companies as at January 1, 1923, were accepted by us.

We certify that, in our opinion, the above Consolidated Balance Sheet is properly drawn up so as to exhibit a true and correct view of the affairs of the system as at December 31, 1927, and we further certify that, in our opinion, the attached Income and Profit and Loss Accounts for the year ended December 31, 1927, are correctly stated.

GEORGE A. TOUCHE & Co.,
Chartered Accountants, Auditors.

March 31, 1928.

PROFIT AND LOSS ACCOUNT, 1927

<i>Debits—</i>		
611	Debit balance Canadian National Railway System at January 1, 1927.....	\$414,320,294 09
	Deduct Central Vermont Railway System debit balance at January 1, 1927.....	5,408,813 04
		\$408,911,481 05
612	Debit balance transferred from Income.....	34,373,027 22
613	Surplus applied to sinking and other reserve funds.....	2,444 00
615	Surplus appropriated for investment in physical property.....	1,266 18
618	Miscellaneous appropriations of surplus.....	88,232 90
619	Loss on retired road and equipment.....	1,525,598 50
		444,902,049 85
<i>Credits—</i>		
603	Profit on road and equipment sold.....	277,070 59
605	Unrefundable overcharges.....	17,025 67
606	Donations.....	57,933 65
607	Miscellaneous credits and debits net.....	514,573 61
622	Adjustment of land surplus account.....	122,788 50
	Debit balance for ward to Balance Sheet.....	443,912,657 83
		\$444,902,049 85

NOTE.—The above figures do not include those of the Central Vermont Railway for twelve months, nor of the Eastern Lines for six months ended December 31, 1927.

DEPARTMENT OF RAILWAYS AND CANALS

INCOME STATEMENT

	Year ending December 31, 1927		Year ending December 31, 1926	
	\$	cts.	\$	cts.
501 Railway operating revenues.....	256,575,724	07	253,376,654	54
531 Railway operating expenses.....	214,461,747	62	205,472,649	88
Net revenue from railway operations.....	42,113,976	45	47,904,004	66
532 Railway tax accruals.....	4,532,636	88	4,561,075	86
533 Uncollectable railway revenues.....	44,866	89	46,168	94
Railway operating income.....	37,536,472	68	43,296,759	86
502 Revenues from miscellaneous operations.....	2,573,144	32	2,294,815	79
534 Expenses of miscellaneous operations.....	2,519,581	67	2,274,852	57
535 Taxes on miscellaneous operating property.....	68,517	56	65,711	96
Miscellaneous operating <i>deficit</i>	14,954	91	45,748	74
Total operating income.....	37,521,517	77	43,251,011	12
504 Rent from locomotives.....	333,363	51	333,794	72
505 Rent from passenger train cars.....	397,123	56	353,432	73
506 Rent from floating equipment.....	385	00	150	00
507 Rent from work equipment.....	461,619	68	349,669	20
508 Joint facility rent income.....	1,114,664	73	1,033,843	62
509 Income from lease of road.....	32,211	97	77,124	88
510 Miscellaneous Rent income.....	1,022,351	65	589,009	99
511 Miscellaneous non-operating physical property.....	296,807	98	203,086	60
512 Separately operated properties—Profit.....	1,456,151	87	1,606,279	99
513 Dividend income.....	470,527	49	413,227	50
514 Income from funded securities.....	865,903	69	848,697	41
515 Income from unfunded securities and accounts.....	1,694,200	81	1,769,641	36
516 Income from sinking and other reserve funds.....	740,453	36	736,906	86
519 Miscellaneous income.....	56,686	23	83,271	39
Total non-operating income.....	8,942,451	53	8,398,136	25
Gross income.....	46,463,969	30	51,649,147	37
536 Hire of freight cars—Debit balance.....	3,599,650	52	3,771,560	57
537 Rent for locomotives.....	92,330	79	96,343	34
538 Rent for passenger train cars.....	291,485	13	303,419	09
539 Rent for floating equipment.....	13,354	66	9,224	29
540 Rent for work equipment.....	44,180	36	40,439	00
541 Joint facility rents.....	1,083,207	19	923,860	40
542 Rent for leased roads.....	1,212,587	52	1,222,583	85
543 Miscellaneous rents.....	82,091	78	83,435	47
544 Miscellaneous tax accruals.....	175,116	66	150,974	55
545 Separately operated properties—Loss.....	712,087	62	646,746	73
546 Interest on funded debt.....	40,448,274	44	39,119,410	55
546A Interest on Dominion Government advances.....	32,190,648	77	31,804,380	40
547 Interest on unfunded debt.....	297,862	23	129,752	41
548 Amortization of discount on funded debt.....	488,331	56	503,392	47
551 Miscellaneous income charges.....	42,148	17	30,797	39
Miscellaneous appropriations of income.....	63,639	14	60,567	84
Total deductions from gross income.....	80,836,996	52	78,896,888	35
Net income <i>deficit</i>	34,873,027	22	27,247,740	98

RAILWAY OPERATING REVENUES AND EXPENSES

	Year ending December 31, 1927	Year ending December 31, 1926
	\$ cts.	\$ cts.
<i>Railway Operating Revenues—</i>		
101 Freight.....	193,541,352 73	191,787,465 76
102 Passenger.....	36,080,488 49	35,570,671 22
103 Excess baggage.....	212,083 24	217,129 61
104 Sleeping car.....	2,100,347 22	1,985,812 77
105 Parlour and chair car.....	285,118 71	268,584 76
106 Mail.....	3,147,755 27	3,142,219 50
107 Express.....	13,163,925 34	12,774,453 93
108 Other passenger—Train.....	91,259 85	48,670 85
109 Milk.....	421,437 53	417,549 20
110 Switching.....	2,439,325 49	2,376,715 82
111 Special service train.....	124,886 71	137,488 97
113 Water transfers—Freight.....	8,040 88	
114 Water transfers—Passenger.....	25,728 25	9,406 80
115 Water transfers—Vehicles and live stock.....	24,783 32	9,422 18
116 Water transfers—Other.....	6,586 72	1,721 50
131 Dining and buffet.....	1,495,020 72	1,355,864 27
132 Restaurant.....	57,108 37	56,920 76
133 Station, train and boat privileges.....	176,347 69	165,658 62
134 Parcel room.....	102,135 92	112,554 11
135 Storage—Freight.....	183,206 08	186,353 04
136 Storage—Baggage.....	50,457 06	50,367 57
137 Demurrage.....	736,035 25	794,676 81
138 Telegraph and telephone.....	2,405 87	2,507 28
139 Grain elevator.....	326,070 57	373,898 76
141 Power.....	21,235 08	14,711 86
142 Rent of buildings, etc.....	318,795 79	300,417 72
143 Miscellaneous.....	1,405,952 60	1,409,914 56
151 Joint facility—Credit.....	113,452 92	18,992 23
152 Joint facility—Debit.....	85,619 60	116,154 22
Total operating revenues.....	256,575,724 07	253,376,654 54
<i>Railway Operating Expenses—</i>		
Maintenance of Way and structures.....	46,075,178 06	43,028,428 62
Maintenance of equipment.....	47,447,253 16	47,321,602 60
Traffic.....	7,124,864 67	6,440,087 63
Transportation.....	105,166,760 58	100,603,158 02
Miscellaneous operations.....	2,414,842 34	2,121,607 17
General.....	7,226,199 60	6,970,244 08
Transportation for investment—Credit.....	993,350 79	1,012,478 24
Total operating expenses.....	214,461,747 62	205,472,649 88

RAILWAY OPERATING EXPENSES—Continued

	Year ending December 31, 1927	Year ending December 31, 1926
	\$ cts.	\$ cts.
<i>Maintenance of Equipment—</i>		
301 Superintendence	1,805,302 97	1,761,117 11
302 Shop machinery	1,272,055 58	1,240,013 69
304 Power plant machinery	76,124 75	86,378 08
306 Power substation apparatus	1,470 16	1,030 23
308 Steam locomotives—Repairs	15,607,412 17	15,266,660 83
310 Steam locomotives—Retirements	950,017 59	604,254 28
311 Other locomotives—Repairs	38,833 77	32,087 53
314 Freight train cars—Repairs	16,241,183 23	17,000,738 89
316 Freight train cars—Retirements	1,331,408 69	1,108,823 17
317 Passenger train cars—Repairs	6,142,603 60	6,077,494 03
319 Passenger train cars—Retirements	71,896 54	190,452 00
320 Motor equipment of cars—Repairs	133,409 58	158,217 75
322 Motor equipment of cars—Retirements		18,867 23
323 Floating equipment—Repairs	147,149 68	73,191 88
325 Floating equipment—Retirements	20,068 56	
326 Work equipment—Repairs	1,537,939 17	1,754,078 57
328 Work equipment—Retirements	109,026 26	95,486 11
329 Miscellaneous equipment—Repairs	17,027 61	16,792 26
331 Miscellaneous equipment—Retirements	3,040 59	3,270 64
332 Injuries to Persons	287,424 26	310,645 34
333 Insurance	449,066 10	424,124 17
334 Stationery and printing	66,473 10	79,227 46
335 Other expenses	28,378 53	31,215 69
336 Maintaining joint equipment at terminals, Dr.	74,287 96	69,009 26
337 Maintaining joint equipment at terminals, Cr.	194,675 03	196,655 24
Depreciation—U.S. lines only	1,230,327 74	1,115,081 64
Total	47,447,253 16	47,321,602 60
<i>Traffic expenses—</i>		
351 Superintendence	2,039,930 98	1,862,291 07
352 Outside agencies	2,507,686 63	2,342,500 17
353 Advertising	1,198,477 54	1,023,315 14
353 Radio	266,535 04	235,728 36
354 Traffic associations	88,744 98	80,031 82
356 Industrial and immigration bureaus	102,123 54	72,707 17
356 Colonization, agriculture and natural resources	546,729 03	460,077 06
357 Insurance	664 80	663 48
358 Stationery and printing	367,523 05	343,650 76
359 Other expenses	6,449 08	19,122 60
Total	7,124,864 67	6,440,087 63

DEPARTMENT OF RAILWAYS AND CANALS

RAILWAY OPERATING EXPENSES—Continued

	Year ending December 31, 1927		Year ending December 31, 1926	
	\$	cts.	\$	cts.
<i>Transportation Rail Line—</i>				
371 Superintendence.....	3,634,642	69	3,736,599	35
372 Despatching trains.....	1,393,587	33	1,321,045	66
373 Station employees.....	15,545,083	29	15,069,985	40
374 Weighing, inspection and demurrage bureaus.....	80,198	85	74,535	66
375 Coal and ore wharves.....			46,991	53
376 Station supplies and expenses.....	1,307,106	12	1,298,054	17
377 Yardmasters and yard clerks.....	2,720,650	88	2,585,759	35
378 Yard conductors and brakemen.....	5,343,141	58	5,052,438	13
379 Yard, switch and signal tenders.....	683,649	40	648,949	26
380 Yard enginemen.....	3,851,683	45	3,697,953	70
381 Yard motormen.....	33,125	93	32,909	25
382 Fuel for yard locomotives.....	4,585,233	18	4,483,183	95
383 Yard switching power produced.....	17,323	06	17,572	58
384 " " purchased.....	55,941	28	55,307	62
385 Water for yard locomotives.....	203,224	23	190,412	74
386 Lubricants for yard locomotives.....	46,701	38	49,267	10
387 Other supplies for yard locomotives.....	44,562	26	45,227	12
388 Enginehouse expenses—Yard.....	1,446,072	96	1,394,721	85
389 Yard supplies and expenses.....	121,477	58	114,498	05
390 Operating joint yards and terminals, Dr.....	988,792	94	813,144	75
391 " " " " Cr.....	1,887,034	96	1,362,068	86
392 Train Enginemen.....	10,613,852	35	9,982,471	39
393 Train motormen.....	89,608	68	85,616	86
394 Fuel for train locomotives.....	19,058,874	19	18,567,805	86
395 Train power produced.....	9,403	51	13,859	01
396 " " purchased.....	44,752	08	46,861	65
397 Water for train locomotives.....	1,000,256	82	1,022,699	16
398 Lubricants for train locomotives.....	243,752	90	266,457	83
399 Other supplies for train locomotives.....	183,055	33	187,902	92
400 Enginehouse expenses—Train.....	3,438,212	04	3,360,730	22
401 Trainmen.....	11,863,007	03	10,848,228	78
402 Train supplies and expenses.....	5,044,548	10	4,720,782	46
403 Operating sleeping cars.....	1,040,044	10	946,110	64
404 Signal and interlocker operation.....	569,862	50	553,537	31
405 Crossing protection.....	673,041	51	678,131	60
406 Drawbridge operation.....	105,490	75	103,945	12
407 Telegraph and telephone operation.....	47,668	83	49,902	13
408 Operating floating equipment.....	1,033,709	61	788,907	36
409 Express service.....	5,973,716	86	5,721,569	28
410 Stationery and printing.....	655,658	24	665,153	39
411 Other expenses.....	263,748	12	316,791	19
412 Operating joint tracks and facilities, Dr.....	217,270	61	211,031	76
413 " " " " Cr.....	515,275	83	508,812	13
414 Insurance.....	364,870	16	402,194	43
415 Clearing wrecks.....	436,196	55	431,763	03
416 Damage to property.....	63,838	96	145,723	06
417 Damage to live stock on right of way.....	59,263	01	51,441	67
418 Loss and damage—Freight.....	1,068,241	10	972,302	46
419 " " " " Baggage.....	2,992	01	3,441	41
420 Injuries to persons.....	741,887	03	598,119	81
Total.....	105,166,760	58	100,603,158	02

RAILWAY OPERATING EXPENSES—*Concluded*

	Year ending December 31, 1927		Year ending December 31, 1926	
	\$	cts.	\$	cts.
<i>Miscellaneous Operations—</i>				
441 Dining and buffet service.....	2,137,398	73	1,825,054	14
442 Restaurants.....	52,252	87	64,722	68
443 Grain elevators.....	152,862	85	179,242	14
445 Producing power sold.....	33,439	82	26,689	87
446 Other miscellaneous operations.....	38,888	07	25,898	84
Total.....	2,414,842	34	2,121,607	17
<i>General Expenses—</i>				
451 Salaries and expenses of general officers.....	871,922	31	903,853	54
452 Salaries and expenses of clerks and attendants.....	3,581,051	63	3,488,123	33
453 General office supplies and expenses.....	407,203	47	412,133	90
454 Law expenses.....	458,753	85	479,771	76
455 Insurance.....	2,687	04	2,671	74
456 Relief Department Expenses.....	21,500	00	21,500	00
457 Pensions.....	1,106,074	07	951,262	66
458 Stationery and printing.....	166,912	48	173,321	27
459 Valuation expenses.....	34,613	69	41,296	77
460 Other expenses.....	572,977	06	498,963	81
461 General joint facilities, Dr.....	14,645	41	6,989	54
462 " " Cr.....	12,141	41	9,644	24
Total.....	7,226,199	60	6,970,244	08

EXPENDITURES, LESS RETIREMENTS, DURING THE YEAR 1927, APPLICABLE TO INVESTMENT IN ROAD AND EQUIPMENT

	C.N.R. Eastern Lines		Canadian National System	
	\$	cts.	\$	cts.
<i>Road—</i>				
1 Engineering.....	3,639	34	736,573	20
2 Land for transportation purposes.....	7,228	26	2,673,627	79
3 Grading.....	61,677	60	5,215,023	57
5 Tunnels and subways.....	4,242	74	33,246	94
6 Bridges, trestles and culverts.....	52,175	39	3,017,208	38
8 Ties.....	17,446	38	755,073	32
9 Rails.....	133,439	46	1,416,662	65
10 Other track material.....	158,941	06	2,433,027	83
11 Ballast.....	43,682	25	1,583,619	63
12 Tracklaying and surfacing.....	70,080	55	1,146,243	38
13 Right of way fences.....	17,214	13	101,739	41
14 Sand and snow fences and snow sheds.....	2,353	52	25,950	31
15 Crossings and signs.....	5,152	37	205,860	20
16 Station and office buildings.....	471,429	75	1,626,335	92
17 Roadway buildings.....	1,160	95	298,297	43
18 Water stations.....	26,573	45	420,125	23
19 Fuel stations.....	435	08	122,583	93
20 Shops and enginehouses.....	123,834	83	843,084	84
21 Grain elevators.....			66,547	97
23 Wharves and docks.....	5,890	58	208,783	95
24 Coal and ore wharves.....			47	17
26 Telegraph and telephone lines.....			61,360	01
27 Signals and interlockers.....	7,742	46	355,734	61
29 Power plant buildings.....			86,426	56
30 Power substation buildings.....			218	44
31 Power transmission systems.....			23,847	30
32 Power distribution systems.....	437	54	97,459	41
33 Power line, poles and fixtures.....			86,750	59
34 Underground conduits.....			5,184	41
35 Miscellaneous structures.....			15,136	12
36 Paving.....			2,561	91
37 Roadway machines.....	5,835	62	22,434	05
38 Roadway small tools.....	227	55	15,225	87
39 Assessments for public improvements.....			190,737	04
40 Revenues and operating expenses during construction.....	2,263	99	212,920	60
41 Cost of road purchased.....			1,278,201	89
43 Other expenses—Road.....	285	21	150,057	93
44 Shop machinery.....	60,059	36	238,238	85
45 Power plant machinery.....	650	38	16,569	69
46 Power substation apparatus.....			3,678	79
47 Unapplied construction material and supplies.....			82,350	61
Total.....	1,279,111	72	22,887,393	43

EXPENDITURES, LESS RETIREMENTS, DURING THE YEAR 1927, APPLICABLE TO INVESTMENT IN ROAD AND EQUIPMENT—*Concluded*

	C.N.R. Eastern Lines		Canadian National System
	\$ cts.		\$ cts.
<i>Equipment—</i>			
51 Steam locomotives.....			5,836,383 92
52 Other locomotives.....			314,067 83
53 Freight train cars.....			6,738,342 00
54 Passenger train cars.....			5,696,616 40
55 Motor equipment of cars.....			239,869 53
56 Floating equipment.....			509,634 70
57 Work equipment.....			1,070,351 07
58 Miscellaneous expenses.....			29,612 14
			20,434,877 59
<i>General—</i>			
71 Organization expenses.....			6,418 56
72 General officers and clerks.....			12,288 17
73 Law.....			18,960 47
74 Stationery and printing.....			6,655 18
76 Interest during construction.....	7,950 44		362,232 15
77 Other expenses—General.....	2,063 87		4,148 39
			402,406 14
	10,014 31		402,406 14
Total.....	1,269,097 41		43,724,677 16
Total Canadian National System including Eastern Lines.....			44,993,774 57
Investment expenditures under suspense appropriations.....			374,771 11
Investment expenditures by separately operated properties.....			1,587,168 29
Total expended during year.....			46,196,171 75
Transfers between balance sheet accounts not applicable to year's expenditures.....			5,137,702 96
Balance at January 1, 1927.....	1,886,449,586 30		1,863,605,307 92
Central Vermont Railway System.....	22,844,278 38		
Balance at December 31, 1927, as per balance sheet.....			1,914,939,182 63

A/C 702—IMPROVEMENTS ON LEASED RAILWAY PROPERTY DURING YEAR 1927

	C.N.R. Eastern Lines		Canadian National System
	\$ cts.		\$ cts.
<i>Road—</i>			
1 Engineering.....			3,679 16
2 Land for transportation purposes.....			34,902 90
3 Grading.....	7,909 39		839 97
6 Bridges, trestles and culverts.....	3,784 46		18,423 68
8 Ties.....			9,351 98
9 Rails.....	4,925 10		22,391 62
10 Other track material.....	746 00		28,114 78
11 Ballast.....			11,540 98
12 Track laying and surfacing.....	9,399 08		14,462 90
13 Right of way fences.....			5,582 25
14 Sand and snow fences and snow sheds.....	2,689 70		212 46
15 Crossings and signs.....			150 13
16 Station and office buildings.....	5,988 46		18,044 91
17 Roadway buildings.....			344 96
18 Water stations.....	5,058 67		9,101 71
19 Fuel stations.....			1,844 33
20 Shops and engine houses.....			15,562 93
21 Grain elevators.....			2,668 02
23 Wharves and docks.....			49,822 83
24 Coal and ore wharves.....			2,718 08
26 Telegraph and telephone lines.....			482 91
27 Signals and interlockers.....			27,315 78
32 Power distribution systems.....			1,930 97
33 Power line poles and fixtures.....			127 10
35 Miscellaneous structures.....			579 70
37 Roadway machines.....			647 27
39 Assessments for public improvements.....			17,374 62
44 Shop machinery.....			2,176 70
	40,500 86		171,444 93

A/C 702—IMPROVEMENTS ON LEASED RAILWAY PROPERTY DURING YEAR 1927

—Concluded

	C.N.R. Eastern Lines	Canadian National System
	\$ cts.	\$ cts.
<i>Equipment—</i>		
57 Work equipment.....		10,793 85
Total.....	40,500 86	160,651 08
Total Canadian National System including Eastern Lines.....		201,151 94
Investment expenditure under suspense appropriations.....		65,297 50
Investment expenditures by separately operated properties.....		921 00
Total expenditures during year.....		267,370 44
Transfers between Balance Sheet Accounts not applicable to year's expenditures.....		2,321,788 63
Balance at January 1, 1927.....	5,964,867 63	
Central Vermont Railway System.....	712,185 54	5,252,682 09
Balance at December 31, 1927, as per Balance Sheet.....		3,198,263 90

STATEMENT SHOWING DETAILS OF EQUIPMENT OWNED DECEMBER 31, 1926,
ADDITIONS, RETIREMENTS AND POSITION AT DECEMBER 31, 1927

	December 31, 1926 Ex. C.V.	Additions during Year	Retirements during Year	December 31, 1927
<i>Locomotives—</i>				
Passenger—Freight.....	2,561	56	91	2,526
Switching.....	503	22	6	519
Electric locomotives.....	12	3		15
Total locomotives.....	3,076	81	97	3,060
<i>Freight Equipment—</i>				
Box cars.....	84,143	2,736	1,455	85,424
Flat cars.....	10,267	30	680	9,617
Stock cars.....	5,710	1	107	5,604
Coal cars.....	16,713	241	330	16,624
Tank cars.....	181		1	180
Refrigerator cars.....	3,079	200	26	3,253
Caboose cars.....	1,758	70	28	1,800
Other cars in freight service.....	1,722	102	330	1,494
Total freight equipment.....	123,573	3,380	2,957	123,996
<i>Passenger Equipment—</i>				
First Class cars.....	954	35	15	974
Second class cars.....	251	1	5	247
Combination cars.....	414	12	9	417
Immigrant cars.....	327	1	1	327
Dining cars.....	84	12		96
Parlor cars.....	133	5	1	137
Sleeping cars.....	251	55	4	302
Postal cars.....	83		6	77
Baggage and express cars.....	949	14	11	952
Unit cars.....	41	7	1	47
Other cars in passenger service.....	101	12		113
Total passenger equipment.....	3,588	154	53	3,689
<i>In Company's Service—</i>				
Business and pay cars.....	67			67
All other cars in Company's service.....	7,233	737	237	7,733
Total in Company's service.....	7,300	737	237	7,800
Total cars.....	134,461	4,271	3,247	135,485
<i>Floating Equipment—</i>				
Motor ship.....		1		1
Car ferries.....	9	1		10
Barges.....	5	1		6
Tugs.....	3	1	1	3
Work.....	4			4

COMPARATIVE STATEMENT OF OPERATING REVENUE PAID IN LABOUR AND THE AVERAGE NUMBER OF EMPLOYEES

	1927		1926		Increase or Decrease	Per cent Increase or Decrease
	\$	cts.	\$	cts.		
Gross earnings.....	256,575,724	07	253,376,654	54	I. 3,199,069	53
Operating labour.....	128,248,553	84	123,863,197	21	I. 4,385,356	63
Ratio of labour to gross earnings.....		49.98		48.88	I.	1.10
*Comparison of payroll (including betterments).....	155,529,857	00	148,475,896	00	I. 7,053,961	00
*Average number of employees.....		100,485		100,123	I.	362

* Includes Eastern lines.

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF OPERATING RATIO AS BETWEEN LABOUR, FUEL AND OTHER EXPENSES

	1927	1926	I.	1927	1926
Labour.....	49.98	48.88	I.	1.10	2.25
Fuel.....	9.27	9.10	I.	0.11	1.21
Other expenses.....	24.40	23.11	I.	1.29	5.58
Total.....	83.59	81.09	I.	2.50	3.08

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF OPERATING RATIO OVER GENERAL ACCOUNTS

	1927	1926
Maintenance of way and structures.....	17.96	16.98
Maintenance of equipment.....	18.49	18.68
Traffic.....	2.78	2.54
Transportation—Rail.....	40.99	39.70
Miscellaneous operations.....	0.94	0.84
General.....	2.82	2.75
Transportation for investment—Credit.....	0.39	0.40
Total.....	83.59	81.09

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF DOLLAR SPENT AS BETWEEN LABOUR, FUEL AND OTHER EXPENSES

	1927	1926
	Cents	Cents
Labour.....	60	60
Fuel.....	11	11
Other expenses.....	29	29
Total.....	\$1 00	\$1 00

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF DOLLAR SPENT OVER GENERAL ACCOUNTS

	1927	1926
	Cents	Cents
Maintenance of way and structures.....	22	21
Maintenance of equipment.....	22	23
Traffic.....	3	3
Transportation—Rail.....	49	49
Miscellaneous.....	1	1
General.....	3	3
Transportation for investment—Cr.....	-	-
Total.....	\$1 00	\$1 00

LOANS FROM DOMINION OF CANADA

	Principal outstanding at Dec. 31, 1927		Interest accrued 1927		Interest accrued 1926	
	\$	cts.	\$	cts.	\$	cts.
<i>Canadian National Railway—</i>						
6% Loan—Vote 478, appropriation 4, 1920.....	25,000,000	00	1,500,000	00	1,500,000	00
6% loan—Vote 126, appropriation 2, 1921.....	55,293,435	18	3,317,606	10	3,317,606	10
6% loan—Vote 137, appropriation 2, 1922.....	23,288,747	14	1,397,324	82	1,397,324	82
5% loan—Vote 377, Appropriation Act, 1925.....	2,149,381	75	107,469	09	89,714	61
4% loan to G.T.P. Rly., Chap. 23, Acts of 1913..	15,000,000	00	600,000	00	600,000	00
Sundry items.....	80,000	00	33,706	99	23,125	30
<i>Grand Trunk Pacific—</i>						
6% loan—Chap. 4, Acts of 1915.....	6,000,000	00	360,000	00	360,000	00
6% loan—Appropriation Act. No. 2, Acts of 1916..	4,555,843	45	273,350	60	273,350	60
6% loan—Appropriation Act No. 4, Acts of 1917..	4,196,073	72	251,764	42	251,764	42
6% loan—Appropriation Acts of 1919.....	5,787,439	93	347,246	40	347,246	40
Advances to pay guaranteed interest (1916 to 1927)	24,357,907	47				
Advances during receivership 5% and 6% (1919 to 1927)	51,981,541	95	3,059,527	58	3,142,394	68
3% G.T.P. Rly. bonds held by the Dominion Government.....	33,048,000	00	991,440	00	991,440	00
<i>Canadian Northern Railway: (Note)—</i>						
3½% loan—Chap. 6, Acts of 1911.....	2,396,099	68	83,863	48	83,863	48
4% loan—Chap. 20, Acts of 1914.....	5,294,000	02	211,760	00	211,760	00
5% loan—Chap. 4, Acts of 1915.....	10,000,000	00	500,000	00	500,000	00
6% loan—Chap. 29, Acts of 1916.....	15,000,000	00	900,000	00	900,000	00
6% Loan—Chap. 24, Acts of 1917.....	25,000,000	00	1,500,000	00	1,500,000	00
6% loan—Act No. 1, Acts of 1918.....	25,000,000	00	1,500,000	00	1,500,000	00
6% loan—War Measure Act of 1918.....	1,887,821	16	113,269	26	113,269	26
6% equipment loans—Chap. 38, Acts of 1918.....	13,951,328	28	837,079	70	837,079	70
6% loan—Vote 108, Appropriation 4, Acts of 1919..	35,000,000	00	2,100,000	00	2,100,000	00
6% equipment loan—Vote 96, Acts of 1919.....	23,362,212	73	1,401,732	76	1,401,732	76
6% loan—Vote 127, Appropriation 4, 1920.....	48,611,077	00	2,916,664	62	2,916,664	62
6% equipment loan—Vote 115, Acts of 1920.....	15,503,426	34	930,205	58	930,205	58
6% equipment loans—Vote 113, Acts of 1921.....	1,725,723	30	103,543	40	103,543	40
6% loan—Vote 126, Appropriation 2, 1921.....	44,419,806	42	2,665,188	38	2,665,188	38
6% loan—Vote 136, Appropriation 1, 1922.....	42,800,000	00	2,568,000	00	2,568,000	00
6% equipment loans—Vote 115, 1922-1923.....	2,315,805	79	138,948	34	138,948	34
6% loan—Vote 139, Appropriation Act, 1923.....	12,655,019	57	759,301	17	759,301	17
5% loan—Vote 137, Appropriation Act, 1924.....	1,318,315	86	65,915	79	65,915	79
5% loan—Vote 377, Appropriation Act, 1925.....	9,496,718	21	474,835	91	396,390	41
5% loan—Vote 372, Appropriation Act, 1926.....	9,062,624	30	495,489	31	150,874	44
Less interest chargeable to Eastern Lines.....			314,584	93	286,073	26
	595,538,349	30	32,190,648	77	31,804,380	40

NOTE.—In respect of the advances under this heading the Government has security by guarantee, mortgage or otherwise, in accordance with the conditions under which said advances were made.

A/C 546—"INTEREST ON FUNDED DEBT"

A/C 755—"UNMATURED FUNDED DEBT"

Name of security	Issuing company	Date of maturity	Principal outstanding at Dec. 31, 1927	Interest accrued 1927	Interest accrued 1926
			\$ cts.	\$ cts.	\$ cts.
<i>Guaranteed by Dominion Government—</i>					
5% perpetual debenture stock	G. T. R.	Perpetual	20,782,491 67	1,039,124 58	1,039,124 58
5% G.W. perpetual debenture stock and bonds	G. T. R.	Perpetual	13,252,322 67	662,616 12	662,616 12
4% perpetual debenture stock	G. T. R.	Perpetual	119,839,014 83	4,793,560 56	4,793,560 56
4% Nor. Rly. perpetual debenture stock	G. T. R.	Perpetual	1,499,979 67	59,999 18	59,999 18
4% perpetual guaranteed stock	G. T. R.	Perpetual	60,833,333 33	2,433,333 33	2,433,333 33
7% sinking fund gold debenture bonds	G. T. R.	Oct. 1, 1940	24,743,000 00	1,732,010 00	1,732,010 00
6% sinking fund gold debenture bonds	G. T. R.	Sept. 1, 1936	25,000,000 00	1,500,000 00	1,500,000 00
3% 1st mortgage bonds (ex. Govt. holdings)	G. T. P.	Jan. 1, 1962	34,992,000 00	1,049,760 00	1,049,760 00
4% sterling bonds, due 1962	G. T. P.	Jan. 1, 1962	8,440,848 00	337,633 92	337,633 92
3% 1st mortgage debenture stock	Can. Nor.	July 10, 1953	9,359,996 72	280,799 86	280,799 86
3% 1st mortgage debenture stock	Can. Nor.	July 20, 1958	7,896,573 31	276,380 08	276,380 14
4% debenture stock and bonds	Can. Nor.	Sept. 1, 1934	17,060,333 33	682,413 34	682,413 34
7% sinking fund debenture bonds	Can. Nor.	Dec. 1, 1940	24,793,000 00	1,735,510 00	1,735,510 00
6% sinking fund debenture bonds	Can. Nor.	July 1, 1946	25,000,000 00	1,625,000 00	1,625,000 00
4% 10 year gold bonds	Can. Nor.	Feb. 15, 1935	17,000,000 00	765,000 00	765,000 00
3% 1st mortgage debenture stock	C. N. A.	May 4, 1960	3,149,998 66	110,249 94	110,249 94
3% 1st mortgage debenture stock	C. N. O.	May 19, 1961	34,229,996 87	1,198,049 84	1,198,049 84
5% Equipment trust—Series "G"	Can. Nat.	Serially 1/8-1938	16,500,000 00	850,000 00	925,000 00
5% 30 year bonds	Can. Nat.	Feb. 1, 1958	50,000,000 00	2,500,000 00	2,500,000 00
4% 3 year guaranteed gold notes	Can. Nat.	July 1, 1927		400,000 00	800,000 00
4% 30 year guaranteed gold bonds—1954	Can. Nat.	Sept. 15, 1954	26,000,000 00	1,170,000 00	1,170,000 000
4% 5 year gold bonds	Can. Nat.	Feb. 15, 1930	18,000,000 00	810,000 00	810,000 000
4% 30 year guaranteed gold bonds—1957	Can. Nat.	July 1, 1957	65,000,000 00	1,309,406 89	
2% 1927 guaranteed debenture stock	Can. Nat.	By tenders or drawings	33,808,441 33	684,346 62	348,792 53
<i>Guaranteed by Province of Ontario—</i>					
3% 1st mortgage debenture stock	C. N. O.	1936 and 1938	7,859,997 59	276,099 90	275,099 90
<i>Guaranteed by Province of Manitoba—</i>					
4% consolidated debenture bonds	Can. Nor.	June 30, 1930	10,785,993 31	431,439 73	431,943 73
4% Sifton branch bonds	Can. Nor.	Feb. 1, 1929	1,137,340 00	45,493 60	45,493 60
4% Gilbert Plains branch bonds	Can. Nor.	Nov. 1, 1930	2,433 33	97 32	97 32
4% Man. and South Eastern bonds	Can. Nor.	Feb. 1, 1929	510,513 34	20,420 53	20,420 53
4% Ontario division bonds	Can. Nor.	June 30, 1930	5,683,293 33	227,292 80	227,205 19
*4% Ontario division bonds	Can. Nor.	June 30, 1930	61,320 00	2,803 20	2,801 75
4% Winnipeg terminal bonds	Can. Nor.	July 1, 1939	3,000,000 00	120,000 00	120,000 00
4% 1st mortgage debenture stock	Can. Nor.	June 30, 1930	2,859,998 87	114,399 92	114,339 92
4% Province of Manitoba bonds	Can. Nor.	Oct. 1, 1930	349,000 00	13,960 00	13,960 00
<i>Guaranteed by Province of Saskatchewan—</i>					
4% 1st mortgage bonds	G. T. P. B. L.	Jan. 22, 1939	9,874,062 00	394,962 48	394,962 48
4% 1st mortgage debenture stock	Can. Nor.	Jan. 23, 1939	8,029,999 99	321,200 00	321,200 00
<i>Guaranteed by Province of Alberta—</i>					
4% 1st mortgage bonds—1942	G. T. P. B. L.	Feb. 15, 1942	1,153,764 00	46,150 56	46,150 56
4% 1st mortgage bonds—1939	G. T. P. B. L.	Feb. 25, 1939	2,430,000 00	97,200 00	97,200 00
4% 1st mortgage debenture stock	Can. Nor.	Feb. 25, 1939	5,586,665 64	223,466 62	223,466 62
4% 1st mortgage debenture stock and bonds—1943	C. N. W.	Oct. 22, 1943	2,799,997 73	125,999 90	125,999 90
4% 1st mortgage debenture stock and bonds—1942	C. N. W.	Feb. 16, 1942	6,424,000 00	289,080 00	289,080 00
<i>Guaranteed by Province of British Columbia—</i>					
4% 1st mortgage debenture stock	C. N. P.	April 2, 1950	16,412,001 13	656,480 07	65,480 07
4% terminal debenture stock	C. N. P.	April 2, 1950	8,614,000 00	387,630 00	387,630 00
Carried forward			750,755,710 15	31,798,370 89	30,628,420 91

*These securities are not guaranteed but may be exchanged for 4% Ontario Division bonds.

CANADIAN NATIONAL RAILWAYS

A/C 546—"INTEREST ON FUNDED DEBT"—Continued

A/C 755—"UNMATURED FUNDED DEBT"—Continued

Name of security	Issuing company	Date of maturity	Principal	Interest	Interest
			outstanding at Dec. 31, 1927	accrued 1927	accrued 1926
			\$ cts.	\$ cts.	\$ cts.
Brought forward.....			750,755,710 15	31,798,370 89	30,628,420 91
<i>Unguaranteed (by Provinces or Dominion)—</i>					
4% Canada Atlantic 1st mortgage bonds.....	G.T.R.....	Jan. 1, 1955..	16,000,092 00	640,003 68	640,003 68
7% Wellington, Grey and Bruce bonds.....	G.T.R.....	By drawings.	207,806 67	27,918 27	27,738 85
6% Northern Railway 3rd preferred bonds.....	G.T.R.....	Indetermin- able.....	70,566 66	4,234 00	4,234 00
5% equipment trust—Series "D".....	G.T.R.....	Aug. 1, 1927..	.....	4,166 67	16,666 66
6% equipment trust notes "U.S.R.A.".....	G.T.R.....	Ser. 15/1/1935	479,200 00	28,752 00	32,346 00
6½% equipment trust certificates "F".....	G.T.R.....	Feb. 1, 1936..	11,230,000 00	729,950 00	729,950 00
3¾% 1st mortgage bonds.....	N.E. Elev.	Serially 1/7/ 1941.....	140,000 00	5,437 50	5,812 50
4% 1st mortgage bonds.....	Port. Elev.	Serially 1/1/ 1937.....	50,000 00	2,000 00	2,200 00
4% 1st mortgage bonds.....	Pem. South- ern.....	Sept. 1, 1956..	150,000 00	6,000 00	6,000 00
4% 2nd mortgage Prairie "A".....	G.T.P.....	April 1, 1955..	10,206,000 00	408,240 00	408,240 00
4% 2nd mortgage Mountain "B".....	G.T.P.....	April 1, 1955..	9,993,000 00	398,520 00	398,520 00
4% 1st mortgage Lake Superior.....	G.T.P.....	April 1, 1955..	7,533,000 00	301,320 00	301,320 00
4% perpetual con. debenture stock.....	Can. Nor.....	Perpetual.....	44,943,019 40	1,797,720 74	1,797,720 74
4½% Prince Albert branch bonds.....	Can. Nor.....	June 30, 1930..	300,000 00	13,500 00	13,500 00
6% equipment trust—Series "A".....	Can. Nor.....	Serially 1/7/ 1928.....	400,000 00	36,000 00	61,500 00
6% equipment trust—Series "B".....	Can. Nor.....	Serially 1/1/ 1929.....	1,125,000 00	78,750 00	123,750 00
6% equipment trust—Series "C".....	Can. Nor.....	Serially 1/5/ 1929.....	1,125,000 00	93,700 00	138,750 00
6% equipment trust—Series "D".....	Can. Nor.....	Serially 1/12/ 1929.....	1,500,000 00	120,000 00	165,000 00
7% equipment trust—Series "E".....	Can. Nor.....	May 1, 1935..	14,000,000 00	980,000 00	980,000 00
4% Perpetual con. debenture stock.....	C.N.O.....	Perpetual.....	8,724,113 20	348,964 50	348,964 50
5% 1st mortgage bonds.....	C.O.R.....	Jan. 1, 1934..	769,906 66	38,490 33	38,908 99
5% 1st mortgage bonds.....	Bay of Quinte	Jan. 2, 1927..	.....	.....	36,500 00
4% perpetual con. debenture stock.....	C.N.Q.....	Perpetual.....	5,250,369 26	210,014 76	210,014 76
4% 1st mortgage gold bonds.....	G.N. of C.....	Oct. 1, 1934..	3,510,250 00	140,410 00	140,410 00
4% 1st mortgage perpetual debenture stock.....	Q. & L St. J.	Perpetual.....	4,252,503 06	170,100 14	170,100 14
3½% 1st mortgage bonds.....	H. & S.W.....	Sept. 30, 1942.	4,447,000 00	*77,822 50	77,822 50
4% 1st mortgage debenture stock.....	Q.L.L. & S.R.R.....	July 1, 1936..	5,020,546 77	200,819 30	200,784 16
5% 1st mortgage rent charge bonds.....	M. R. Tnl. & Tml.....	April 15, 1970.	1,595,293 34	81,340 88	85,960 55
5% 1st mortgage bonds.....	C.N.C. & O. Dock.....	Jan. 1, 1936..	1,375,000 00	68,750 00	68,750 00
4% 1st mortgage debenture stock.....	D.W. & P.....	June 1, 1939..	7,004,997 27	280,199 89	280,199 89
4% 1st mortgage bonds.....	G.T.W.....	July 1, 1950..	10,984,416 00	438,576 64	438,576 64
6% equipment trust notes "U.S.R.A.".....	G.T.W.....	Serially 15/1/ 1935.....	1,652,000 00	99,636 25	112,026 25
5% 1st mortgage bonds.....	G.T. Jct.....	Jan. 1, 1934..	938,960 00	46,948 00	46,948 00
4½% equipment trust—Series "H".....	Can. Nat.....	Serially 1/7/ 1939.....	7,500,000 00	351,562 50	379,687 50
4½% equipment trust—Series "J".....	Can. Nat.....	Serially 1/5/ 1942.....	15,000,000 00	420,000 00	.....
Interest on securities retired in 1926.....	Can. Nor.....				2,083 33
Fixed charges due public per income A/C 546.....				40,448,274 44	39,119,410 55
4% Montreal Warehousing Co. firsts.....		April 1, 1936..	111,000 00		Int. charged to A/C 512 or 545
5% Rail & River Coal Co. firsts.....		April 1, 1938..	1,446,000 00	do	do
5% Niagara, St. Catharines & Toronto Ry. Co. firsts.....		Nov. 1, 1929..	1,098,000 00	do	do
4½% Toronto Suburban debenture stock.....		July 15, 1961..	2,628,000 00	do	do
Canadian National Realities Ltd. outstanding mortgages.....		Various.....	381,140 00	do	do
4½% National Transcontinental Ry. Branch Lines gold bonds.....		Oct. 1, 1955..	3,396,000 00	Interest charged to A/C 701.	
5% Canadian Northern income charge debenture stock.....		May 6, 1930..	24,137,846 08	Interest not earned.	
Total debt held by public (including bonds held in sinking fund) as per balance sheet A/C 755.....			981,381,736 52		

*6 months' interest charged to Eastern Lines.

STATISTICS OF RAIL-LINE OPERATION
TRAIN AND LOCOMOTIVE MILEAGE

Class of Service	Locomotive mileage						Total locomotive mileage	
	Train mileage		Principal		Helper		Light	
	1927	1926	1927	1926	1927	1926	1927	1926
Freight.....	31,744,709	30,800,219	31,763,845	30,817,169	677,172	811,301	558,556	486,988
Passenger.....	22,389,609	21,502,914	22,389,621	21,502,922	113,052	119,492	390,998	407,526
Mixed.....	3,169,220	3,025,934	3,169,622	3,026,112	13,800	20,641	38,459	29,274
Special.....	36,527	37,448	36,533	37,448	2,218	2,689	1,089	1,029
Unit cars.....	984,107	986,860	.....	.....	.....	.....	.....	.....
Train switching—Freight.....	.....	.....	.....	.....	.....	.....	.....	.....
“ Passenger.....	.....	.....	.....	.....	.....	.....	.....	.....
Total transportation.....	58,324,172	56,353,375	.....	.....	.....	.....	.....	.....
Work.....	2,465,344	2,331,242	.....	.....	.....	.....	.....	.....
Grand total.....	60,789,516	58,684,617	.....	.....	.....	.....	79,793,407	77,694,838

Class of service	Freight Train Car Mileage						Total freight train car mileage	
	Loaded		Empty		Total loaded and empty		Caboose	
	1927	1926	1927	1926	1927	1926	1927	1926
Freight train.....	808,756,432	794,749,924	421,709,230	410,786,078	1,230,465,662	1,205,536,002	31,733,365	30,685,108
Mixed train.....	19,415,763	19,377,919	7,616,075	7,833,219	27,031,328	27,211,138	1,372,072	1,258,436
Special train.....	361,453	327,555	2,164	2,046	363,617	329,601	36,549	33,996
Other transportation.....	13,273,064	13,715,377	8,463,666	8,441,752	21,736,730	22,157,129	1,015,681	762,140
Total transportation.....	841,806,702	828,170,775	437,791,135	427,063,095	1,279,597,837	1,255,233,870	34,157,647	32,739,680
Work.....	9,207,847	7,927,284	7,962,471	6,728,690	17,170,318	14,655,974	1,604,003	1,520,542
Grand total.....	851,014,549	836,098,059	445,753,606	433,791,785	1,296,768,155	1,269,889,844	35,761,650	34,260,222

PASSENGER TRAIN CAR MILEAGE

Class of Service	Passenger		Sleeping, Parlor and Observation		Dining		Other		Total Passenger Train car mileage	
	1927	1926	1927	1926	1927	1926	1927	1926	1927	1926
	Freight train.....	3,542,713	4,321,203	125,655	128,378	25,654	16,071	3,711,701	3,114,744	7,405,723	7,580,396
Passenger train.....	54,902,392	52,159,009	41,912,705	39,171,530	6,734,447	5,888,206	50,931,322	49,120,04	154,481,366	146,338,790
Mixed train.....	4,580,216	4,304,122	23,438	37,981	1,632	2,304	1,705,481	1,653,760	6,310,787	5,998,167
Special train.....	123,979	111,037	22,208	27,116	1,180	3,048	19,750	45,728	167,112	186,929
Unit cars and trailers.....	1,427,991	1,219,433	.....	.....	.....	.....	.....	.....	1,427,991	1,219,433
All transportation services..	64,577,291	62,114,804	42,084,021	39,365,005	6,762,913	5,903,629	56,368,754	53,934,277	169,792,979	161,323,715
Work service.....	66,204	53,558	20,430	48,854	2,332	9,474	81,953	66,803	170,919	178,689
Grand total.....	64,643,495	62,168,362	42,104,451	39,413,859	6,765,245	5,919,103	56,450,707	54,001,050	169,963,898	161,502,404

STATISTICS OF RAIL-LINE OPERATION

Item No.	Year 1927	Year 1926	Item No.	Year 1927	Year 1926
1. Average mileage of road operated.....	20,638 99	20,511 51	Averages per train mile—		
<i>Freight service—</i>			131 Loaded freight car miles—Freight trains...	25.89	26.25
91 Tons—Revenue freight.....	60,531,058	59,240,518	132 Loaded freight car miles—Mixed trains...	6.13	6.40
92 Tons—Non-revenue freight.....	11,041,260	9,924,176	133 Empty freight car miles—Freight trains...	13.55	13.61
93 Tons—Total.....	71,572,318	69,164,694	134 Empty freight car miles—Mixed trains...	2.40	2.59
94 Ton miles—Revenue freight.....	18,587,960,341	18,430,934,016	135 Ton miles—Revenue freight.....	538.38	551.09
95 Ton miles—Non-revenue freight.....	2,328,254,535	2,060,822,644	136 Ton miles—All freight.....	606.19	612.98
96 Ton miles—Total.....	20,916,214,876	20,491,776,660	137 Passenger train car miles—passenger trains	6.99	6.90
<i>Passenger service—</i>			138 Passenger train car miles—Mixed trains...	1.99	1.98
97 Passengers carried—Revenue.....	18,843,962	19,892,898	139 Revenue Passenger miles.....	57.41	57.62
98 Passenger miles—Revenue.....	1,374,893,080	1,326,251,169	140 Freight revenue.....	\$5 64	\$5 76
<i>Revenues and expenses—</i>			141 Passenger service train revenue.....	\$2 32	\$2 36
101 Freight revenue.....	\$193,541,352 73	\$191,787,465 76	142 Operating revenue.....	\$4 40	\$4 50
102 Passenger revenue.....	36,080,438 49	35,570,671 22	143 Operating expenses.....	\$3 68	\$3 65
103 Passenger service train revenue.....	55,502,415 65	54,327,750 14	144 Net operating revenues.....	\$0 72	\$0 85
104 Operating revenues.....	236,575,724 07	233,376,654 54	Averages per locomotive mile—		
105 Operating expenses.....	214,461,747 62	205,472,649 88	151 Train miles—Freight trains.....	.96	.96
106 Net operating revenue.....	42,113,976 45	47,904,004 66	152 Car miles—Freight trains.....	38.94	39.21
<i>Averages per mile of road—</i>			153 Train miles—Passenger trains.....	.98	.98
111 Freight train miles.....	1,538	1,502	154 Car miles—Passenger trains.....	7.07	6.99
112 Passenger train miles.....	1,133	1,096	155 Train miles—Mixed trains.....	.98	.98
113 Mixed train miles.....	154	148	156 Car miles—Mixed trains.....	10.77	11.21
114 Special Train miles.....	2	2	157 Train miles—Special trains.....	.92	.91
115 Transportation service train miles.....	2,826	2,747	158 Car miles—Special trains.....	14.24	13.37
116 Work Train miles.....	119	114	Averages per loaded freight car mile—		
117 Locomotive miles—Transportation.....	3,723	3,643	161 Ton miles—Revenue freight.....	21.97	22.17
118 Freight service car miles.....	63,654	62,793	162 Ton miles—All freight.....	24.74	24.66
119 Passenger service car miles.....	8,227	7,865	163 Freight revenue.....	\$0.23001	\$0.23167
120 Freight revenue.....	9,435 74	9,350 24	Averages per car mile—Passenger—		
121 Passenger service train revenue.....	2,689 20	2,648 65	171 Passenger miles—Revenue.....	12.91	13.09
122 Operating revenue.....	12,431 60	12,352 90	172 Passenger revenue.....	\$0.33874	\$0.35100
123 Operating expenses.....	10,391 10	10,017 43	Miscellaneous averages—		
124 Net operating revenues.....	2,040 50	2,335 47	181 Miles hauled—Revenue freight.....	307.08	311.12
125 Ton miles—Revenue freight.....	895,735	894,674	182 Miles hauled—Non-revenue freight.....	210.87	207.66
126 Ton miles—All freight.....	1,008,543	995,145	183 Miles hauled—All freight.....	292.23	296.28
127 Passenger miles—Revenue.....	66,616	64,659	184 Miles carried—Revenue passengers.....	72.96	66.67
			185 Revenue per ton of freight.....	\$3.19738	\$3.23744
			186 Revenue per ton mile of freight.....	\$0.01041	\$0.01041
			187 Revenue per passenger.....	\$1.91470	\$1.78811
			188 Revenue per passenger mile.....	\$0.02624	\$0.02682
			189 Operating ratio.....	83.59%	81.09%

COMPARATIVE STATEMENT OF REVENUE TONNAGE BY COMMODITIES

	Year 1927	Year 1926	Increase Decrease
	Tons	Tons	Tons
<i>Products of Agriculture—</i>			
Wheat.....	6,071,381	6,211,845	140,464
Corn.....	573,999	495,236	78,763
Oats.....	686,210	883,894	197,684
Barley.....	547,356	529,990	17,366
Rye.....	291,904	95,458	196,446
Flax (seed).....	53,498	64,685	11,187
Other grain.....	52,724	84,464	31,740
Flour.....	1,023,439	1,113,634	90,195
Other mill products.....	974,234	958,458	15,776
Hay and straw.....	359,124	477,362	118,238
Cotton.....	55,970	54,600	1,370
Apples (fresh).....	96,455	113,110	16,655
Other fresh fruits.....	328,653	339,684	11,031
Potatoes.....	282,016	257,342	24,674
Other fresh vegetables.....	174,178	160,796	13,382
Other products of agriculture.....	537,209	544,048	6,839
Total.....	12,108,350	12,384,606	276,256
<i>Products of Animals—</i>			
Horses and mules.....	48,357	48,287	70
Cattle and calves.....	427,712	424,277	3,435
Sheep and goats.....	45,455	38,230	7,225
Hogs.....	222,405	212,462	9,943
Dressed meats (fresh).....	209,545	205,229	4,316
Dressed meats (cured or salted).....	67,065	79,202	12,137
Other packing house products.....	128,035	149,012	20,977
Poultry.....	19,932	22,461	2,529
Eggs.....	57,076	51,405	5,671
Butter and cheese.....	137,014	158,146	21,132
Wool.....	21,467	18,032	3,435
Hides and leather.....	89,130	84,455	4,675
Other products of animals.....	35,333	41,853	6,520
Total.....	1,508,526	1,533,051	24,525
<i>Products of Mines—</i>			
Anthracite coal.....	2,549,943	2,747,710	197,767
Bituminous coal.....	7,007,150	7,013,980	6,830
Lignite coal.....	1,972,679	1,881,334	91,345
Coke.....	635,703	782,045	146,342
Iron ores.....	494,558	566,581	72,023
Other ores and concentrates.....	368,555	335,054	33,501
Bullion and matte.....	32,606	54,608	22,022
Clay, gravel, sand and crushed stone.....	6,235,562	5,762,952	472,610
Slate, stone, granite (dimension or block).....	160,842	195,872	35,030
Crude petroleum.....	187,175	184,160	3,015
Asphaltum.....	166,334	102,136	64,198
Salt.....	424,359	420,663	3,696
Other products of mines.....	184,404	184,935	531
Total.....	20,419,870	20,232,030	187,840
<i>Products of Forests—</i>			
Logs, posts, poles and cordwood.....	2,337,239	2,151,616	185,623
Ties.....	96,079	119,697	23,618
Pulpwood.....	3,069,078	2,595,460	473,618
Sawed lumber, timber, box shooks, staves and headings.....	4,283,094	4,517,471	234,377
Other products of forests.....	219,412	208,463	10,949
Total.....	10,004,902	9,592,707	412,195
Carried forward.....	44,041,648	43,742,394	299,254

COMPARATIVE STATEMENT OF REVENUE TONNAGE BY COMMODITIES—*Concluded*

	Year 1927	Year 1926	Increase Decrease
	Tons	Tons	Tons
Brought forward.....	44,041,648	43,742,394	299,254
<i>Manufactures and Miscellaneous—</i>			
Refined petroleum and its products.....	1,632,487	1,477,506	154,981
Sugar, syrup, glucose and molasses.....	302,159	349,859	47,700
Iron, pig and bloom.....	325,527	296,032	29,435
Rails and fastenings.....	72,132	58,841	13,291
Bar and sheet iron, structural iron and iron pipe.....	813,424	814,067	643
Castings, machinery and boilers.....	550,491	419,779	130,712
Cement.....	1,007,083	1,010,657	3,574
Brick and artificial stone.....	528,418	496,952	31,466
Lime and plaster.....	348,631	343,040	5,591
Sewer pipe and drain tile.....	66,824	115,816	48,992
Agricultural implements and vehicles other than autos..	240,255	198,538	41,717
Automobiles and auto trucks.....	1,424,447	1,225,786	198,661
Household goods and second-hand furniture.....	45,560	44,564	996
Furniture (new).....	53,005	59,038	6,033
Liquor and beverages.....	131,865	116,575	15,290
Fertilizer.....	267,318	165,766	101,552
Paper, printed matter and books.....	1,147,927	1,091,758	56,169
Wood pulp.....	990,439	1,081,027	90,588
Fish (fresh, frozen, smoked or salted).....	70,733	71,965	1,232
Canned meats.....	2,654	838	1,816
Canned goods (all canned food products other than meat)	202,281	171,032	31,249
Other manufactures and miscellaneous.....	3,830,149	3,529,025	301,124
Merchandise.....	2,435,601	2,359,603	75,998
Total.....	16,489,410	15,498,124	991,286
Grand total.....	60,531,058	59,240,518	1,290,540

SCHEDULE OF COMPANIES COMPRISING THE CANADIAN NATIONAL RAILWAY SYSTEM

Name of issuing company	Capital stock		Held by system		Held by Government and others	
	\$	cts.	\$	cts.	\$	cts.
<i>Canadian National Railway Company</i>	180,424,327	70	†14,796,589	00	†165,627,738	70
Bay City Terminal Railway Company.....	15,000	00	15,000	00		
*Canada Atlantic Transit Company.....	219,000	00	219,000	00		
*Canada Atlantic Transit Company of U.S.....	250,000	00	250,000	00		
The Canadian Express Company.....	1,768,800	00	1,768,800	00		
The Champlain and St. Lawrence Railroad Company.....	50,000	00	50,000	00		
The Chicago, Detroit and Canada Grand Trunk Junction Railroad Company.....	1,095,000	00	1,095,000	00		
Chicago, New York and Boston Refrigerator Company.....	1,129,400	00	1,129,400	00		
Detroit, Grand Haven and Milwaukee Railway Company.....	1,500,000	00	1,500,000	00		
Grand Rapids Terminal Railroad Company.....	50,000	00	50,000	00		
The Grand Trunk Junction Railway Company.....	500,000	00	500,000	00		
Grand Trunk Western Railway Company.....	6,000,000	00	6,000,000	00		
International Bridge Company.....	1,500,000	00	1,500,000	00		
The Lachine, Jacques Cartier and Maisonneuve Railway Company.....	1,200	00	1,200	00		
The Michigan Air Line Railway.....	300,000	00	300,000	00		
*Montreal and Southern Counties Railway Company.....	500,000	00	310,500	00	189,500	00
The Maganetawan River Railway Company.....	30,000	00	30,000	00		
*The Montreal Warehousing Company.....	236,000	00	221,100	00	14,900	00
National Transcontinental Railway Branch Lines Company.....	500	00	500	00		
New England Elevator Company.....	400,000	00	400,000	00		
*The Oshawa Railway Company.....	40,000	00	40,000	00		
The Ottawa Terminals Railway Company.....	250,000	00	250,000	00		
The Pembroke Southern Railway Company.....	107,800	00	90,500	00	17,300	00
Portland Elevator Company.....	50,000	00	50,000	00		
*Rail and River Coal Company.....	2,000,000	00	2,000,000	00		
St. Clair Tunnel Company.....	700,000	00	700,000	00		
*The Terminal Warehousing Company, Limited.....	1,000,000	00	1,000,000	00		
*The Thousand Islands Railway Company.....	60,000	00	60,000	00		
Toledo, Saginaw and Muskegon Railway Company.....	1,600,000	00	1,600,000	00		
The Toronto Belt Line Railway Company.....	50,000	00	26,000	00	24,000	00
The United States and Canada Rail Road Company.....	219,400	00	218,925	00	475	00
Vermont and Province Line Railroad Company.....	200,000	00	200,000	00		
*Prince Charles, Limited.....	10,000	00	10,000	00		
Canadian National Land Settlement Association.....						
The Pontiac, Oxford and Northern Railroad Company.....	1,000,000	00	1,000,000	00		
The Detroit and Huron Railway Company.....	148,000	00	148,000	00		
The Chicago and Kalamazoo Terminal Railroad Company.....	100,000	00	100,000	00		
Grand Trunk-Milwaukee Car Ferry Company.....	200,000	00	200,000	00		
Whipple Car Company.....	1,400,000	00	1,400,000	00		
Total Canadian National Railway Group.....	205,104,427	70	39,230,514	00	165,873,913	70
<i>The Canadian Northern Railway Company</i>	101,000,600	00	1,000,000	00	100,000,600	00
The Bay of Quinté Railway Company.....	1,395,000	00	1,395,000	00		
The Bessemer and Barry's Bay Railway Company.....	125,000	00	125,000	00		
The Canadian Northern Alberta Railway Company.....	3,000,000	00	3,000,000	00		
The Canadian Northern Railway Express Company, Limited.....	1,000,000	00	1,000,000	00		
Canadian Northern Manitoba Railway Company.....	250,000	00	250,000	00		
The Canadian Northern Ontario Railway Company.....	10,000,000	00	10,000,000	00		
Canadian Northern Pacific Railway Company.....	25,000,000	00	25,000,000	00		
**The Canadian Northern Quebec Railway Company.....	9,550,000	00	5,700,800	00	3,849,200	00
*Canadian National Realities, Limited.....	40,000	00	40,000	00		
Canadian Northern Steamships, Limited.....	2,000,000	00	2,000,000	00		
The Canadian Northern Coal and Ore Dock Company, Limited.....	500,000	00	500,000	00		
Canadian Northern Rolling Stock, Limited.....	50,000	00	50,000	00		
Canadian National Rolling Stock Limited.....	50,000	00	50,000	00		
Carried forward.....	153,960,600	00	50,110,800	00	103,849,800	00

SCHEDULE OF COMPANIES COMPRISING THE CANADIAN NATIONAL RAILWAY
SYSTEM—Continued

Name of issuing company	Capital stock		Held by system		Held by Government and others	
	\$	cts.	\$	cts.	\$	cts.
Brought forward.....	153,960,600	00	50,110,800	00	103,849,800	00
*Canadian National Electric Railways.....	1,750,000	00	1,750,000	00		
Canadian National Express Company.....	1,000,000	00	1,000,000	00		
Canadian Northern System Terminals Limited.....	2,000,000	00	2,000,000	00		
*Canadian National Telegraph Company.....	500,000	00	500,000	00		
*Canadian National Transfer Company.....	500,000	00	500,000	00		
Canadian Northern Western Railway Company.....	2,000,000	00	2,000,000	00		
The Central Ontario Railway.....	3,331,000	00	3,329,000	00	2,000	00
Continental Realty & Holding Company Limited..	90,000	00	90,000	00		
The Dalhousie Navigation Company, Limited.....	50,000	00	50,000	00		
Duluth, Winnipeg and Pacific Railroad Company..	100,000	00	100,000	00		
Duluth, Winnipeg and Pacific Railway Company...	6,000,000	00	6,000,000	00		
*Duluth and Virginia Realty Company.....	45,000	00	45,000	00		
Duluth, Rainy Lake & Winnipeg Railway Company	2,000,000	00	2,000,000	00		
*The Great North Western Telegraph Company of Canada.....	373,625	00	34,850	00	7,275	00
The Great North Western Telegraph Company of Canada (held in escrow).....			331,500	00		
The Halifax and South Western Railway Company..	1,000,000	00	1,000,000	00		
The Irondale, Bancroft and Ottawa Railway Com- pany.....	53,500	00	53,000	00	500	00
The James Bay and Eastern Railway Company...	1,250,000	00	1,250,000	00		
The Lake Superior Terminals Company Limited...	500,000	00	500,000	00		
Market Gardens Limited.....	15,000	00	15,000	00		
The Marmora Railway and Mining Company.....	128,600	00	128,600	00		
The Minnesota and Manitoba Railroad Company...	400,000	00	400,000	00		
The Minnesota and Ontario Bridge Company.....	100,000	00	100,000	00		
Mount Royal Tunnel and Terminal Company, Limited.....	5,000,000	00	5,000,000	00		
*The Niagara, St. Catharines and Toronto Railway Company.....	925,000	00	924,900	00	100	00
*The Niagara, St. Catharines and Toronto Navigatio Company (Limited).....	100,000	00	100,000	00		
The Quebec and Lake St. John Railway Company..	4,508,300	00	4,019,140	00	489,160	00
The Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company.....	201,000	00	201,000	00		
St. Boniface Western Land Company.....	250,000	00	250,000	00		
The St. Charles and Huron River Railway Com- pany.....	10,000	00	10,000	00		
The Toronto, Niagara and Western Railway Com- pany.....	125,000	00	125,000	00		
The Winnipeg Land Company Limited.....	100,000	00	100,000	00		
The Canadian Northern Railway Group.....	188,366,625	00	84,017,790	00	104,348,835	00
<i>The Grand Trunk Pacific Railway Company.....</i>	24,942,000	00	24,942,000	00		
The Grand Trunk Pacific Branch Lines Company..	1,002,000	00	1,002,000	00		
The Grand Trunk Pacific Saskatchewan Railway Company.....	200,000	00	200,000	00		
*The Grand Trunk Pacific Development Company, Limited.....	3,000,000	00	3,000,000	00		
*Canadian National Steamship Company, Limited..	15,000	00	15,000	00		
*Grand Trunk Pacific Alaska Steamship Company..	50,000	00	50,000	00		
*Grand Trunk Pacific Terminal Elevator Company, (Limited).....	501,000	00	501,000	00		
*The Grand Trunk Pacific Telegraph Company.....	100,000	00	100,000	00		
*Grand Trunk Pacific Dock Company, of Seattle....	150,000	00	150,000	00		
Total Grand Trunk Pacific Railway Group.....	29,960,000	00	29,960,000	00		

SCHEDULE OF COMPANIES COMPRISING THE CANADIAN NATIONAL RAILWAY
STSYEM—Concluded

Name of issuing company	Capital stock		Held by system		Held by Government and others	
	\$	cts.	\$	cts.	\$	cts.
SUMMARY						
Canadian National Railway Group.....	205,104,427	70	39,230,514	00	165,873,913	70
Canadian Northern Railway Group.....	188,366,625	00	84,017,790	00	104,348,835	00
Grand Trunk Pacific Railway Group.....	29,960,000	00	29,960,000	00		
	423,431,052	70	153,208,304	00	270,222,748	70†
*Canadian National Railways (France).....	fr. 30,000,000	00	fr. 30,000,000	00		

The accounts of companies indicated () are taken up in the System Income Account as "Separately Operated Properties."

**\$5,144,600 C.N.Q. stock is held by the Northern Consolidated Holding Company. The Canadian Northern Railway owns 44,467 shares in that company out of a total issue of 61,815. For the purpose of this statement the holding company is ignored and the proportion of the C.N.Q. stock thus owned by the Canadian Northern Railway is shown as held by the latter company.

†One certificate for \$180,424,327.70 of the company's capital stock is issued in the name of His Majesty as representing \$165,627,738.70 of Grand Trunk stock previously held by the public and \$14,796,589 previously held in that company's treasury.

‡\$265,628,338.70 of this amount is owned by the Dominion of Canada.

A/C 706—INVESTMENTS IN AFFILIATED COMPANIES

Company	Amount outstanding		Amount owned by Can. Nat. System		Book value		
	\$	cts.	\$	cts.	\$	cts.	
"A"—Stocks—							
Atlantic and St. Lawrence Rail Road company...	5,484,000	00		224	33		
The Belt Railway Company of Chicago.....	3,120,000	00		240,000	00		
Central Vermont Railway Company.....	3,000,000	00		2,191,100	00		
Chicago and Western Indiana Railroad Company.	5,000,000	00		1,000,000	00		
The Detroit and Toledo Shore Line Railroad Company.....	1,428,000	00		714,000	00		
The Ontario Car Ferry Company (Limited).....	500,000	00		250,000	00		
The Ontario Terminals Railway Company.....	50,000	00		25,000	00		
The Toledo Terminal Railroad Company.....	4,000,000	00		387,200	00		
Detroit Terminal Railroad Company.....	2,000,000	00		1,000,000	00		
Canadian Government Merchant Marine, Limited	460,900	00		900	00		
	25,042,900	00		5,808,424	33	1,516,785	91
"B"—Bonds—							
Atlantic and St. Lawrence Rail Road Company..	3,000,000	00		3,000,000	00		
Central Vermont Railway Company 5 p.c. Gold Bonds.....	12,838,300	00		4,229,300	00		
Chicago & Western Indiana Railroad Consolidated Bonds.....	49,298,666	67		2,187,000	00		
The Detroit and Toledo Shore Line R.R. Co. First Mortgage Bonds.....	3,000,000	00		587,000	00		
The Muskegon Railway & Navigation Co. First Mortgage Gold Bonds.....	571,200	00		55,300	00		
The Toledo Terminal Railroad Company.....	5,241,000	00		137,000	00		
The Toronto Terminals Railway Co. 5 p.c. First Mortgage Bonds.....	12,582,100	00		6,291,100	00		
	86,531,266	67		16,486,700	00	16,456,591	80
"C"—Notes—							
Central Vermont Railway Company.....						8,041,905	52
"D"—Advances—							
Canadian Government Merchant Marine, Limited						565,760	57
Central Vermont Railway Company.....						12,850,343	15
Chicago and Western Indiana Railroad Company.						638,114	66
The Muskegon Railway and Navigation Company						44,084	78
						14,098,303	16
Total Balance Sheet Account No. 706.....						40,113,586	39

OPERATED MILEAGE, DECEMBER 31, 1927—Continued
(SYSTEM LINES (EXCLUDING "EASTERN LINES" AND CENTRAL VERMONT RY.)

Territory	Mileage owned by Constituent Companies				Mileage of Lines under Lease or Contract		Mileage of Trackage Rights		Total Road Mileage				Spurs, Sidings and Yard Tracks	Inactive Mileage		
	1st Main Track	2nd Main Track	3rd Main Track	4th Main Track	1st Main Track	2nd Main Track	1st Main Track	2nd Main Track	1st Main Track	2nd Main Track	3rd Main Track	4th Main Track		1st Main Track	2nd Main Track	Miles
Brought Forward.																
GRAND TRUNK WESTERN LINES— <i>Concluded</i>																
Pontiac, Oxford & Northern Railroad	99.89														34.49	
Detroit & Huron Railway	18.58														3.93	
Chicago, Detroit & Canada Gr. Trunk Junction Railroad.					59.55	11.19									100.83	
Michigan Air Line Railway	105.92														21.12	
Cincinnati, Seginaw & Mackinaw Railroad					50.56		1.57								48.15	
Bay City Terminal Railway	1.17														2.53	
Grand Trunk Milwaukee Car Ferry (85.9 miles)															5.80	
Total Grand Trunk Western Lines	841.81	338.33	10.56		121.12	11.19	27.78	4.85	990.71	354.37	10.56		741.65			
WESTERN REGION																
Manitoba District—Lakehead Division	16.68	10.11					2.08	1.97		12.08			162.79			
Port Arthur Division	952.33	30.29			43.88				996.21	30.29			243.82	26.71		2.10
D. W. and P. Division	169.00						7.98		176.38				53.77			

Winnipeg Terminal Division.....	30.15	12.24	12.72	4.75	.....	42.87	16.99	.....	168.30
Portage Division.....	898.56	242.10	242.10	.....	1,140.66	.....	.....	.....	198.45
Brandon Division.....	554.49	94.04	94.04	.....	648.53	.....	.....	.....	88.05
Dauphin Division.....	600.23	.....	.....	.....	690.23	.....	.....	.....	113.03
<i>Saskatchewan District</i>										
Prince Albert Division.....	760.56	.....	.....	.....	760.56	.....	.....	.....	89.50
Melville Division.....	770.58	.....	.....	.....	770.58	.....	.....	.....	166.15
Regina Division.....	935.65	.....	.....	1.25	936.90	.....	.....	.....	164.50
Saskatoon Division.....	778.82	.....	.....	.....	778.82	.....	.....	.....	181.07
<i>Alberta District—</i>										
Calgary Division.....	860.34	19.91	.....	.....	864.64	19.91	.....	3.80	.....
Edmonton Division.....	985.08	4.27	.....	.....	985.08	4.27	.....	.....	225.57
Edson Division.....	422.01	.....	34.83	0.38	457.22	.....	.....	30.15	0.73
<i>British Columbia District—</i>										
Smithers Division.....	676.73	.....	.....	.....	676.73	.....	.....	.....	129.65
Kamloops Division.....	624.12	.....	.....	39.02	663.14	17.96	.....	11.65	0.15
Vancouver Island Division.....	167.50	.....	.....	.....	107.50	.....	.....	26.70	.....
Total Western Region.....	10,232.83	76.82	427.57	4.75	10,714.81	101.50	.....	72.31	4.90

SUMMARY

Central Region (line west of Lewis and Diamond Jct.).....	6,919.61	732.47	7.42	443.29	17.18	22.57	8.21	7,385.47	757.86	12.49	7.42	2,706.23	57.35	0.60	5.21	
Grand Trunk Western lines.....	841.81	338.33	10.56	121.12	11.19	27.78	4.85	990.71	354.37	10.56	.....	741.65	.....	.....	.....
Western Region.....	10,232.83	76.82	.....	427.57	4.75	54.41	19.93	10,714.81	101.50	.....	.....	2,482.92	68.51	.....	4.90
Total mileage steam operated lines referred to as "System mileage".....	17,994.25	1,147.62	23.05	7.42	991.98	33.12	104.76	32.99	19,090.99	1,213.73	23.05	7.42	5,930.80	125.86	0.60	10.11

DEPARTMENT OF RAILWAYS AND CANALS

SUMMARY OF FIRST MAIN TRACK MILEAGE BY REGIONS AND DISTRICTS

SYSTEM LINES (EXCLUDING EASTERN LINES AND CENTRAL VERMONT RAILWAY)

	Miles
<i>Central Region—</i>	
Quebec District (lines west of Levis and Diamond Junction).....	1,910·37
Montreal District.....	1,277·55
Northern Ontario District.....	1,605·02
Southern Ontario District.....	2,592·53
<i>Grand Trunk Western Lines.....</i>	990·71
<i>Western Region—</i>	
Manitoba District.....	3,713·64
Saskatchewan District.....	3,246·86
Albert District.....	2,306·94
British Columbia District.....	1,447·37
Total first main track mileage steam operated lines referred to as "System mileage".....	19,090·99

MILEAGE OF LINES CONTROLLED BY CANADIAN NATIONAL RAILWAYS NOT INCLUDED IN OPERATING FIGURES

	Miles
<i>Steam operated Lines—</i>	
Thousand Islands Railway.....	4·60
ELECTRIC LINES:	
Canadian National Electric Railway (Toronto (Suburban District)).....	49·36
Niagara, St. Catharines and Toronto Railway.....	68·59
Montreal & Southern Counties Railway.....(a)	56·02
Oshawa Railway.....	11·92
	190·49

(a) Includes 0·88 mile Montreal & Southern Counties Railway running rights over Canadian National Railways (duplicate mileage).

STATEMENT OF THE REVENUES AND EXPENSES (AND CERTAIN STATISTICS) *RE* EASTERN LINES

As defined in the Maritime Freight Rates Act, 1927

FOR THE SIX MONTHS ENDING DECEMBER 31, 1927

The Maritime Freight Rates Act, 1927, is chapter 44 of the Statutes of Canada for 1927.

Section 6 of the Act is as follows:—

“For accounting purposes, but without affecting the management and operation of any of the Eastern Lines, the revenues and expenses of the Eastern Lines (including the reductions herein authorized which shall be borne by the Eastern Lines) shall be kept separately from all other accounts respecting the construction, operation and management of the Canadian National Railways. In the event of any deficit occurring in any railway fiscal year in respect of the Eastern Lines the amount of such deficit shall be included in a separate item in the estimates submitted to Parliament for or on behalf of the Canadian National Railways at the first session of Parliament following the close of such fiscal year.”

The Act became effective as of July 1, 1927. For that reason the comparative earnings shown in this statement cover the six months' periods in the years 1926 and 1927 from July 1 to December 31 in each year.

	1927	1926		
Revenue.....	\$12,128,570 21	\$12,811,171 00	Dec.	\$682,600 79
Expenses.....	14,713,852 43	14,231,983 11	Inc.	481,869 32
Net earnings.....	<u>\$2,585,282 22</u>	<u>\$1,420,812 11</u>		\$1,164,470 11
Operating ratio.....	121·32%	111·09%		

The above figures include actual receipts only.

But for the “20 per cent” reduction in freight rates the above 1927 revenue figure would have been increased by approximately \$931,809.89, with the result that the deficit in net earnings would have been reduced by this amount to \$1,653,472.33, so that for the six months' period the 1927 deficit would have exceeded the 1926 deficit by \$232,660.22 only.

In the following pages are shown the Income Statement and Profit and Loss Account; also particulars of operating revenues and expenses; also of certain statistics and of the lines of railway forming the Eastern Lines.

INCOME STATEMENT

	Six months ending Dec. 31, 1927	Six months ending Dec. 31, 1926
	\$ cts.	\$ cts.
501 Railway operating revenues.....	12,128,570 21	12,811,171 00
531 Railway operating expenses.....	14,713,852 43	14,231,983 11
<i>Net deficit from railway operations.....</i>	<i>2,585,282 22</i>	<i>1,420,812 11</i>
532 Railway tax accruals.....	129,302 88	495,066 31
533 Uncollectible railway revenues.....	581 12	2,814 81
<i>Railway operating deficit.....</i>	<i>2,715,166 22</i>	<i>1,918,693 23</i>
502 Revenues from miscellaneous operations.....	12,879 58	6,731 61
534 Expenses of miscellaneous operations.....	11,439 59	9,460 14
535 Taxes on miscellaneous operating property.....	393 00	500 00
<i>Miscellaneous operating income.....</i>	<i>1,832 99</i>	<i>3,228 63</i>
<i>Total operating deficit.....</i>	<i>2,713,333 23</i>	<i>1,921,921 76</i>
504 Rent from locomotives.....	49,119 75	59,686 74
507 Rent from work equipment.....	31,437 50	27,503 94
508 Joint facility rent income.....	23,756 08	24,754 74
509 Income from lease of road.....	11,650 00	11,650 00
510 Miscellaneous rent income.....	32,361 13	38,908 16
511 Miscellaneous non-operating physical property.....	6,593 19	479 94
515 Income from unfunded securities and accounts.....	20,482 43	22,462 88
519 Miscellaneous income.....	24 66	66 28
<i>Total non-operating income.....</i>	<i>175,424 74</i>	<i>185,380 12</i>
<i>Gross income (deficit).....</i>	<i>2,537,908 49</i>	<i>1,736,541 64</i>
536 Hire of freight cars—Debit balance.....	4,006 54	19,228 30
538 Rent for passenger train cars.....	139,959 71	138,127 38
541 Joint facility rents.....	36,111 64	36,522 81
542 Rent for leased roads.....	61,429 92	62,055 41
543 Miscellaneous rents.....	1,677 07	645 84
544 Miscellaneous tax accruals.....	4,732 84	11,209 20
546 Interest on funded debt.....	77,822 50	77,822 50
546A Interest on Dominion Government advances.....	314,584 93	236,073 26
547 Interest on unfunded debt.....	58,405 35	1,475 00
551 Miscellaneous income charges.....	28,055 51	84,002 59
<i>Total deductions from gross income.....</i>	<i>726,786 01</i>	<i>717,162 29</i>
<i>Net income (deficit).....</i>	<i>3,264,694 50</i>	<i>2,453,703 93</i>

PROFIT AND LOSS ACCOUNT, 1927

<i>Debits—</i>		
612 Debit balance transferred from income.....		\$3,264,694 50
619 Loss on retired road and equipment.....		203,876 60
		\$3,468,571 10
<i>Credits—</i>		
603 Profit on road and equipment sold.....		\$190 00
605 Unrefundable overcharges.....		849 12
607 Miscellaneous credits.....		9,998 60
Debit Balance—		
Recharged against Dominion of Canada A/C.....	\$ 407,787 07	
Payable in cash by Government.....	3,049,746 31	
		3,457,533 38
		\$3,468,571 10

We have examined the above Income and Profit and Loss Accounts of the Eastern Lines for the six months ended the 31st December, 1927, and we certify that in our opinion these accounts fairly state the results of the working of such lines, as authorized by the Maritime Freight Rates Act, 1927.

GEORGE A. TOUCHE & Co.,
Chartered Accountants, Auditors.

March 31, 1928.

RAILWAY OPERATING REVENUES AND EXPENSES

	Six months ending Dec. 31, 1927	Six months ending Dec. 31, 1926
	\$ cts.	\$ cts.
<i>Railway Operating Revenues—</i>		
101 Freight.....	7,633,572 57	8,216,083 00
102 Passenger.....	2,495,471 85	2,528,440 00
103 Excess baggage.....	18,001 86	18,716 29
104 Sleeping car.....	237,956 63	218,257 76
105 Parlor and chair car.....	18,187 05	21,725 11
106 Mail.....	406,420 49	403,944 28
107 Express.....	875,610 16	999,797 54
108 Other passenger train.....	6,341 09	2,747 39
109 Milk.....	18,356 00	18,649 73
110 Switching.....	63,138 49	60,423 61
111 Special service train.....	6,444 33	8,131 86
114 Water transfers—Passenger.....	7,101 41	
115 Water transfers—Vehicles and live stock.....	20,513 68	15,896 58
116 Water transfers—Other.....	1 35	
131 Dining and buffet.....	137,923 82	131,021 25
132 Restaurant.....	2,876 63	2,859 42
133 Station, train and boat privileges.....	14,887 32	13,213 39
134 Parcel room.....		0 30
135 Storage—Freight.....	8,345 84	7,286 54
136 Storage—Baggage.....	1,704 24	1,747 90
137 Demurrage.....	28,989 11	15,243 09
139 Grain elevator.....	23,374 41	17,510 11
142 Rents of buildings, etc.....	32,865 42	34,998 96
143 Miscellaneous.....	70,486 46	74,477 49
Total operating revenues.....	12,128,570 21	12,811,171 00
<i>Railway Operating Expenses—</i>		
Maintenance of way and structures.....	3,794,940 64	3,800,025 39
Maintenance of equipment.....	2,445,504 78	2,473,951 91
Traffic.....	374,452 60	379,200 54
Transportation.....	7,227,285 71	6,799,526 39
Miscellaneous operations.....	219,327 07	191,460 56
General.....	673,183 62	611,317 65
Transportation for investment—Cr.....	20,841 99	23,499 33
Total operating expenses.....	14,713,852 43	14,231,983 11

RAILWAY OPERATING EXPENSES

	Six months ending Dec. 31, 1927		Six months ending Dec. 31, 1926	
	\$	cts.	\$	cts.
<i>Maintenance of Way and Structures—</i>				
201 Superintendence.....	259,063	43	264,150	19
202 Roadway maintenance.....	413,869	52	389,548	50
206 Tunnels and subways.....		729 53		1,025 95
208 Bridges, trestles and culverts.....	156,959	12	176,725	73
212 Ties.....	634,178	13	732,483	26
214 Rails.....	439,107	91	306,427	28
216 Other track material.....	145,939	20	130,684	95
218 Ballast.....	43,958	18	74,029	11
220 Track laying and surfacing.....	1,001,898	32	923,378	70
221 Right of way fences.....	45,808	81	26,327	49
223 Snow and sand fences and snow sheds.....	6,164	00	3,123	05
225 Crossings and signs.....	35,747	36	30,568	49
227 Station and office buildings.....	110,216	22	174,248	51
229 Roadway buildings.....	6,168	90	3,060	07
231 Water stations.....	24,021	02	43,526	14
233 Fuel stations.....	9,489	94	8,704	83
235 Shops and enginehouses.....	125,758	26	133,290	22
237 Grain elevators.....	2,806	64	2,348	12
241 Wharves and docks.....	50,167	70	71,705	14
243 Coal and ore wharves.....		148 76		1,692 74
245 Gas producing plants.....		83 19		226 14
247 Telegraph and telephone lines.....	37,336	58	54,492	57
249 Signals and interlockers.....	21,272	89	22,988	34
253 Power plant buildings.....				638 46
257 Power transmission systems.....	3,325	72	5,337	04
259 Power distribution systems.....	1,644	64	2,448	23
261 Power line poles and fixtures.....	1,524	12		648 80
269 Roadway machines.....	16,721	32	13,554	68
271 Small tools and supplies.....	34,340	24	39,830	72
272 Removing snow, ice and sand.....	69,318	63	75,313	98
273 Assessments for public improvements.....		121 64		
274 Injuries to persons.....	36,522	77	22,592	06
275 Insurance.....	37,134	71	37,639	17
276 Stationery and printing.....	7,355	24	7,442	94
277 Other expenses.....	4,474	75	2,939	34
278 Maintaining joint tracks, yards, etc., Dr.....	19,454	56	24,808	80
279 " " " " " " Cr.....	7,593	79	7,924	35
Total.....	3,794,940	64	3,800,025	39
<i>Maintenance of Equipment—</i>				
301 Superintendence.....	80,135	37	75,407	12
302 Shop machinery.....	61,907	43	57,272	83
304 Power plant machinery.....	3,173	58	3,989	94
306 Power substation apparatus.....				138 87
308 Steam locomotives—Repairs.....	909,173	27	850,354	74
310 " " " " " " Retirements.....	63,205	58	25,733	75
314 Freight train cars—Repairs.....	630,307	83	659,749	02
316 " " " " " " Retirements.....	69,337	58	60,400	18
317 Passenger train cars—Repairs.....	461,304	28	477,083	28
319 " " " " " " Retirements.....	6,811	22	29,475	64
320 Motor equipment of cars—Repairs.....	7,372	54	21,680	11
322 " " " " " " Retirements.....				2,384 23
323 Floating equipment—Repairs.....	28,869	43	51,357	06
326 Work equipment—Repairs.....	66,015	81	103,283	93
328 " " " " " " Retirements.....	6,964	96	4,552	98
329 Miscellaneous equipment—Repairs.....	715	80	833	22
331 " " " " " " Retirements.....	170	95	172	96
332 Injuries to persons.....	11,559	33	11,718	17
333 Insurance.....	36,838	62	36,838	62
334 Stationery and printing.....	2,526	91	2,944	88
335 Other expenses.....	1,603	04	1,683	27
336 Maintaining joint equipment at terminals, Dr.....	1,930	69	1,861	20
337 " " " " " " Cr.....	4,419	44	4,686	35
Total.....	2,445,504	78	2,473,951	91

DEPARTMENT OF RAILWAYS AND CANALS

RAILWAY OPERATING EXPENSES—*Concluded*

	Six months ending Dec. 31, 1927		Six months ending Dec. 31, 1926	
	\$	cts.	\$	cts.
<i>Miscellaneous operations—</i>				
441 Dining and buffet service.....	205,251	30	178,054	04
442 Restaurants.....	2,494	22	4,021	62
443 Grain elevators.....	10,698	65	9,311	32
446 Other miscellaneous operations.....	882	90	73	58
Total.....	219,327	07	191,460	56
<i>General Expenses—</i>				
451 Salaries and expenses of general officers.....	68,062	00	55,141	95
452 Salaries and expenses of clerks and attendants.....	250,456	03	235,108	36
453 General office supplies and expenses.....	25,997	09	24,673	98
454 Law expenses.....	33,161	23	35,900	51
455 Insurance.....	51	84	82	57
456 Relief Department expenses.....	6,000	00	6,000	00
457 Pensions.....	226,691	34	218,124	71
458 Stationery and printing.....	11,480	35	10,628	34
460 Other expenses.....	51,283	74	25,657	23
Total.....	673,183	62	611,317	65

COMPARATIVE STATEMENT OF OPERATING REVENUE PAID IN LABOUR AND
THE AVERAGE NUMBER OF EMPLOYEES—JULY 1 TO DECEMBER 31

	1927		1926		Increase or Decrease	Per cent Increase or Decrease	
	\$	cts.	\$	cts.	\$	cts.	
Gross earnings.....	12,128,570	21	12,811,171	00	D. 682,600	79	5.33
Operating labour.....	8,771,447	94	8,300,078	66	I. 471,369	28	5.68
Ratio of labour to gross earnings.....	72.32		64.79		I. 7.53		11.62

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF OPERATING RATIO
AS BETWEEN LABOUR, FUEL AND OTHER EXPENSES

Labour.....	72.32	64.79	I. 7.53	11.62
Fuel.....	13.36	12.06	I. 1.30	10.78
Other expenses.....	35.64	34.24	I. 1.40	4.09
Total.....	121.32	111.09	I. 10.23	9.21

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF OPERATING RATIO
OVER GENERAL ACCOUNTS

	1927	1926
Maintenance of way and structures.....	31.29	29.66
Maintenance of equipment.....	20.17	19.31
Traffic.....	3.09	2.96
Transportation—Rail.....	59.58	53.08
Miscellaneous operations.....	1.81	1.49
General.....	5.55	4.77
Transportation for investment—Cr.....	0.17	0.18
Total.....	121.32	111.09

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF DOLLAR SPENT AS
BETWEEN LABOUR, FUEL AND OTHER EXPENSES

	1927	1926
	Cents	Cents
Labour.....	60	58
Fuel.....	11	11
Other expenses.....	29	31
Total.....	\$1.00	\$1.00

COMPARATIVE STATEMENT SHOWING DISTRIBUTION OF DOLLAR SPENT OVER
GENERAL ACCOUNTS

	1927	1926
	Cents	Cents
Maintenance of way and structures.....	26	27
Maintenance of equipment.....	17	17
Traffic.....	02	03
Transportation—Rail.....	49	43
Miscellaneous.....	01	01
General.....	05	04
Transportation for investment—Cr.....		
Total.....	\$1.00	\$1.00

STATISTICS OF RAIL-LINE OPERATION—JULY 1 TO DECEMBER 31

TRAIN AND LOCOMOTIVE MILEAGE

Class of service	Train mileage		Locomotive mileage						Total locomotive mileage	
	1927	1926	Principal		Helper		Light		1927	1926
			1927	1926	1927	1926	1927	1926		
Freight.....	1,765,000	1,631,513	1,771,089	1,636,685	31,532	31,508	38,710	33,888	1,841,331	1,702,081
Passenger.....	1,737,329	1,603,699	1,737,329	1,603,699	7,780	7,215	42,272	35,149	1,787,381	1,646,063
Mixed.....	462,396	455,786	462,396	455,786	1,360	1,650	9,981	9,443	473,737	466,879
Special.....	2,660	1,108	2,660	1,108	1,061	144	152	23	3,873	1,275
Unit cars.....	127,243	125,337	.....	.....	.....	.....	.....	.....	.....	.....
Train switching—Freight.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
“ “ —Passenger.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total transportation.....	4,094,628	3,817,443	.....	.....	.....	.....	.....	.....	4,937,942	4,618,547
Work.....	153,461	159,807	.....	.....	.....	.....	.....	.....	184,981	190,359
Grand total.....	4,248,089	3,977,250	.....	.....	.....	.....	.....	.....	5,122,923	4,808,906

FREIGHT TRAIN CAR MILEAGE

Class of service	Loaded		Empty		Total loaded and empty		Caboose		Total freight train car mileage	
	1927	1926	1927	1926	1927	1926	1927	1926	1927	1926
Mixed train.....	1,997,450	1,990,804	753,919	695,169	2,751,369	2,685,973	11,688	7,715	2,763,057	2,693,688
Special train.....	2,583	13,846	3,583	3,166	3,166	13,846	2,545	993	5,711	14,839
Other transportation.....	80,779	140,845	60,729	95,772	141,808	236,317	56,833	47,692	198,341	284,009
Total transportation.....	41,056,642	39,083,069	13,707,255	12,533,455	54,763,897	51,566,524	1,556,956	1,393,522	56,320,853	52,960,046
Work.....	449,751	618,578	423,510	574,550	873,261	1,193,128	101,010	105,652	974,271	1,298,776
Grand total.....	41,506,393	39,651,647	14,130,765	13,108,005	55,637,158	52,759,652	1,657,966	1,499,174	57,295,124	54,258,826

PASSENGER TRAIN CAR MILEAGE

Class of service	Passenger		Sleeping, parlour and observation		Dining		Other		Total passenger train car mileage	
	1927	1926	1927	1926	1927	1926	1927	1926	1927	1926
Freight train.....	610,523	645,003	11,765	20,702	35	312	123,683	154,979	746,006	820,996
Passenger train.....	4,159,234	4,050,239	2,875,335	2,548,926	633,093	538,002	4,059,321	3,924,976	11,726,983	11,062,143
Mixed train.....	783,282	788,582	6,370	472	.....	.....	225,929	222,469	1,015,581	1,011,523
Special train.....	2,707	5,405	3,697	.....	.....	.....	17,448	.....	28,852	5,405
Unit cars and trailers.....	152,446	135,684	.....	.....	.....	.....	.....	.....	152,446	135,684
All transportation service.....	5,708,192	5,624,913	2,897,167	2,570,100	633,128	538,314	4,426,381	4,302,424	13,664,868	13,035,751
Work.....	3,001	3,730	356	.....	374	.....	2,261	3,332	5,992	7,062
Grand total.....	5,711,193	5,628,643	2,897,523	2,570,100	633,502	538,314	4,428,642	4,305,756	13,670,860	13,042,813

STATISTICS OF RAIL-LINE OPERATION—JULY 1 TO DECEMBER 31—Concluded

Item No.	Year 1927	Year 1926	Item No.	Year 1927	Year 1926
1. Average mileage of road operated.....	3, 108-00	3, 108-81	Averages per train mile—		
<i>Freight service—</i>			131 Loaded freight car miles—Freight trains...	22-13	22-70
91 Tons—Revenue freight.....	3, 060, 615	2, 854, 328	132 Loaded freight car miles—Mixed trains...	4-32	4-37
92 Tons—Non-revenue freight.....	622, 602	571, 963	133 Empty freight car miles—Freight trains...	7-34	7-26
93 Tons—Total.....	3, 683, 217	3, 426, 291	134 Empty freight car miles—Mixed trains...	1-63	1-53
94 Ton miles—Revenue freight.....	876, 890, 066	811, 620, 817	135 Ton miles—Revenue freight.....	415-64	412-22
95 Ton miles—Non-revenue freight.....	89, 021, 143	71, 007, 643	136 Ton miles—All freight.....	457-97	448-39
96 Ton miles—Total.....	965, 911, 209	882, 628, 460	137 Passenger train car miles—Passenger trains	6-77	6-95
<i>Passenger service—</i>			138 Passenger train car miles—Mixed trains...	2-20	2-22
97 Passengers carried—Revenue.....	1, 793, 864	1, 790, 134	139 Revenue passenger miles.....	54-40	60-05
98 Passenger miles—Revenue.....	108, 190, 727	111, 296, 583	140 Freight revenue.....	\$3 63	\$4 19
<i>Revenue and expenses—</i>			141 Passenger service train revenue.....	\$2 05	\$2 27
101 Freight revenue.....	\$7, 633, 572 57	\$8, 216, 083 00	142 Operating revenues.....	\$3 96	\$3 36
102 Passenger revenue.....	2, 495, 471 85	2, 528, 440 00	143 Operating expenses.....	\$3 59	\$3 73
103 Passenger service train revenue.....	4, 076, 345 13	4, 212, 278 10	144 Net operating revenues.....	\$0 63	\$0 37
104 Operating revenues.....	12, 128, 570 21	12, 811, 171 00	Averages per locomotive mile—		
105 Operating expenses.....	14, 713, 852 43	14, 231, 983 11	151 Train miles—Freight trains.....	0-96	0-96
106 Net operating revenue.....	2, 585, 282 22	1, 480, 812 11	152 Car miles—Freight trains.....	29-08	29-52
<i>Averages per mile of road—</i>			153 Train miles—Passenger trains.....	0-97	0-97
111 Freight train miles.....	568	525	154 Car miles.....	6-98	7-22
112 Passenger train miles.....	600	556	155 Train miles—Mixed trains.....	0-98	0-98
113 Mixed train miles.....	149	147	156 Car miles—Mixed trains.....	7-98	7-94
114 Special train miles.....	0	0	157 Train miles—Special trains.....	0-69	0-87
115 Transportation service train miles.....	1, 317	1, 228	158 Car miles—Special trains.....	7-63	15-88
116 Work train miles.....	49	51	Averages per loaded freight car mile—		
117 Locomotive miles—Transportation.....	1, 589	1, 486	161 Ton miles—Revenue freight.....	21-29	20-74
118 Freight service car miles.....	18, 121	17, 035	162 Ton miles—All freight.....	23-46	22-56
119 Passenger service car miles.....	4, 397	4, 193	163 Freight revenue.....	\$0-18594	\$0-21056
120 Freight revenue.....	\$2, 431 40	\$2, 642 84	Averages per car mile—Passenger—		
121 Passenger service train revenue.....	\$1, 311 57	\$1, 354 95	171 Passenger miles—Revenue.....	12-58	13-59
122 Operating revenues.....	\$3, 902 37	\$4, 120 92	172 Passenger revenue.....	\$0-29021	\$0-30874
123 Operating expenses.....	\$4, 734 19	\$4, 577 95	Miscellaneous averages—		
124 Net operating revenues.....	\$881 82	\$557 03	181 Miles hauled—Revenue freight.....	286-51	284-35
125 Ton miles—Revenue freight.....	281, 254	260, 268	182 Miles hauled—Non-revenue freight.....	142-98	124-15
126 Ton miles—All freight.....	309, 897	283, 109	183 Miles hauled—All freight.....	262-25	257-60
127 Passenger miles—Revenue.....	34, 810	35, 800	184 Miles carried—Revenue passengers.....	60-31	62-17
			185 Revenue per ton of freight.....	\$2-46905	\$2-87846
			186 Revenue per ton mile of freight.....	\$0-00871	\$0-01012
			187 Revenue per passenger.....	\$1-39112	\$1-41243
			188 Revenue per passenger mile.....	\$0-02307	\$0-02272
			189 Operating ratio.....	121-327%	111-097%

COMPARATIVE STATEMENT OF REVENUE TONNAGE BY COMMODITIES

	Year 1927	Year 1926	Increase Decrease
	Tons	Tons	Tons
<i>Products of Agriculture—</i>			
Wheat.....	109,247	86,788	22,459
Corn.....	8,929	10,370	1,441
Oats.....	25,137	29,231	4,094
Barley.....	14,980	9,551	5,429
Rye.....	34,987	6,456	28,531
Flax (seed).....	80	151	71
Other grain.....	785	1,002	217
Flour.....	121,706	106,374	15,332
Other mill products.....	50,551	73,872	23,321
Hay and straw.....	22,364	22,422	58
Cotton.....	633	772	139
Apples (fresh).....	12,453	13,449	996
Other fresh fruits.....	9,275	9,172	103
Potatoes.....	131,144	134,822	3,678
Other fresh vegetables.....	8,212	7,075	1,137
Other products of agriculture.....	15,817	15,378	439
Total.....	566,300	526,885	39,415
<i>Products of Animals—</i>			
Horses and mules.....	2,278	2,577	299
Cattle and calves.....	6,612	8,016	1,404
Sheep and goats.....	6,355	5,890	465
Hogs.....	2,948	2,454	494
Dressed meats (fresh).....	7,231	6,264	967
Dressed meats (cured or salted).....	1,704	3,538	1,834
Other packing house products.....	3,743	5,169	1,426
Poultry.....	508	564	56
Eggs.....	745	955	210
Butter and cheese.....	3,400	3,206	194
Wool.....	782	845	63
Hides and leather.....	1,102	983	119
Other products of animals.....	679	512	167
Total.....	38,087	40,973	2,886
<i>Products of mines—</i>			
Anthracite coal.....	13,093	12,219	874
Bituminous coal.....	536,586	565,995	29,409
Lignite coal.....			
Coke.....	18,027	21,009	2,982
Iron ores.....		89	89
Other ores and concentrates.....	205	371	166
Bullion and matte.....	2,636	4,258	1,622
Clay, gravel, sand and crushed stone.....	138,527	61,563	76,964
Slate, stone granite (dimension or block).....	2,728	4,074	1,346
Crude petroleum.....	81	600	519
Asphaltum.....	1,938	919	1,019
Salt.....	9,711	7,947	1,764
Other products of mines.....	7,079	7,382	303
Total.....	730,611	686,426	44,185
<i>Products of Forests—</i>			
Logs, posts, poles and cordwood.....	73,543	54,190	19,353
Ties.....	8,820	10,618	1,798
Pulpwood.....	203,096	220,239	17,143
Sawed lumber, timber, box shooks, staves and headings.....	705,947	622,887	83,060
Other products of forests.....	35,697	24,976	10,721
Total.....	1,027,103	932,910	94,193
Carried forward.....	2,362,101	2,187,194	174,907

COMPARATIVE STATEMENT OF REVENUE TONNAGE BY COMMODITIES—*Concluded*

	Year 1927	Year 1926	Increase Decrease
	Tons	Tons	Tons
Brought forward.....	2,362,101	2,187,194	174,907
<i>Manufactures and Miscellaneous—</i>			
Refined petroleum and its products.....	70,568	64,437	6,131
Sugar, Syrup, Glucose and molasses.....	25,528	40,566	15,038
Iron, pig and bloom.....	27,314	17,519	9,795
Rails and fastenings.....	3,669	6,160	2,491
Bar and sheet iron, structural iron and iron pipe.....	18,117	20,143	2,026
Castings, machinery and boilers.....	6,110	5,857	253
Cement.....	31,560	19,796	11,764
Brick and artificial stone.....	23,698	15,846	7,852
Lime and Plaster.....	30,067	34,473	4,406
Sewer pipe and drain tile.....	5,806	7,432	1,626
Agriculture implements and vehicles other than autos...	3,207	1,661	1,546
Automobiles and auto trucks.....	5,826	8,554	2,728
Household goods and second-hand furniture.....	1,781	2,032	251
Furniture (new).....	1,226	958	268
Liquor beverages.....	7,714	5,713	2,001
Fertilizer.....	6,326	3,692	2,634
Paper, printed matter and books.....	15,282	13,789	1,493
Wood pulp.....	75,070	79,779	4,709
Fish (fresh, frozen, smoked or salted).....	25,135	31,377	6,242
Canned meats.....	25	53	28
Canned goods (all canned food products other than meat)	10,926	9,798	1,128
Other manufactures and miscellaneous.....	130,474	114,830	15,644
Merchandise.....	173,085	162,669	10,416
Total.....	698,514	667,134	31,380
Grand total.....	3,060,615	2,854,328	206,287

OPERATED MILEAGE DECEMBER 31, 1927

Territory	Mileage Owned				Mileage of Lines under Lease or Contract				Mileage of Trackage Rights		Total Road Mileage				Spurs, Sidings and Yard Tracks			Inactive Mileage			
	1st Main Track	2nd Main Track	3rd Main Track	4th Main Track	1st Main Track	2nd Main Track	1st Main Track	2nd Main Track	1st Main Track	2nd Main Track	1st Main Track	2nd Main Track	3rd Main Track	4th Main Track	Miles	Miles	Miles	1st Main Track	2nd Main Track	Spurs, Sidings and Yard Tracks	
	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	Miles	
Halifax Division.....	512.00	21.09																			
New Glasgow Division.....	354.56	1.93			66.32																
Island Division.....	276.32																				
Moncton Division.....	390.08	25.96																			
Campbellton Division.....	475.08																				
Edmundston Division.....	563.77				158.46																
Levis Division (part).....	228.84									81.59											
Total mileage.....	2,800.65	48.98			224.78					82.61					3,108.04	48.98				818.27	1.30

NOTE.—The lines of the Levis Division included in the Eastern Lines are those east of Levis and Diamond Junction.

CANADIAN GOVERNMENT RAILWAYS

BALANCE SHEET AS AT DECEMBER 31, 1927

A/C	ASSETS		
701 Investment in road and equipment—			
Investment in road and equipment.....	\$	412,250,907 70	
Branch lines' purchases.....		70,000 00	
Capital suspense—Overseas rail.....		669,539 67	
"B" Abandoned Lines.....		597,855 39	
			412,349,223 42
702 Improvements on leased railway property—			
Lake Superior Branch.....	1,314,609 93		
Vale Railway.....	49,885 69		
Van Buren bridge.....	28,223 27		
			1,392,718 89
705 Miscellaneous physical property—			
Minaki Inn.....	979,242 53		
Malagash spur.....	29,290 75		
Halifax Ocean Terminal Hotel.....	17,094 77		
Sioux Lookout Tramway.....	942 63		
			1,026,570 68
722 Canadian National Railways—			
Advances A/C Working capital.....	17,030,369 97		
" " Surplus (guaranteed issues).....	2,870,606 69		
" " Telegraph Department, capital expenditures.....	154,233 81		
" " Capital expenditures (guaranteed issues).....	2,072,534 32		
" " N.B. & P.E.I. Bond Redemption Account.....	5,063 08		
			17,977,558 07
			432,746,071 06

LIABILITIES

755 Branch Lines' purchases.....			70,000 00
757 Dominion of Canada Account—			
Advances for road and equipment.....	\$	412,775,094 40	
" working capital.....	17,030,369 97		
" deficits.....	4,924,434 90		
" Workmen's Compensation payments.....	1,400,678 44		
" Pension payments.....	285,809 61		
			436,416,387 32
784 Profit and Loss Account.....			3,740,316 26
			\$ 432,746,071 06

Certified correct:
T. H. COOPER,
General Auditor.

C. E. FRIEND,
Asst. General Comptroller.
J. M. ROSEVEAR,
General Comptroller.

CANADIAN GOVERNMENT RAILWAYS

PROFIT AND LOSS ACCOUNT AS AT DECEMBER 31, 1927

DEBITS

611 Debit balance at January 1, 1927.....	\$	6,638,582 25
619 Loss on retired road and equipment.....		103,186 44
Total debits.....	\$	6,741,768 69

CREDITS

602 Credit balance transferred from income.....	\$	588,785 25
603 Profit on road and equipment sold.....		191 75
605 Unrefundable overcharges.....		2,983 50
606 Donations.....		14,329 08
607 Miscellaneous credits.....		11,268 18
C. G. Railways' proportion of amount contributed by Government under Maritime Freight Rates Act, July 1, 1927.....		2,383,894 67
Total credits.....	\$	3,001,452 43
Debit balance at December 31, 1927.....	\$	3,740,316 26

CANADIAN GOVERNMENT RAILWAYS, INCLUDING ST. JOHN AND
QUEBEC RAILWAY

INCOME STATEMENT YEAR ENDED DECEMBER 31, 1927

		Year ended Dec. 31, 1927
I. OPERATING INCOME		
501	Railway operating revenues.....	\$ 46,437,217 27
531	Railway operating expenses.....	44,630,826 02
	Net revenue from railway operations.....	<u>1,806,391 25</u>
532	Railway tax accruals.....	270,870 79
533	Uncollectible railway revenues.....	3,181 43
	Railway operating income.....	<u>1,532,339 03</u>
502	Revenues from miscellaneous operations.....	36,165 09
534	Expenses of miscellaneous operations.....	66,563 95
	Net revenue from miscellaneous operations.....	<u>30,398 86</u>
	Total operating income.....	<u>1,501,940 17</u>
II. NON-OPERATING INCOME		
503	Hire of freight cars—Credit balance.....	159,877 14
504	Rent from locomotives.....	277,863 96
505	Rent from passenger train cars.....	299,053 93
507	Rent from work equipment.....	153,462 76
508	Joint facility rent income.....	110,889 51
509	Income from lease of road.....	23,300 00
510	Miscellaneous rent income.....	169,341 22
511	Miscellaneous non-operating physical property.....	21,242 19
515	Income from unfunded securities and accounts.....	25,331 04
519	Miscellaneous income.....	1,388 47
	Total non-operating income.....	<u>\$ 1,241,750 22</u>
	Gross income.....	<u>\$ 2,743,690 39</u>
III. DEDUCTIONS FROM GROSS INCOME		
537	Rent for locomotives.....	75,453 18
538	Rent for passenger train cars.....	761,213 71
540	Rent for work equipment.....	41,016 90
541	Joint facility rents.....	489,849 66
542	Rent for leased roads.....	713,400 60
543	Miscellaneous rents.....	3,228 08
544	Miscellaneous tax accruals.....	14,513 30
547	Interest on unfunded debt.....	51,985 35
551	Miscellaneous income charges.....	4,244 36
	Total deductions from gross income.....	<u>2,154,905 14</u>
	Net income.....	<u>\$ 588,785 25</u>

CANADIAN GOVERNMENT RAILWAYS

CAPITAL ACCOUNT—YEAR ENDED DECEMBER 31, 1927

<i>Intercolonial Railway—</i>			
To cost to December 31, 1926.....	\$ 149,109,347 73		
Construction and betterments during year.....	1,655,661 75		
			\$ 150,765,009 48
<i>Prince Edward Island Railway—</i>			
To cost to December 31, 1926.....	13,639,309 60		
Construction and betterments during year.....	319,373 61		
Equipment retirements during year.....	16,516 84		
			13,942,166 87
<i>New Brunswick and Prince Edward Island—</i>			
To cost to December 31, 1926.....	915,174 41		
Construction and betterments during year.....	94,709 02		
			1,009,883 43
<i>International Railway—</i>			
To cost to December 31, 1926.....	3,140,078 82		
Construction and betterments during year.....	26,029 56		
			3,166,108 38
<i>National Transcontinental Railway—</i>			
To cost to December 31, 1926.....	172,414,516 13		
Construction and betterments during year.....	732,023 82		
Transfer of prior year's expenditure—Lake Superior Branch.....	689,713 87		
Transfer of prior year's expenditure—Van Buren Bridge.....	28,223 27		
			172,428,597 81
<i>Moncton and Buctouche Railway—</i>			
To cost to December 31, 1926.....	519,935 57		
Construction and betterments during year.....	17,571 45		
			537,507 02
<i>Salisbury and Albert Railway—</i>			
To cost to December 31, 1926.....	626,336 96		
Construction and betterments during year.....	7,500 38		
			633,837 34
<i>St. Martin's Railway—</i>			
To cost to December 31, 1926.....	367,083 66		
Construction and betterments during year.....	5,480 36		
			372,569 02
<i>Elgin and Havelock Railway—</i>			
To cost to December 31, 1926.....	182,605 72		
Construction and betterments during year.....	13,700 27		
			196,305 99
<i>York and Carleton Railway—</i>			
To cost to December 31, 1926.....	64,135 41		
Construction and betterments during year.....	52 00		
			64,083 41
<i>Quebec and Saguenay Railway—</i>			
To cost to December 31, 1926.....	7,822,310 13		
Construction and betterments during year.....	54,984 75		
			7,877,294 88
<i>Caraquet and Gulf Shore—</i>			
To cost to December 31, 1926.....	1,015,457 93		
Construction and betterments during year.....	55,576 09		
			1,071,034 02
<i>Lotbiniere and Megantic Railway—</i>			
To cost to December 31, 1926.....	353,836 16		
Construction and betterments during year.....	25,599 40		
			328,236 76
<i>Cape Breton Railway—</i>			
To cost to December 31, 1926.....	103,521 94		
Construction and betterments during year.....	10,675 84		
			114,197 78
<i>Vale Railway—</i>			
To additions and betterments to December 31, 1926.....	49,234 31		
To additions and betterments during year.....	651 38		
			49,885 69
<i>Quebec Bridge—</i>			
To cost of bridge to December 31, 1924.....			22,640,228 46
<i>Van Buren Bridge—</i>			
To additions and betterments to December 31, 1926.....	28,223 27		
To additions and betterments during year.....			28,223 27
<i>Long Lac Cut-off—</i>			
To cost to December 31, 1926.....	2,847,547 01		
Construction and betterments during year.....			2,847,547 01

CAPITAL ACCOUNT—YEAR ENDED DECEMBER 31, 1927—*Concluded*

<i>Lake Superior Branch—</i>			
To additions and betterments to December 31, 1926.....	594,331 08		
Transfer of prior year's expenditure.....	689,718 87		
To additions and betterments during year.....	30,559 98		
			1,314,609 93
<i>Lawlor Building, Toronto—</i>			
To cost to December 31, 1926.....	1,229,912 87		
Additional expenditure during year.....	13,921 72		
			1,243,834 59
<i>Canadian Government Railways—</i>			
Cost of equipment to December 31, 1926.....	34,261,609 60		
Expenditure during year.....	283,070 17		
Less: Equipment retired.....	1,005,494 22		
	33,539,185 55		
Add: Additions to S.S. "Northumberland" to December 31, 1927...	40,362 74		
			33,579,548 29
Capital Suspense—Branch line aid.....	36,485 95		
Branch lines purchased—Balance of purchase of Moncton and Buctouche Railway.....	70,000 00		
	106,485 95		
<i>Deduct—</i>			
Capital Suspense—Overseas Rail.....	\$ 569,539 67		
Moncton and Buctouche Railway....	5,713 40		
	575,253 07		
			468,767 12
<i>Minaki Inn—</i>			
To cost to December 31, 1926.....	517,016 11		
Additions and betterments during year.....	462,226 42		
			979,242 53
<i>Malagash Spur—</i>			
Expenditure during year.....			29,290 75
<i>Halifax Ocean Terminal Hotel—</i>			
Expenditure during year.....			17,094 77
<i>Sioux Lookout Tramways—</i>			
Expenditure during year.....			942 63
			<u>\$ 414,768,512 99</u>

ST. JOHN AND QUEBEC RAILWAY

EARNINGS, EXPENSES AND RENTAL ACCOUNT—YEAR ENDED DECEMBER 31,
1927

Railway operating revenues.....	\$ 270,292 10
Railway operating expenses.....	445,803 41
	<u>175,511 31</u>
Railway operating deficit.....	175,511 31
Other income items net debit.....	38,735 23
	<u>\$ 214,246 54</u>
Net deficit.....	\$ 214,246 54
In addition to the above, 40 p.c. of operating revenues has been paid as rental.....	108,116 84
Total loss.....	<u>322,363 38</u>

DEPARTMENT OF RAILWAYS AND CANALS
CANADIAN GOVERNMENT RAILWAYS

STATEMENT OF AVERAGES—YEAR ENDED DECEMBER 31, 1927

Miles of road operated.....	4,498.71
Total engine mileage.....	15,557,806
Total train mileage.....	12,631,998
Total car mileage.....	276,297,019
<i>Earnings—</i>	
Transportation—Rail (Accounts 101 to 112).....	\$ 45,366,731 77
Incidentals (Accounts 113 to 152).....	1,070,485 50
Total.....	\$ 46,437,217 27
<i>Operating Expenses—</i>	
Rail.....	\$ 44,630,826 02
<i>Ratio of Earnings to gross Earnings—</i>	
Earnings from transportation—Rail.....	97.69%
Earnings from incidentals.....	2.31%
Earnings per mile of road operated.....	\$ 10,322 34
Earnings per engine mile.....	\$ 2 98
Earnings per train mile.....	\$ 3 68
Earnings per car mile.....	cts. 16.80
<i>Ratio of Expenses to Gross Earnings—</i>	
Rail.....	96.11%
Expenses per train mile.....	\$ 3 53
Expenses per mile of road operated.....	9,920 80
Repairs of locomotives.....	2,948,941 30
Repairs of freight cars.....	2,743,369 89
Repairs of passenger cars.....	1,775,897 70
Cost of repairs per locomotive.....	5,164 52
Cost of repairs per freight car.....	129 86
Cost of repairs per passenger car.....	2,779 18
Freight traffic.....	33,425,332 83
Passenger traffic.....	8,609,796 78
Mails and express.....	2,115,750 72
Miscellaneous (A/ Cs. 103, 104, 105, 108 to 112).....	1,215,851 44
Incidental.....	1,070,485 50
Total.....	\$ 46,437,217 27
Hire of equipment—Credit.....	\$ 12,574 00
Rentals leased roads—Debit.....	690,100 60
All other income—Debit.....	540,079 40

LOCOMOTIVE AND CAR EQUIPMENT AS AT DECEMBER 31, 1927

	On hand January 1, 1927	Added during year	Retired during year	On hand December 31, 1927
<i>Locomotives</i>	589		18	571
<i>Freight—</i>				
Box.....	13,297	16	208	13,105
Automobile.....	496		2	494
Stock.....	2,246	1	19	2,226
Poultry.....	2			2
Refrigerator.....	287		12	275
Eastman heater.....	191		3	188
Potato.....	199		3	196
Flat.....	1,735	6	165	1,576
Ballast.....	987		35	952
Coal and coke.....	1,120	27	43	1,104
Pulpwood.....	797	38	233	602
Oil tanks.....	65			65
Caboose.....	350		10	340
Total.....	21,772	86	733	21,125

LOCOMOTIVE AND CAR EQUIPMENT AS AT DECEMBER 31, 1927—*Concluded*

	On hand January 1, 1927	Added during year	Retired during year	On hand December 31, 1927
<i>Passenger—</i>				
Parlor.....	2			2
Cafe parlor.....	13			13
Cafe coaches.....	4			4
Observation, buffet parlor.....	4		1	3
Mountain observation.....	4	1	2	3
Comb. cafe, parlor, sleeping.....	1			1
Buffet sleeping.....	8	2	1	9
Compartment.....	2		1	1
Dining.....	15			15
Sleeping.....	57		4	53
Colonist.....	41	1	1	41
First class.....	152	1	2	151
Second class.....	49	1	5	45
Passenger and baggage.....	103		3	100
Passenger and mail.....	3		3	
Mail and express or baggage.....	19			19
Baggage or express.....	89		3	86
Box baggage.....	24			24
Postal.....	15			15
Refrigerator express.....	32			32
Milk.....	3			3
Stockmen's.....	7			7
Lunch counter.....	6			6
Trailers.....	6			6
Total.....	659	6	26	639
<i>Work—</i>				
Business.....	18			18
Photographers.....				
Instruction.....	2			2
Vision test.....	2			2
Stores supply.....	6			6
Dynamometer.....	1			1
Lidgerwood.....	8			8
Gas.....	8			8
Cranes and derricks.....	46	2		48
Flangers.....	90	16	2	104
Ditchers.....	8	1		9
Ballast spreaders and trimmers.....	9			9
Pile drivers.....	3			3
Steam shovels.....	16		1	15
Snow ploughs.....	115		8	107
Boarding.....	1,273	87	51	1,309
Engineer.....	4			4
Store.....	1		1	
Auxiliary.....	141	6	6	141
Cabin and idler.....	17	2		19
Cinder.....	53	4	8	49
Road repair.....	13		1	12
Air dump.....	38			38
Transfer Flat.....	17	2	1	18
Water tank.....	2	6		8
Fire fighting tank.....	15	1		16
Concrete mixer.....	4			4
Sand blast.....	1			1
Well boring.....	1			1
Test weight and scale test.....	1			1
Centrifugal pump.....				
Ice.....	3	5		8
Shop service.....	11			11
Rail saw.....	1			1
Oil tank.....	1			1
Paint.....				
Dump.....	16	1	1	16
Bridge tanks.....	1			1
Work flat.....		7		7
Radio repair car.....		1		1
Total.....	1,946	141	80	2,007

CANADIAN GOVERNMENT RAILWAYS EMPLOYEES' RELIEF AND INSURANCE ASSOCIATION

STATEMENT OF RECEIPTS AND EXPENDITURES FROM JANUARY 1, TO
DECEMBER 31, 1927

RECEIPTS

Credit balance on December 31, 1926.....	\$ 134,045 92
Amount of premiums collected from Canadian National Railways' pay lists.....	\$ 224,677 85
Premiums collected from railways' vouchers.....	1,886 68
Contribution from Canadian National Railways.....	15,000 00
	241,564 53
Cash members not on duty, refunds, etc.....	2,968 68
Premiums from S. & A. vouchers.....	3,110 49
Premiums from retired members.....	5,983 71
Annual fees.....	1,411 25
Examination fees.....	110 00
Interest on monthly balances and bonds.....	25,206 24
	38,790 37
Total receipts.....	\$ 414,400 82

EXPENDITURES

Sick and accident indemnity.....	\$ 97,447 93
Medical and surgical attendance.....	51,812 91
	149,260 84
Temporary employees' accident fund.....	24,304 66
Death and total disability claims.....	69,250 00
Examination fees.....	109 00
	\$ 242,924 50

OPERATING EXPENSES

Sick and accident fund, temporary employees' accident fund, retired employees, death and total disability fund.....	20,600 21
	263,524 71
" Difference.....	150,876 11
Less outstanding liabilities.....	14,000 00
	\$ 136,876 11

SICK AND ACCIDENT FUND (REGULAR AND TEMPORARY)

This fund shows a surplus December 31, 1927..... \$ 78,753 50

DEATH AND TOTAL DISABILITY FUND

The statement shows an expenditure on account of death and total disability claims of.....	\$ 61,250 00
This statement shows that one hundred and seventy-four death and total disability claims were assessed and paid during the year, one hundred and five death claims, due to natural causes aggregating.....	47,750 00
Ten death claims due to accidental injuries aggregating.....	7,250 00
	55,000 00
Nine total disability claims, aggregating.....	6,250 00
	61,250 00
Six temporary death claims, due to accidental injuries, aggregating.....	1,500 00
	\$ 62,750 00

INTERCOLONIAL AND PRINCE EDWARD ISLAND RAILWAYS
EMPLOYEES' PROVIDENT FUND

STATEMENT OF RECEIPTS AND EXPENDITURES DURING THE YEAR
ENDED DECEMBER 31, 1927

Balance to credit of the fund on December 31, 1926.....	Nil
The contributions made by employees during the year, being one and one-half per cent of their monthly salary and wages, were.....	\$ 281,603 46
The contributions made by the railways were.....	100,000 00
Special contribution made by the railways to offset deficit, year ended December 31, 1927.....	379,104 68
Amounts received to increase retiring allowances of all retired employees receiving less than \$30 per month, in order that the minimum allowance now paid under the Act, viz.: \$20, might be increased to \$30 per month, in accordance with Vote No. 473, whereby an amount was placed in the estimates to supplement retiring allowances payable under the provisions of the I.C. and P.E.I. Railways Employees' Provident Fund, including from January 1 to December 31, 1927.....	38,398 47
Amounts received from refunds, etc.....	436 37
	<u>\$ 799,542 98</u>

The Expenditures were:—

For retiring allowances.....	717,542 07
For allowances made to retired employees receiving less than \$30 per month, to increase the minimum allowance in accordance with Vote No. 473, whereby an amount was placed in the estimates to supplement retiring allowances payable under the provisions of the I.C. and P.E.I. Railways Employees' Provident Fund, including from January 1 to December 31, 1927.....	38,398 47
For contributions refunded in cases of deceased employees.....	19,991 16
For contributions refunded which were deducted in error.....	1,560 62
For contributions refunded to discharged employees, etc.....	5,291 94
Medical examinations for probationers entering the service, etc.	700 00
Medical examinations for employees retiring from the service..	94 22
For election expenses.....	1,173 84
For salaries and travelling expenses, Secretary's office, and proportion of salary of Chief Medical Officer.....	14,204 95
For stationery, printing, postage, etc.....	580 71
	<u>799,542 98</u>
Balance to the credit of the Fund on the 31st December, 1927.....	<u>Nil</u>

C. C. MacDONALD,
Secretary.

W. U. APPLETON,
Chairman.

CANADIAN NATIONAL RAILWAYS

STATEMENT SHOWING THE AMOUNT CREDITED TO THE CANADIAN GOVERNMENT
RAILWAYS EMPLOYEES' RELIEF AND INSURANCE ASSOCIATION BY THE
CANADIAN NATIONAL RAILWAYS DURING THE YEAR ENDED
DECEMBER 31, 1927

Amount of premiums collected from the Canadian National Railway pay lists.....	\$ 224,677 85
Premium collected from railway vouchers.....	1,886 68
Annual contribution from the Canadian National Railways.....	15,000 00
Total.....	<u>\$ 241,564 53</u>

C. C. MacDONALD,
Secretary.

W. F. SEARS,
Auditor.

CANADIAN NATIONAL RAILWAYS

STATEMENT SHOWING MILEAGE OF CANADIAN GOVERNMENT RAILWAYS AS AT
DECEMBER 31, 1927

	Main Line		Yard track and sidings	Total
	First track	Secondtrack		
Atlantic Region.....	2,213.50	48.98	706.36	2,968.84
Central Region.....	1,441.76	20.93	427.95	1,890.64
Western Region.....	390.17	4.89	137.80	532.86
Leased Lines—Atlantic Region.....	164.25	.....	16.20	180.45
“ Central Region.....	5.48	.....	1.68	7.16
“ Western Region.....	159.16	.....	88.90	248.06
Running Rights—Atlantic Region.....	81.59	.....	.....	81.59
“ Central Region.....	42.80	37.94	.....	80.74
“ Western Region.....	.....	.....	.....	.....
	4,498.71	112.74	1,378.89	5,990.34

REPORT OF THE DEPARTMENTAL ACCOUNTANT

TOTAL EXPENDITURE and Revenue of the Department of Railways and Canals prior to and since Confederation to March 31, 1928.

	\$	cts.	\$	cts.
Grand total expenditure.....			1,363,460,879	14
Expenditure on railways.....	935,905,584	80		
" Quebec bridge.....	21,910,596	06		
" railway subsidies.....	78,785,471	09		
" canals.....	272,385,797	85		
" Miscellaneous.....	54,473,429	34		
Total expenditure.....			1,363,460,879	14
<i>Classification of expenditure in general—</i>				
Capital account.....	727,441,241	68		
Revenue account.....	498,605,094	18		
Income account.....	58,629,072	19		
Consolidated Fund—Railway subsidies.....	78,785,471	09		
Total expenditure.....			1,363,460,879	14
<i>Classification of expenditure in detail—</i>				
<i>Railways—</i>				
Capital.....	480,686,221	41		
Income.....	10,268,238	40		
Revenue.....	444,951,124	99	935,905,584	80
<i>Quebec Bridge—</i>				
Capital.....	21,706,664	49		
Income.....	203,931	57	21,910,596	06
Railway subsidies.....			78,785,471	09
Total expenditure on railways.....			1,036,601,651	95
<i>Canals—</i>				
Capital.....	203,420,904	41		
Income.....	15,387,635	30		
Revenue, staff.....	29,788,940	25		
Revenue, repairs.....	23,788,317	89	272,385,797	85
<i>Miscellaneous expenditure—</i>				
Capital.....	21,627,451	37		
Income.....	32,769,266	92		
Revenue.....	76,711	05	54,473,429	34
Grand total expenditure.....			1,363,460,879	14

GENERAL SUMMARY of the Expenditure and Revenue for Fiscal Year ending March 31, 1928

Grand total expenditure to March 31, 1928.....		1,363,460,879	14
This expenditure is divided as follows—			
Railways, including Quebec bridge.....	1,036,601,651	95	
Canals.....	272,385,797	85	
General expenditure.....	54,473,429	34	1,363,460,879
Total expenditure for the year ending March 31, 1928—			
This expenditure is divided as follows—			
Railways.....	4,636,643	13	
Canals.....	16,720,404	20	
General expenditure.....	5,251,659	14	26,608,706
REVENUE RECEIVED			
Grand total of revenue received from July 1, 1927, to March 31, 1928:			
Railways.....	391,866,392	09	
Canals.....	24,865,333	24	416,731,725
Revenue received from Canals during fiscal year.....			1,355,677

REVENUE

GENERAL STATEMENT of the Revenue received during the year ending
March 31, 1928

<i>Canals—</i>	
Welland canal.....	\$ 346,289 07
Welland canal, Port Colborne elevator.....	614,466 25
Welland Ship canal.....	2,013 32
Beauharnois canal.....	15,075 31
Soulanges canal.....	4,203 89
Cornwall canal.....	26,164 80
Williamsburg canal.....	2,006 50
Lachine canal.....	234,381 27
Chambly canal.....	1,015 74
Carillon and Grenville canal.....	637 00
Chats Falls canal.....	1 00
Ste. Anne's Lock.....	648 64
Rideau canal.....	12,562 51
St. Peter's canal.....	73 00
Murray canal.....	232 14
Trent canal.....	95,708 02
Sault Ste. Marie canal.....	139 00
Miscellaneous.....	60 00
Total.....	\$1,355,677 46

GENERAL STATEMENT of Expenditure during the year ending March 31, 1928

	\$	cts.	\$	cts.
Total expenditure.....			26,608,706	47
Expenditure chargeable to railways.....	4,636,643	13		
Expenditure chargeable to canals.....	16,720,404	20		
General expenditure.....	5,251,659	14		
Total expenditure.....			26,608,706	47
<i>Classification of expenditure in general—</i>				
Capital account.....	17,389,850	74		
Income account.....	6,680,075	45		
Revenue account.....	2,538,780	28		
Total expenditure.....			26,608,706	47
<i>Classification of expenditure by accounts—</i>				
<i>Railways—</i>				
Capital expenditure.....			3,626,945	97
Income expenditure general.....			1,009,697	16
<i>Canals—</i>				
Capital expenditure.....			13,762,904	77
Income expenditure.....	381,447	57		
Income expenditure, general.....	37,271	58		
			418,719	15
Revenue expenditure, staff.....	1,212,720	59		
Revenue expenditure, staff, general.....	132,524	05		
			1,345,244	64
Revenue expenditure, repairs.....	1,150,241	35		
Revenue expenditure, repairs, general.....	43,294	29		
			1,193,535	64
General expenditure, income account.....			5,251,659	14
Total expenditure.....			26,608,706	47

PRINCIPAL EXPENDITURES during the Fiscal Year

Canada Highways Act, chapter 54, 1919.....	\$	1,224,395 75
Hudson Bay Railway.....		2,674,224 57
Hudson Bay Railway and Terminals (Fort Churchill).....		880,643 30
New Brunswick and Prince Edward Island Railway.....		63,418 77
Railway Commission, maintenance.....		278,440 00
Railway Commission, statutory.....		49,564 52
Railway Grade Crossing Fund.....		678,787 53
Government Employees Compensation Act, chapter 30, 1927.....		378,387 36
Vote 347, St. Lawrence Ship Canal, surveys and investigations.....		63,200 53
Welland Ship Canal.....	13,722,925 75	
Sunday labour.....		59,324 00
Canals expenditure.....		2,938,154 45
Maritime freight rates.....		3,471,400 87
Miscellaneous expenditure.....		125,839 07
	\$	<u>26,608,706 47</u>

EXPENDITURE on Government and other Railways for Fiscal Year ending March 31, 1928

	Capital	Income	Revenue	Total
	\$ cts.	\$ cts.		\$ cts.
National Transcontinental Railway.....	8,953 09			8,953 09
Hudson Bay Railway.....	3,002,382 86			
Less credit of previous year's expenditure.....	328,158 29			
	2,674,224 57			2,674,224 57
New Brunswick and Prince Edward Island Railway.....	63,418 77			63,418 77
Canadian Pacific Railway.....	71 00			71 00
Total.....	2,746,667 43			2,746,667 43
Railway Commission, maintenance.....		278,440 00		278,440 00
Railway Commission, statutory.....		49,564 52		49,564 52
Governor General's cars.....		2,905 11		2,905 11
Railway Grade Crossing Fund.....		678,787 53		678,787 53
Hudson Bay Railway—Fort Churchill terminals.....	880,643 30			880,643 30
Hudson Bay Railway—Port Nelson terminals.....	364 76			364 76
Total.....	880,278 54	1,009,697 16		1,889,975 70
Grand total of railways.....	3,626,945 97	1,009,697 16		4,636,643 13
MISCELLANEOUS				
Canada Highways Act, chapter 54, 1919.....		1,224,395 75		1,224,395 75
Canada Highways Commission.....		17,064 78		17,064 78
Government Employees' Compensation Act, Revised Statutes of Canada, chapter 30, 1927.....		378,387 36		378,387 36
Civil Service Amendment Act gratuities to dependents of deceased employees.....		1,073 32		1,073 32
Printing and stationery, outside service.....		4,401 94		4,401 94
Canadian Government Railways—To supplement pension allowance.....		38,398 47		38,398 47
Vote 464, Deferred adjustment of military pay.....		13,643 98		13,643 98
Vote 347, St. Lawrence Ship Canal—Surveys and investigations and Canadian National Advisory Committee.....		63,200 53		63,200 53
Miscellaneous services.....		39,692 14		39,692 14
Vote 404, Maritime Freight Rates Act—Miscellaneous railways.....		421,654 56		421,654 56
Vote 405, Maritime Freight Rates Act—Eastern lines.....		931,809 89		931,809 89
Vote 406, Eastern Lines deficits (other than occurring from Maritime Freight Rates Act).....		2,117,936 42		2,117,936 42
Total.....		5,251,659 14		5,251,659 14

EXPENDITURE on Canals for Fiscal Year ended March 31, 1928

Name of Canal	Chargeable to		Chargeable to Revenue		Total
	Capital	Income	Staff	Repairs	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
Carillon and Grenville.....			30,419 67	50,689 22	81,108 89
Ste. Anne's lock.....		5,984 18	5,575 03	4,195 02	15,754 23
Chambly.....			56,070 75	33,139 65	89,210 40
St. Ours.....			4,317 30	4,115 33	8,432 63
Lachine.....		19,085 85	157,287 08	157,137 06	333,509 99
Soulanges.....			53,954 81	69,586 15	123,540 96
Cornwall.....			104,619 91	85,686 42	190,306 33
Williamsburg.....			60,294 12	31,866 28	92,160 40
Ontario St. Lawrence river canals.....		5,407 06			5,407 06
St. Peters.....		421 16	7,381 45	8,154 91	15,957 52
Rideau.....			90,356 30	374,129 39	464,485 69
Murray.....			6,282 00	5,049 64	11,331 64
Trent.....	40,203 02	166,526 12	149,950 37	80,669 44	437,348 95
Welland—					
1925-1926 income.... \$ 102,368 62					
1927-28 income..... 70,128 98					
	224 00	172,497 60	250,041 16	137,936 38	560,251 14
Welland Ship.....	13,722,925 75				13,722,925 75
Port Colborne elevator.....		11,525 60	195,408 48	76,250 16	283,184 24
Sault Ste. Marie.....			40,762 16	31,636 30	72,398 46
Total.....	13,762,904 77	381,447 57	1,212,720 59	1,150,241 35	16,507,314 28
GENERAL ON CANALS					
Dredge vessels, Quebec canals.....			16,101 23	14,600 99	30,702 22
Dredge vessels, Rideau canal.....			20,584 46	11,778 14	32,362 60
Sunday labour.....			59,324 00		59,324 00
Surveys and inspections.....		7,623 02			7,623 02
QUEBEC CANALS					
Maintenance.....			33,094 86		33,094 86
Hungry Bay and St. Barbe dykes.....				16,915 16	16,915 16
Bakers dam.....		27,648 56			27,648 56
MISCELLANEOUS					
Vote 378, compassionate allowance to widow of late William H. Tilley.....		1,000 00			1,000 00
Vote 379, compassionate allowance to Stanley Sleck, accidentally injured on Welland canal bridge..		1,000 00			1,000 00
Civil Service Amendment Act gratuities to dependents of deceased employees.....			3,419 50		3,419 50
Total.....		37,271 58	132,524 05	43,294 29	213,089 92
Grand total.....	13,762,904 77	418,719 15	1,345,244 64	1,193,535 64	16,720,404 20

Ontario St. Lawrence Canals headquarters staff and repairs expenditure split 50-50 between Cornwall and Williamsburg.

RECAPITULATION OF EXPENDITURE

	Capital		Income		Revenue		Total	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Expenditure on railways.....	3,626,945	97	1,009,697	16			4,636,643	13
Expenditure on canals.....	13,762,904	77	418,719	15	2,538,780	28	16,720,404	20
Miscellaneous expenditure.....			5,251,659	14			5,251,659	14
	17,389,850	74	6,680,075	45	2,538,780	28	26,608,706	47

EXPENDITURES on Canals to March 31, 1928

CAPITAL ACCOUNT

	Previous Years		1927-28		Total	
	\$	cts.	\$	cts.	\$	cts.
Quebec Canals System—						
Carillon and Grenville.....	4,191,756	51			4,191,756	51
Ste. Anne's lock.....	1,320,215	63			1,320,215	63
Chambly.....	780,996	52			780,996	52
St. Ours.....	127,228	56			127,228	56
Lachine.....	14,132,684	80			14,132,684	80
Lake St. Louis.....	298,176	11			298,176	11
Beauharnois.....	1,636,029	29			1,636,029	29
Soulanges.....	7,904,044	53			7,904,044	53
Ontario-St. Lawrence System—						
Lake St. Francis.....	75,906	71			75,906	71
Cornwall.....	7,245,804	21			7,245,804	21
Williamsburg.....	1,334,551	80			1,334,551	80
Farrans Point.....	877,090	57			877,090	57
Galops.....	6,143,468	11			6,143,468	11
Rapide Plat.....	2,159,880	80			2,159,880	80
Ontario-St. Lawrence river canals—						
North channel.....	1,995,142	87			1,995,142	87
River reaches.....	483,830	20			483,830	20
Galops channel.....	1,039,895	65			1,039,895	65
St. Lawrence Ship canal.....	133,896	80			133,896	80
St. Peters.....	648,547	14			648,547	14
Rideau.....	4,214,263	99			4,214,263	99
Tay.....	489,599	23			489,599	23
Murray.....	1,248,946	71			1,248,946	71
Trent.....	19,337,432	60	40,203	02	19,377,635	62
Welland.....	29,906,411	93		224 00	29,906,187	93
Welland Ship.....	76,579,030	80	13,722,925	75	90,301,955	55
Sault Ste. Marie.....	4,935,809	42			4,935,809	42
Culbute lock and dam.....	382,391	46			382,391	46
Total.....	189,623,032	95	13,762,904	77	203,385,937	72
Canals general.....	34,966	69			34,966	69
Grand total.....	189,657,999	64	13,762,904	77	203,420,904	41

INCOME ACCOUNT

Quebec Canals System—						
Carillon and Grenville.....	466,290	45			466,290	45
Ste. Anne's lock.....	132,941	64	5,984	18	138,925	82
Chambly.....	934,318	49			934,318	49
St. Ours.....	178,366	58			178,366	58
Lachine.....	1,940,873	01	19,085	85	1,959,958	86
Beauharnois.....	265,810	84			265,810	84
Soulanges.....	510,529	93			510,529	93
Ontario-St. Lawrence System—						
Lake St. Francis.....	27,028	08			27,028	08
Cornwall.....	637,119	09			637,119	09
Williamsburg.....	396,175	43			396,175	43
Ontario-St. Lawrence river canals.....	224,487	76	5,407	06	229,894	82
St. Peters.....	845,082	17	421	16	845,503	33
Rideau.....	714,865	55			714,865	55
Tay.....	748	65			748	65
Murray.....	101,457	76			101,457	76
Trent.....	2,907,954	67	166,526	12	3,074,480	79
Welland.....	3,243,376	11	172,497	60	3,415,873	71
Welland, Port Colborne elevator.....			11,525	60	11,525	60
Sault Ste. Marie.....	320,974	77			320,974	77
Culbute lock and dam.....	60,923	37			60,923	37
Baie Verte.....	44,387	53			44,387	53
Total.....	13,953,711	88	381,447	57	14,335,159	45
Canals general.....	1,015,204	27	37,271	58	1,052,475	85
Grand total.....	14,968,916	15	418,719	15	15,387,635	30

DEPARTMENT OF RAILWAYS AND CANALS

REVENUE ACCOUNT, STAFF

	Previous Years		1927-28		Total	
	\$	cts.	\$	cts.	\$	cts.
Quebec Canals System—						
Carillon and Grenville.....	1,106,896	55	30,419	67	1,137,316	22
Ste. Anne's lock.....	172,796	19	5,575	03	178,371	22
Chambly.....	1,424,984	11	56,070	75	1,481,054	86
St. Ours.....	167,815	06	4,317	30	172,132	36
Lachine.....	3,994,035	30	157,287	08	4,151,322	38
Beauharnois.....	649,574	89			649,574	89
Soulanges.....	988,321	76	53,954	81	1,042,276	57
Ontario-St. Lawrence System—						
Cornwall.....	2,548,854	00	104,619	91	2,653,473	91
Williamsburg.....	1,091,467	12	60,294	12	1,151,761	24
St. Peters.....	172,821	41	7,381	45	180,202	86
Rideau.....	2,471,655	10	90,356	30	2,562,011	40
Murray.....	212,983	56	6,282	00	219,265	56
Trent.....	1,650,140	73	149,950	37	1,800,091	10
Welland.....	7,732,149	53	250,041	16	7,982,190	69
Welland, Port Colborne elevator.....			195,408	48	195,408	48
Sault Ste. Marie.....	779,323	60	40,762	16	820,085	76
Culbute lock and dam.....	11,507	48			11,507	48
Total.....	25,175,326	39	1,212,720	59	26,388,046	98
Canals general.....	3,268,369	22	132,524	05	3,400,893	27
Grand total.....	28,443,695	61	1,345,244	64	29,788,940	25

REVENUE ACCOUNT, REPAIRS

Quebec Canals System—						
Carillon and Grenville.....	818,936	80	50,689	22	869,626	02
Ste. Anne's lock.....	193,802	15	4,195	02	197,997	17
Chambly.....	1,472,415	34	33,139	65	1,505,554	99
St. Ours.....	162,036	27	4,115	33	166,151	60
Lachine.....	3,772,148	15	157,137	06	3,929,285	21
Beauharnois.....	525,691	23			525,691	23
Soulanges.....	1,328,169	21	69,586	15	1,397,755	36
Ontario-St. Lawrence System—						
Cornwall.....	1,650,664	34	85,686	42	1,736,350	76
Williamsburg.....	904,707	81	31,866	28	936,574	09
St. Peters.....	55,016	86	8,154	91	63,171	77
Rideau.....	2,969,903	35	374,129	39	3,344,032	74
Murray.....	151,154	75	5,049	64	156,204	39
Trent.....	1,454,494	74	80,669	44	1,535,164	18
Welland.....	5,424,073	49	137,936	38	5,562,009	87
Welland, Port Colborne elevator.....			76,250	16	76,250	16
Sault Ste. Marie.....	679,116	66	31,636	30	710,752	96
Culbute lock and dam.....	7,036	15			7,036	15
Total.....	21,569,367	30	1,150,241	35	22,719,608	65
Canals general.....	1,025,414	95	43,294	29	1,068,709	24
Grand total.....	22,594,782	25	1,193,535	64	23,788,317	89

TOTAL Expenditure by Canals to March 31, 1928

Canals	Capital	Income	Revenue		Total
			Staff	Repairs	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Quebec Canals System—					
Carillon and Grenville.....	4,191,756 51	466,290 45	1,137,316 22	869,626 02	6,664,989 20
St. Anne's lock.....	1,320,215 63	138,925 82	178,371 22	197,997 17	1,835,509 84
Chambly.....	780,996 52	934,318 49	1,481,054 86	1,505,554 99	4,701,924 86
St. Ours.....	127,228 56	178,366 58	172,132 36	166,151 60	643,879 10
Lachine.....	14,132,684 80	1,959,958 86	4,151,322 38	3,929,285 21	24,173,251 25
Lake St. Louis.....	298,176 11				298,176 11
Beauharnois.....	1,636,029 29	265,810 84	649,574 89	525,691 23	3,077,106 25
Soulanges.....	7,904,044 53	510,529 93	1,042,276 57	1,397,755 36	10,854,606 39
Ontario St. Lawrence System—					
Lake St. Francis.....	75,906 71	27,028 08			102,934 79
Cornwall.....	7,245,804 21	637,119 09	2,653,473 91	1,736,350 76	12,272,747 97
Williamsburg.....	1,334,551 80				
Farrans Point.....	877,090 57	396,175 43	1,151,761 24	936,574 09	12,999,502 04
Galops.....	6,143,468 11				
Rapide Plat.....	2,159,880 80				
Ontario St. Lawrence River canals—					
North channel.....	1,995,142 87				
River reaches.....	483,830 20	229,894 82			3,748,763 54
Galops channel.....	1,039,895 65				
St. Lawrence Ship canal.....	133,896 80				133,896 80
St. Peters.....	648,547 14	845,503 33	180,202 86	63,171 77	1,737,425 10
Rideau.....	4,214,263 99	714,865 55	2,562,011 40	3,344,032 74	10,835,173 68
Tay.....	489,599 23	748 65			490,347 88
Murray.....	1,248,946 71	101,457 76	219,265 56	156,204 39	1,725,874 42
Trent.....	19,377,635 62	3,074,480 79	1,800,091 10	1,535,164 18	25,787,371 69
Welland.....	29,906,187 93	3,415,873 71	7,982,190 69	5,562,009 87	46,866,262 20
Welland, Port Colborne elevator.....		11,525 60	195,408 48	76,250 16	283,184 24
Welland Ship.....	90,301,956 55				90,301,956 55
Sault Ste. Marie.....	4,935,809 42	320,974 77	820,085 76	710,752 96	6,787,622 91
Culbute lock and dam.....	382,391 46	60,923 37	11,507 48	7,036 15	461,858 46
Baie Verte.....		44,387 53			44,387 53
Total.....	203,385,937 72	14,335,159 45	26,388,046 98	22,719,608 65	266,828,752 80
Canals, general.....	34,966 69	1,052,475 85	3,400,893 27	1,068,709 24	5,557,045 05
	203,420,904 41	15,387,635 30	29,788,940 25	23,788,317 89	272,385,797 85

YEARLY EXPENDITURE on Canals and Revenue Received to March 31, 1928

	Year ending	Capital		Income		Revenue		Revenue received			
		\$	cts.	\$	cts.	\$	cts.	\$	cts.		
Government expenditure prior to Confederation, including Imperial Government expenditure.....		20,593,866	13	98,378	46						
Government expenditure (1868 to 1879 included).....	1880	17,004,842	55	515,196	21	1,830,398	92	1,832,998	61	5,079,068	36
Government expenditure.....	1880	2,123,366	34			195,039	83	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	58,298	29	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	1,437,149	30	194,129	61	293,115	58	231,089	54	324,475	24
" ".....	1893	2,069,573	30	196,185	84	291,048	97	204,759	39	357,089	87
" ".....	1894	3,027,164	19	110,512	07	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	407,662	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
" ".....	1905	2,071,593	72	352,855	43	431,499	60	401,742	79	78,009	21
" ".....	1906	1,552,121	21	310,716	70	447,962	92	375,889	60	108,067	76
" ".....	1907	887,838	61	254,423	18	329,629	63	287,231	03	105,003	15
" ".....	1908	1,708,156	37	483,250	11	473,638	95	411,660	53	144,882	13
" ".....	1909	1,868,834	45	699,304	73	475,515	04	433,958	10	199,501	26
" ".....	1910	1,650,706	64	459,835	62	515,585	16	491,793	02	193,409	28
" ".....	1911	2,349,474	49	385,534	55	511,305	94	471,530	32	221,138	49
" ".....	1912	2,554,938	91	384,860	73	585,899	54	555,709	95	263,716	75
" ".....	1913	2,255,448	21	292,960	26	605,248	57	535,135	66	307,567	66
" ".....	1914	2,824,536	79	351,397	24	642,844	68	574,038	68	380,188	06
" ".....	1915	5,490,796	03	405,806	32	675,770	67	562,599	27	427,763	14
" ".....	1916	6,142,148	96	348,174	41	697,532	44	529,565	23	446,722	21
" ".....	1917	4,304,589	09	372,102	96	700,022	11	486,167	67	461,423	14
" ".....	1918	1,781,957	07	90,255	66	743,857	09	540,331	49	414,868	22
" ".....	1919	2,211,935	48	137,604	37	733,090	71	698,878	14	387,654	90
" ".....	1920	4,579,565	22	743,877	26	745,986	58	713,334	83	441,926	36
" ".....	1921	5,449,961	68	1,104,239	51	815,979	22	920,992	94	365,941	36
" ".....	1922	4,482,638	65	744,990	40	983,042	31	1,105,053	90	804,515	58
" ".....	1923	4,995,184	27	548,757	36	924,216	63	859,839	45	742,404	13
" ".....	1924	6,747,395	04	457,510	91	980,094	21	942,056	20	897,412	22
" ".....	1925	10,619,902	69	445,955	15	959,516	48	853,076	17	907,650	33
" ".....	1926	12,024,460	92	487,798	09	1,046,568	15	873,681	54	920,900	00
" ".....	1927	13,845,683	78	429,118	85	1,129,040	91	858,472	92	961,694	09
" ".....	1928	13,762,904	77	381,447	57	1,212,720	59	1,150,241	35	1,355,677	46
Total*.....		203,385,937	72	14,335,159	45	26,388,046	98	22,719,608	65	24,865,553	24

* This does not include expenditure which has been charged to Miscellaneous Canals Expenditure, but only to amount expended on specific canals.

† Canal tolls abolished this year.

STATEMENT of Canals Revenue for year ending March 31, 1928

Divisions	Dues		Rents		Total	
	\$	cts.	\$	cts.	\$	cts.
<i>Welland Canal—</i>						
Port Dalhousie.....	494	14	330,212	71	330,706	85
Port Colborne.....		945 33	14,636	89	15,582	22
Port Colborne elevator.....	614,466	25			614,466	25
Total.....	615,905	72	344,849	60	960,755	32
<i>Welland Ship Canal—</i>						
Port Dalhousie.....			1,913	49	1,913	49
Port Colborne.....		5 33	94	50	99	83
Total.....		5 33	2,007	99	2,013	32
<i>St. Lawrence Canals—</i>						
Coteau Landing, Beauharnois canal.....			15,075	31	15,075	31
Coteau landing, Soulanges canal.....		25 00	4,178	89	4,203	89
Cornwall, Cornwall canal.....	1,065	30	25,099	50	26,164	80
Cardinal, Williamsburg canal.....		5 00	2,001	50	2,006	50
Lachine, Lachine canal.....	2,816	77			2,816	77
Montreal, Lachine canal.....	23,696	93	207,867	57	231,564	50
Total.....	27,609	00	254,222	77	281,831	77
<i>Chambly Canal—</i>						
Chambly.....			787	74	787	74
St. Johns.....		12 00	156	00	168	00
St. Ours.....			60	00	60	00
Total.....		12 00	1,003	74	1,015	74
<i>Ottawa River Canals—</i>						
Carillon and Grenville canal.....		8 00	629	00	637	00
Chats Falls canal.....			1	00	1	00
Ste. Anne's lock.....	208	64	440	00	648	64
Total.....	216	64	1,070	00	1,286	64
<i>Rideau Canal—</i>						
Ottawa.....	232	49	10,980	83	11,213	32
Kingston Mills.....		10 00	875	19	885	19
Smiths Falls.....		40 00	424	00	464	00
Total.....	282	49	12,280	02	12,562	51
<i>St. Peter's Canal.....</i>						
Murray canal.....			73	00	73	00
Trent canal.....			232	14	232	14
Sault Ste. Marie canal.....	66	00	95,642	02	95,708	02
Miscellaneous.....			139	00	139	00
			60	00	60	00
Grand Total.....	644,097	18	711,580	28	1,355,677	46

STATEMENT of Hydraulic and other Rents showing Rent Accrued, Paid and Balances Due March 31, 1928

Balance due April 1, 1927	Hydraulic and other rents accrued		House rents accrued		Totals		Divisions	Abatement of over-charges		Refunds		Deposited to credit of Receiver General		Balance due Mar 31, 1928		Totals
	\$	cts.	\$	cts.	\$	cts.		\$	cts.	\$	cts.	\$	cts.	\$	cts.	
12,555 72	151,461 14	1,727 00	1,727 00	165,723 86	Welland Canal.....	1,937 67	66 67	1,766 00	343,083 60	181,130 08	165,723 86					
495 11	402 40	1,792 00	1,792 00	2,689 51	Welland Ship Canal.....	113 02		1,514 29	493 70	568 50	2,689 51					
65,995 44	191,117 92	159 00	159 00	125,281 48	Lachine Canal.....	60 00		147 00	207,720 57	82,646 09	125,281 48					
25 00	15,075 31	336 00	336 00	15,075 31	Beauharnois Canal.....			336 00	15,075 31	119 00	15,075 31					
280 00	3,936 89	352 24	352 24	4,297 89	Soulanges Canal.....			676 50	3,842 89	25 00	4,297 89					
50 00	944 00	45 00	45 00	1,028 74	Chambly Canal.....			45 00	327 24	80 00	1,028 74					
	25,022 50	112 00	112 00	25,184 50	Carillon and Grenville Canal.....			112 00	584 00	85 00	25,184 50					
	39 00	193 14	193 14	232 14	Cornwall Canal.....			193 14	24,987 50		25,184 50					
	380 00	60 00	60 00	440 00	Murray Canal.....			60 00	39 00		232 14					
3,290 00	2,633 50	218 00	218 00	6,141 50	Ste. Anne's Lock.....	850 00		218 00	1,783 50	3,290 00	6,141 50					
10,344 74	9,754 62	2,149 00	2,149 00	22,248 36	Williamsburg Canal.....	31 67	11 83	2,149 00	10,131 02	9,924 84	22,248 36					
89 95	93,337 68	2,189 43	2,189 43	95,617 06	Rideau Canal.....	17 00	2 50	2,186 93	93,455 09	44 66	95,617 06					
5 00	91 00	48 00	48 00	144 00	Trent Canal.....			48 00	91 00	5 00	144 00					
	25 00	48 00	48 00	73 00	Sault Ste. Marie Canal.....			48 00	25 00		73 00					
	1 00			1 00	St. Peters Canal.....				1 00		1 00					
	42 00			42 00	Chats Falls Canal.....				60 00		60 00					
39,412 92	494,616 20	9,753 07	9,753 07	464,956 35	Miscellaneous.....	3,009 36	81 00	9,499 86	702,080 42	249,714 29	464,956 35					

STATEMENT showing Sources of Canals Revenue Received during Fiscal Year ending March 31, 1928

	Land	Water power	Transmission	Boat houses	Houses	Wharfage, winterage and Miscellaneous	Elevator fees	Totals
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Welland Canal System—</i>								
Welland canal.....	13,350 98	327,171 62	2,561 00		1,766 00	1,439 47		346,289 07
Welland canal Port Colborne elevator.....		2 00	444 70		1,514 29	5 33		614,466 25
Welland Ship canal.....	47 00							2,013 32
<i>St. Lawrence Canals—</i>								
Lachine.....	154,612 52	49,926 00	3,182 05		147 00	26,513 70		234,331 27
Beauharnois.....	401 31	14,663 00	11 00					15,075 31
Soulages.....	390 39	3,000 00	452 50		336 00	25 00		4,203 89
Cornwall.....	892 50	24,036 00	32 00	27 00	112 00	1,065 30		26,164 80
Williamsburg.....	500 00	1,258 50	25 00		218 00	5 00		2,006 50
<i>Chambly Canal.....</i>	204 24	10 00	113 00		676 50	12 00		1,015 74
<i>Ottawa River Canals—</i>								
Carillon and Grenville.....	327 00	250 00	7 00		45 00	8 00		637 00
Chats Falls.....	1 00							1 00
Ste. Anne's lock.....	304 00		76 00		60 00	208 64		648 64
<i>Rideau canal.....</i>	8,852 75	600 00	511 00	167 27	2,149 00	282 49		12,562 51
<i>St. Peters canal.....</i>			25 00		48 00			73 00
<i>Murray canal.....</i>	32 00		7 00		193 14			232 14
<i>Trent canal.....</i>	1,603 04	91,086 00	618 00	148 05	2,186 93	66 00		95,708 02
<i>Sault Ste. Marie canal.....</i>	21 00	50 00	20 00		48 00			139 00
Miscellaneous.....	60 00							60 00
Totals.....	181,599 73	512,053 12	8,085 25	342 32	9,499 86	29,630 93	614,466 25	1,355,677 46

GOVERNMENT EMPLOYEES Compensation Act, Chapter 15, 1918—(Chapter 30
Revised Statutes, 1927)

STATEMENT OF EXPENDITURE

TO MARCH 31, 1927

Board	Dominion expenditure including amounts advanced	Disbursements under the Act				Balance on deposit
		Compen- sation, pensions, etc.	Proportion adminis- trative expenses	Interest	Total	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Nova Scotia.....	220,514 61	185,553 11	30,466 16		216,019 27	4,495 34
New Brunswick.....	514,339 71	451,521 17	52,679 19		504,200 36	10,139 35
Ontario.....	479,650 50	456,207 86	17,007 62		473,215 48	6,435 02
Manitoba.....	332,986 50	278,099 38	41,699 96	497 00	319,302 34	13,684 16
Alberta.....	51,111 07	41,155 27	5,804 34	6,537 45	40,422 16	10,688 91
British Columbia.....	88,809 57	82,075 44	4,453 56	5,332 20	81,196 80	7,612 77
Province of Quebec and mis- cellaneous.....	285,748 06	285,809 03	60 97		285,748 06	
Province of Ontario (Medi- cal Aid).....	163 50	163 50			163 50	
Province of Saskatchewan.....	1,115 00	1,115 00			1,115 00	
Interest deposited to credit of casual revenue.....	11,971 36			11,971 36	11,971 36	
Totals to March 31, 1927....	1,986,409 88	1,781,699 76	152,049 86	395 29	1,933,354 33	53,055 55

YEAR 1927-1928

Nova Scotia.....	56,688 88	45,333 41	5,155 84		50,489 25	6,199 63
New Brunswick.....	80,096 60	68,166 57	6,522 01		74,688 58	5,408 02
Ontario.....	94,922 25	86,673 85			86,673 85	8,248 40
Manitoba.....	55,914 63	51,623 91	7,365 72		58,989 63	3,075 00
Alberta.....	4,841 90	11,288 96	998 75	380 81	11,906 90	7,065 00
British Columbia.....	12,050 22	14,335 01	446 70	177 71	14,604 00	2,553 78
Province of Prince Edward Island.....	3,015 74	3,015 74			3,015 74	
Province of Quebec and mis- cellaneous.....	70,318 24	70,335 83	17 59		70,318 24	
Province of Ontario (Medi- cal Aid).....	538 90	538 90			538 90	
Totals year 1927-1928.....	378,387 36	351,312 18	20,471 43	558 52	371,225 09	7,162 27

TO MARCH 31, 1928

Nova Scotia.....	277,203 49	230,886 52	35,622 00		266,508 52	10,694 97
New Brunswick.....	594,436 31	519,687 74	59,201 20		578,888 94	15,547 37
Ontario.....	574,572 75	542,881 71	17,007 62		559,889 33	14,683 42
Manitoba.....	388,901 13	329,723 29	49,065 68	497 00	378,291 97	10,609 16
Alberta.....	55,952 97	52,444 23	6,803 09	6,918 26	52,329 06	3,623 91
British Columbia.....	100,859 79	96,410 45	4,900 26	5,509 91	95,800 80	5,058 99
Province of Prince Edward Island.....	3,015 74	3,015 74			3,015 74	
Province of Quebec and mis- cellaneous.....	356,066 30	356,144 86	78 56		356,066 30	
Province of Ontario (Medi- cal Aid).....	702 40	702 40			702 40	
Province of Saskatchewan.....	1,115 00	1,115 00			1,115 00	
Interest deposited to credit of casual revenue.....	11,971 36			11,971 36	11,971 36	
Totals to March 31, '928....	2,364,797 24	2,133,011 94	172,521 29	953 81	2,304,579 42	60,217 82

GOVERNMENT EMPLOYEES Compensation Act, Chapter 15, 1918—(Chapter 30 Revised Statutes, 1927)—Number of Claims on which Payments were made and Amounts Disbursed in Compensation, Medical Aid and Pensions Fiscal Year 1927-28.

NOVA SCOTIA BOARD

Department	Number of Claims				Disbursements
	Compensation and Medical Aid	Medical Aid only	Pension	Total	
					\$ cts.
Marine and Fisheries.....	3	5		8	573 60
National Defence.....	6	2	4	12	1,443 07
Public Works.....	29	6	5	40	4,057 26
Railways and Canals— Canadian Government Railways....	251	47	45	343	38,802 46
Trade and Commerce.....	3			3	457 02
Totals.....	292	60	54	406	45,333 41

NEW BRUNSWICK BOARD

Interior.....	3			3	321 78
Marine and Fisheries.....	4	3	1	8	1,141 26
Post Office.....			2	2	900 00
Public Works.....	9	2	1	12	773 89
Railways and Canals— Canadian Government Railways....	570	67	72	709	65,029 64
Totals.....	586	72	76	734	68,166 57

ONTARIO BOARD

Agriculture.....			1	1	650 04
Finance.....		1		1	54 00
Interior.....	2			2	943 00
Marine and Fisheries.....	4	2	10	16	7,000 89
Mines.....	1			1	46 15
National Defence.....	14	4	5	23	2,335 71
Public Printing and Stationery.....	3	1		4	1,114 70
Public Works.....	17	6	11	34	9,949 92
Railways and Canals— Canals.....	83	9	29	121	24,355 85
Canadian Government Railways....	127	35	35	197	35,755 71
Soldiers' Civil Re-establishment.....	3		9	12	2,805 24
Trade and Commerce.....	3	1		4	1,662 64
Totals.....	257	59	100	416	86,673 85

MANITOBA BOARD

Interior.....	6	3	2	11	1,457 02
Marine and Fisheries.....			1	1	240 00
Mines.....			1	1	976 69
Public Works.....	6	3	2	11	1,111 12
Railways and Canals— Canadian Government Railways....	254	297	20	571	35,588 76
Hudson Bay Railway.....	86	128	1	215	11,401 92
Hudson Bay Railway Terminals.....	4			4	698 15
Soldiers' Civil Re-establishment.....	1		1	2	150 25
Totals.....	357	431	28	816	51,623 91

GOVERNMENT EMPLOYEES Compensation Act, Chapter 15, 1918—Continued

ALBERTA BOARD

Department	Number of Claims				Disbursements \$ cts.
	Compensation and Medical Aid	Medical Aid only	Pension	Total	
Agriculture.....	2		1	3	1,319 48
Immigration and Colonization.....		1		1	133 50
Indian Affairs.....			1	1	420 00
Interior.....	31	10	9	50	7,951 95
Marine and Fisheries.....		1		1	2 50
Mines.....		2	1	3	482 50
National Defence.....	1			1	474 52
Public Works.....	1	1		2	273 60
Trade and Commerce.....	5	1		6	230 91
Totals.....	40	16	12	68	11,288 96

BRITISH COLUMBIA BOARD

Agriculture.....		1	1	2	426 00
Immigration and Colonization.....		1		1	19 50
Trade and Commerce.....		1		1	3 00
Indian Affairs.....	3	1		4	665 10
Interior.....	12	9	2	23	2,304 71
Justice.....			1	1	1 62
Marine and Fisheries.....	21	5	6	32	6,150 77
Marine Biological Board of Canada.....		1		1	3 00
Mines.....		1		1	6 50
National Defence.....	1	6		7	87 28
National Revenue.....		5	1	6	948 25
Post Office.....		30		30	283 80
Public Works.....	21	21	2	44	3,435 48
Totals.....	58	82	13	153	14,335 01

PROVINCE OF PRINCE EDWARD ISLAND

Marine and Fisheries.....	1			1	130 59
Public Works.....		1		1	28 00
Railways and Canals— Canadian Government Railways.....	38	1		39	2,857 15
Totals.....	39	2		41	3,015 74

PROVINCE OF QUEBEC AND MISCELLANEOUS

Justice.....					2,186 40
Marine and Fisheries.....	6			6	10,766 68
National Defence.....	4			4	8,860 26
Public Works.....	3			3	1,454 63
Railways and Canals— Canals.....	4			4	3,874 70
Canadian Government Railways.....	176	22		198	48,007 88
Hudson Bay Railway.....					441 92
Totals.....	193	22		215	70,335 83

GOVERNMENT EMPLOYEES Compensation Act, Chapter 15, 1918—*Concluded*

PROVINCE OF ONTARIO (MEDICAL AID)

Department	Number of Claims				Disbursements
	Compensation and Medical Aid	Medical Aid only	Pension	Total	
					\$ cts.
Interior.....		3		3	26 90
Marine and Fisheries.....		2		2	7 50
Mines.....		3		3	33 00
National Defence.....		4		4	36 00
Public Printing and Stationery.....		1		1	8 00
Public Works.....		1		1	15 00
Railways and Canals—					
Canals.....		48		48	334 50
Secretary of State.....		1		1	12 00
Trade and Commerce.....		2		2	66 00
Totals.....		65		65	538 90

SUMMARY

Agriculture.....	2	1	3	6	2,395 52
Finance.....	1			1	54 00
Immigration and Colonization.....	2			2	153 00
Indian Affairs.....	3	1	1	5	1,085 10
Interior.....	54	25	13	92	13,005 36
Justice.....			1	1	2,184 78
Marine and Fisheries.....	39	18	18	75	26,013 79
Marine Biological Board of Canada.....		1		1	3 00
Mines.....	1	6	2	9	1,544 84
National Defence.....	26	16	9	51	13,236 84
National Revenue.....		5	1	6	948 25
Post Office.....		30	2	32	1,183 80
Public Printing and Stationery.....	3	2		5	1,122 70
Public Works.....	86	41	21	148	21,098 90
Railways and Canals—					
Canals.....	87	57	29	173	28,565 05
Canadian Government Railways.....	1,416	469	172	2,057	226,041 60
Hudson Bay Railway.....	86	128	1	215	10,960 00
Hudson Bay Railway Terminals.....	4			4	698 15
Secretary of State.....		1		1	12 00
Soldiers' Civil Re-establishment.....	4		10	14	2,955 49
Trade and Commerce.....	11	5		16	2,419 57
Totals.....	1,822	809	283	2,914	351,312 18

HUDSON BAY RAILWAY AND TERMINALS

Summary of Expenditure to March 31, 1928

—	Cost to	Net expenditure	Total cost
	March 31, 1927	fiscal year 1927-28	to March 31, 1928
	\$ cts.	\$ cts.	\$ cts.
1. Railway.....	18,106,023 34	2,674,224 57	20,780,247 91
2. Port Nelson Terminals.....	6,274,582 64	364 76	6,274,217 88
3. Port Churchill Terminals.....	17,307 46	880,643 30	897,950 76
Total.....	24,397,913 44	3,554,503 11	27,952,416 55

HUDSON BAY RAILWAY—Expenditure to March 31, 1928

Year	Capital		Deficits during operations		Total cost
	Schedule "F" Public Accounts	Schedule "K" Public Accounts	Amounts chargeable to appropriations under collection of Revenue	Schedule "K"	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
1909	92,427 83				92,427 83
1910	53,042 63				53,042 63
1911	184,149 81				184,149 81
1912	159,632 00				159,632 00
1913	1,009,024 52				1,009,024 52
1914	3,071,631 22				3,071,631 22
1915	3,256,074 39				3,256,074 39
1916	2,981,425 47				2,981,425 47
1917	1,792,190 39				1,792,190 39
1918	1,288,789 61				1,288,789 61
1919	641,318 69				641,318 69
1920	247,153 67				247,153 67
1921			*51,585 17		195,568 50
1922	61,563 43		*22,484 42		22,484 42
1923	13,824 94		*49,397 98		110,961 41
1924	183,250 35	27,104 38	*26,293 27	111,924 37	40,118 21
1925	53,848 38	296,439 06		51,567 80	322,279 10
1926		133,983 32		39,351 03	294,158 48
1927	2,808,549 31				173,334 35
1928	2,674,224 57				2,808,549 31
	19,970,117 11	457,526 76	149,760 84	202,843 20	2,674,224 57
					20,780,247 91

NOTE.—Above items under "Schedule K" in Public Accounts form part of cash loans to Canadian National Railways.

*These items form part of Canadian Government Railways deficits shown elsewhere under heading of "Government expenditure relative to Railways."

PORT NELSON AND FORT CHURCHILL TERMINALS—Expenditure to March 31, 1928

	Port Nelson		Fort Churchill	
	Capital	Amounts chargeable to appropriations under collection of Revenue	Capital	Amounts chargeable to appropriations under collection of Revenue
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1913	90,038 63			
1914	1,427,086 03			
1915	1,517,669 60			
1916	1,905,706 30			
1917	812,089 55			
1918	590,909 39			
1919	78,760 89			
1920	11,545 19			
1921	121,063 71			
1922	34,769 87			
1923	27,802 56			
1924	24,621 93			
1925	2,184 04			
1926	2,484 07	20,587 31		
1927	1,548 80	13,429 71	16,905 09	402 37
1928	364 76		880,643 30	
	6,240,200 86	34,017 02	897,548 39	402 37

HUDSON BAY RAILWAY (Railway only)—Statement showing Expenditure to March 31, 1928, Classified

Classification of expenditure	Total expended to fiscal year ending March 31, 1927		Expended during fiscal year 1927-28		Total construction cost	
	\$	cts.	\$	cts.	\$	cts.
<i>Road—</i>						
1. Engineering.....	1,601,712	92	138,950	45	1,740,663	37
2. Land for transportation purposes.....	49,194	16	6,517	15	55,711	31
3. Grading.....	7,264,567	39	145,770	65	7,410,338	04
6. Bridges, trestles and culverts.....	1,630,833	06	276,849	04	1,907,682	10
8. Ties.....	1,899,117	82	494,125	24	2,393,243	06
9. Rails.....	2,179,914	77	56,534	20	2,236,448	97
10. Other track material.....	511,025	11	39,646	04	471,379	07
11. Ballast.....	657,693	76	438,940	76	1,096,634	52
12. Track laying and surfacing.....	805,247	55	640,322	40	1,445,569	95
13. Right-of-way fences.....	762	85	27	70	790	55
14. Snow fences and snowsheds.....	156	41	3,527	42	3,683	83
15. Crossings and signs.....	4,304	70	1,621	87	5,926	57
16. Station and office buildings.....	19,976	17	12,341	21	32,317	38
17. Roadway buildings.....	14,803	40	50,762	23	65,565	63
18. Water stations.....	271,539	50	76,081	42	347,620	92
19. Fuel stations.....	47,846	15	14,506	09	62,352	24
20. Shops and enginehouses.....	304,771	42	180,445	29	485,216	71
21. Grain elevators.....						
22. Storage warehouses.....	394	95			394	95
23. Wharves and docks.....	669	55			669	55
24. Coal and ore wharves.....						
25. Gas producing plants.....						
26. Telegraph and telephone lines.....	260,766	41	79,747	75	340,514	16
27. Signals and interlockers.....	388	14	27	59	415	73
35. Miscellaneous structures.....	5,372	12			5,372	12
33. Power line poles, etc.....			998	06	998	06
37. Roadway machines.....	2,669	10	27,055	47	29,724	57
38. Roadway small tools.....	10,986	48	7,379	54	18,366	02
40. Revenue and operating expenses.....	368,835	86	22,110	73	390,946	59
41. Cost of road purchased.....	21,413	79			21,413	79
42. Reconstruction of road purchased.....						
43. Other expenditures—Road.....	2,996	63	1,715	97	4,712	60
44. Shop machinery.....	12,823	00	718	13	13,541	13
45. Power plant machinery.....						
46. Power substation apparatus.....						
47. Unapplied construction materials.....			20,495	87	20,495	87
Total Road.....	17,950,783	17	2,657,926	19	20,608,709	36
<i>Equipment—</i>						
51. Steam locomotives.....						
52. Other locomotives.....						
53. Freight-train cars.....						
54. Passenger-train cars.....						
55. Motor equipment of cars.....						
56. Floating equipment.....						
57. Work equipment.....	68,448	63			68,448	63
58. Miscellaneous equipment.....			795	20	795	20
Total equipment.....	68,448	63	795	20	69,243	83
<i>General Expenditures—</i>						
71. Organization expenses.....						
72. General officers and clerks.....	52,063	25	11,201	08	63,264	33
73. Law.....	200	00			200	00
74. Stationery and printing.....	1,778	87	3,397	17	5,176	04
75. Taxes.....						
76. Interest during construction.....						
77. Other expenditures—General.....	32,749	42	904	93	33,654	35
Total General Expenses.....	86,791	54	15,503	18	102,294	72
Total Construction Cost.....	18,106,023	34	2,674,224	57	20,780,247	91

WELLAND SHIP CANAL—Amounts expended on Construction to March 31, 1928

	Year ending	Capital	
		\$	cts.
Government expenditure.....	1914	994,257	60
“ “.....	1915	4,074,200	69
“ “.....	1916	4,892,105	15
“ “.....	1917	3,513,769	82
“ “.....	1918	1,235,046	59
“ “.....	1919	1,823,875	96
“ “.....	1920	3,499,963	35
“ “.....	1921	5,070,297	57
“ “.....	1922	4,279,815	61
“ “.....	1923	4,776,393	84
“ “.....	1924	6,465,512	55
“ “.....	1925	9,909,636	95
“ “.....	1926	11,960,465	11
“ “.....	1927	13,846,472	92
“ “.....	1928		
		14,188,495	28
Less sale of materials.....		465,569	53
		13,722,925	75
Total.....		90,064,739	46

Expenditure as above..... \$90,064,739 46

To which add the preliminary expenditure for survey, borings, etc., charged to Welland canal capital as follows—

1905-06.....	\$ 13,231	97
1906-07.....	10,825	27
1907-08.....	8,300	34
1908-09.....	19,993	37
1909-10.....	9,979	91
1910-11.....	21,229	35
1911-12.....	23,138	60
1912-13.....	112,890	92
1915-16.....	17,627	36
	237,217	09

Total cost of Welland Ship Canal to March 31, 1928..... \$90,301,956 55

INCOME EXPENDITURE Relative to Railways to March 31, 1928

Railways	Previous years		1927-28		Total	
	\$	cts.	\$	cts.	\$	cts.
Annapolis and Digby Railway.....	8,381	82			8,381	82
Intercolonial Railway.....	280,000	00			280,000	00
Miscellaneous expenditure.....	8,970,159	42	1,009,697	16	9,979,856	58
Total.....	9,258,541	24	1,009,697	16	10,268,238	40
Quebec Bridge.....	203,931	57			203,931	57
Grand total.....	9,462,472	81	1,009,697	16	10,472,169	97

QUEBEC BRIDGE—Amounts expended on Construction

	Year	Capital		Income	
		\$	cts.	\$	cts.
Government expenditure.....	1909			67,588	05
“ “	1910			111,788	02
“ “	1911	227,563	40		
“ “	1912	603,293	07		
“ “	1913	1,512,825	96		
“ “	1914	2,604,105	61		
“ “	1915	2,816,305	10		
“ “	1916	2,746,813	70		
“ “	1917	2,733,677	00		
“ “	1918	931,278	01		
“ “	1919	656,761	79		
“ “	1920	880	65		
“ “	1921			24,555	50
“ “	1923	344	70		
		14,831,398	29	203,931	57

Capital expenditure as above.....\$14,831,398 29

In this expenditure a total of \$91,188.10 has been credited,
being received for sale of scrap and used material
from the collapsed bridge.

Add amounts paid by authorities other than Appropriation
Acts—

Amount guaranteed by Act of 1903, Chapter 54.....\$ 6,424,781 00

Amount paid to the province of Quebec.....250,000 00

Amount paid to the city of Quebec.....300,000 00

Amount paid to Emile Tanguay, as per Supreme Court
award.....485 20

6,975,266 20

\$21,806,664 49

Less, amount received from Phoenix Bridge Co.....100,000 00

Total amount of Capital Expenditure.....\$21,706,664 49

To which add the expenditure under Income 1909, 1910 and

1921.....203,931 57

Also amount paid for subsidies during 1901, 1902 and 1903. 374,353 33

578,284 90

Total expenditure to March 31, 1923.....\$22,284,949 39

MARITIME Freight Rates—Expenditure Relative to Railways

	Previous Years	1927-28		Total	
		\$	cts.	\$	cts.
Eastern Lines.....		931,809	89	931,809	89
Atlantic, Quebec & Western Railway.....		9,974	20	9,974	20
Canada and Gulf Terminal Railway.....		890	39	890	39
Canadian Pacific Railway, including Fredericton and Grand Lake Coal and Railway, New Brunswick Coal and Rail- way Co.....		130,962	64	130,962	64
Cumberland Railway and Coal Company.....		13,597	03	13,597	03
Dominion Atlantic Railway.....		86,971	71	86,971	71
Maritime Coal, Railway and Power Company.....		10,980	96	10,980	96
Quebec Oriental Railway Company.....		4,905	52	4,905	52
Sydney and Louisburg Railway Company.....		150,408	00	150,408	00
Temiscouata Railway Company.....		12,964	11	12,964	11
Total.....		1,353,464	45	1,353,464	45
Eastern Lines deficits (other than occurring from Maritime Freight Rates Act).....		2,117,936	42	2,117,936	42
Grand total.....		3,471,400	87	3,471,400	87

Payments cover period from July 1, 1927, to December 31, 1927.

CAPITAL EXPENDITURE Relative to Railways to March 31, 1928

	Previous years		Year ending March 31, 1928		Total	
	\$	cts.	\$	cts.	\$	cts.
<i>Canadian Government Railways—</i>						
<i>Intercolonial Railway System—</i>						
Canada Eastern Railway.....	819,000	00			819,000	00
Cape Breton Railway.....	3,860,679	14			3,860,679	14
Drummond County Railway.....	1,464,000	00			1,464,000	00
Eastern Extension Railway.....	1,324,042	81			1,324,042	81
Montreal and European Railway.....	333,942	72			333,942	72
Oxford and New Glasgow Railway.....	1,949,063	21			1,949,063	21
Intercolonial Railway.....	136,826,448	32			136,826,448	32
Total.....	146,577,176	20			146,577,176	20
New Brunswick and Prince Edward Island Railway.....	861,847	83	63,418	77	925,266	60
Prince Edward Island Railway.....	13,276,674	49			13,276,674	49
International Railway of New Brunswick.....	2,963,021	87			2,963,021	87
National Transcontinental Railway.....	169,294,876	56	8,953	09	169,303,829	65
Moncton and Buctouche Railway.....	293,067	16			293,067	16
Salisbury and Albert Railway.....	437,647	60			437,647	60
St. Martin's Railway.....	302,045	64			302,045	64
Elgin and Havelock Railway.....	135,029	12			135,029	12
York and Carleton Railway.....	59,749	15			59,749	15
Quebec and Saguenay Railway.....	7,772,911	03			7,772,911	03
Caraquet and Gulf Shore Railway.....	711,767	38			711,767	38
Lotbiniere and Megantic Railway.....	360,008	39			360,008	39
Cape Breton Railway (extension).....	107,646	73			107,646	73
Hudson Bay Railway.....	17,295,892	54	2,674,224	57	19,970,117	11
Canadian Government Rys.—Rolling Stock.....	35,906,042	55			35,906,042	55
Canadian Government Rys.—Miscellaneous.....		345				345
<i>b</i> Quebec Bridge.....	21,706,664	49			21,706,664	49
Miscellaneous suspense.....		3,862				3,862
Total.....	418,066,276	13	2,746,596	43	420,812,872	56
<i>Other Railways and Miscellaneous—</i>						
Canadian Northern Railway.....	10,000,000	00			10,000,000	00
Annapolis and Digby Railway.....	660,683	09			660,683	09
<i>a</i> European and North American Railway.....	88,363	18			88,363	18
<i>a</i> Nova Scotia Railway.....	208,509	72			208,509	72
<i>c</i> Carleton Branch Railway.....	48,410	48			48,410	48
Canadian Pacific Railway.....	62,791,364	25	71	00	62,791,435	25
Hudson Bay Railway—Port Nelson and Fort Churchill Terminals.....	6,257,470	71	880,278	54	7,137,749	25
Yukon Territory Works, Stikine—Teslin Railway.....	283,323	55			283,323	55
North Railway.....	250,000	00			250,000	00
Governor General's cars.....	71,538	82			71,538	82
Miscellaneous expenditure.....	18,000	00			18,000	00
Total.....	498,743,939	93	3,626,945	97	502,370,885	90

a Amount paid between 1868 and 1873, inclusive, was transferred to Consolidated Fund.

b Adjusted to agree with Schedule F of the Public Accounts.

c This Railway, which cost \$88,410.48, was sold in 1893 to the City of St. John, N.B., for \$40,000.00 (Vic. Chap. 6).

GOVERNMENT EXPENDITURE RELATIVE TO RAILWAYS

RECAPITULATION of Expenditure and Revenue to March 31, 1928

	Capital		Revenue			Revenue received		
			Compassionate and miscellaneous	Improvements and betterments	Working expenses			
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Expenditure prior to Confederation.....	13,881,460	65						
Since Confederation—								
1868 to 1890 inclusive.....	105,592,016	89	43,639	97	45,661,435	22	39,107,792	60
1890 to 1891.....	1,184,317	34			3,949,263	73	3,181,888	56
1891 to 1892.....	417,425	73			3,748,597	77	3,136,393	51
1892 to 1893.....	712,917	44			3,288,629	62	3,262,505	62
1893 to 1894.....	585,749	01			3,226,208	13	3,179,019	57
1894 to 1895.....	376,814	83			3,197,846	17	3,129,450	37
1895 to 1896.....	324,774	72			3,254,442	64	3,140,678	47
1896 to 1897.....	204,624	31			3,195,959	58	3,060,074	38
1897 to 1898.....	270,990	85	1,400	00	3,507,248	88	3,313,847	10
1898 to 1899.....	1,112,348	47			3,696,612	31	3,940,570	11
1899 to 1900.....	3,309,130	42			4,665,228	06	4,774,161	87
1900 to 1901.....	3,922,989	37			5,739,051	54	5,213,381	24
1901 to 1902.....	5,386,611	24			5,861,099	54	5,918,990	43
1902 to 1903.....	3,083,680	86			6,474,134	20	6,584,598	77
1903 to 1904.....	2,619,059	86			7,599,958	57	6,627,255	51
1904 to 1905.....	6,125,481	79			8,906,154	35	7,050,892	11
1905 to 1906.....	6,102,565	74			7,893,653	49	7,950,552	97
1906 to 1907.....	7,174,370	17			6,328,745	65	6,509,186	49
1907 to 1908.....	23,684,005	25			9,595,295	43	9,534,569	04
1908 to 1909.....	29,414,227	34			9,764,586	51	8,894,420	42
1909 to 1910.....	21,505,975	91			9,095,903	96	9,647,963	71
1910 to 1911.....	24,532,466	18	1,000	00	10,037,878	77	10,249,394	38
1911 to 1912.....	23,108,805	52	3,950	00	11,074,852	80	11,034,165	83
1912 to 1913.....	17,375,968	10	4,500	00	12,499,925	65	12,442,203	46
1913 to 1914.....	21,628,095	15	11,300	00	13,559,225	45	13,394,317	37
1914 to 1915.....	22,115,663	92	23,000	00	12,474,453	85	12,149,357	32
1915 to 1916.....	21,153,255	19	3,400	00	17,891,484	65	18,427,908	65
1916 to 1917.....	12,003,649	70	4,000	00	1,070,334	64	24,725,571	90
1917 to 1918.....	34,699,416	96	15,100	00	33,400,460	45	27,240,956	87
1918 to 1919.....	40,193,180	64	17,000	00	43,889,626	07	38,013,725	69
1919 to 1920.....	11,593,148	00	8,500	00	48,194,709	86	41,402,061	36
1920 to 1921.....	5,096,534	94	2,000	00	43,770,971	10	36,814,349	70
*1921 to 1922.....	4,553,638	03			6,326,800	47		
1922 to 1923.....	1,052,292	72			5,695,669	05		
1923 to 1924.....	315,943	52						
1924 to 1925.....	57,499	27						
1925 to 1926.....	40,580	26			a	20,537	31	
1926 to 1927.....	2,828,343	65			a	13,832	08	
1927 to 1928.....	3,626,945	97						
	480,686,221	41	138,789	97	2,586,230	21	442,226,104	81
							391,866,392	09

	\$	cts.
Total amount of Capital Expenditure.....	480,686,221	41
Cost of Quebec bridge to March 31, 1925.....	21,706,664	49
Miscellaneous expenditure in 1914.....	18,000	00
	502,410,885	90
Less amount received from the City of St. John, N.B., as purchase price of Carleton Branch Railway.....	40,000	00
	502,370,885	90

*Under authority of Item 341, Chapter 54, 1921, the receipts and revenues of the Canadian Government Railways were from, Jan. 1, 1921, applied by the management towards payment of working expenditures.

a Revenue expenditure of Port Nelson Terminals.

II.—STATEMENT showing Subsidies paid to March 31, 1928

Subsidies Voted		Number	Railways	July 1, 1883, to March 31, 1922		Total
Authority	Amount			\$	cts.	
47 Vic., chap. 8	51,200 00	1	Albert Southern Railway, N.B.	50,460 00		50,460 00
52 " " 3	—	2	Alberta Central Railway, Alta.	404,480 00		404,480 00
3-4 Geo. V, chap. 46	—	3	Algoma Central and Hudson Bay Ry., Ont.	2,048,704 00		2,048,704 00
2 Geo. V, chap. 48	—	4	Algoma Eastern Ry. Co., formerly Manitoulin and North Shore Ry. Co., Ontario	547,648 00		547,648 00
2 Geo. V, chap. 48	—	5	Atlantic and Lake Superior Ry., Quebec	163,418 19		163,418 19
1 Ed. VII, chap. 7	—	6	Atlantic and Northwestern Railway	3,732,000 00		3,732,000 00
37 Vic., chap. 14	186,600 annual-ly for 20 years	7	Atlantic, Quebec and Western Ry. Co., Quebec	902,800 00		902,800 00
48-9 " " 58	—	8	Baie des Chaleurs Railway, Quebec	620,000 00		620,000 00
6 Ed. VII, chap. 43	932,800 00	9	Bay of Quinte Railway, Ontario, now Canadian National Ry.	141,722 45		141,722 45
9-10 " " 51	—	10	Beauharnois Junction Railway, Quebec	62,400 00		62,400 00
46 Vic., chap. 25	—	11	Belleville and North Hastings Railway, Ontario	21,888 00		21,888 00
47 " " 8	320,000 00	12	Brantford, Waterloo and Lake Erie Ry., Ontario	57,600 00		57,600 00
52 " " 3	300,000 00	13	Brookville, Westport and Sault Ste. Marie Railway, Ontario, now Canadian National Ry.	140,800 00		140,800 00
62-3 " " 7	—	14	Bruce Mines and Algoma Railway, Ontario	53,920 00		53,920 00
63-4 " " 8	—	15	Buctouche and Moncton Railway, New Brunswick	101,600 00		101,600 00
6 Ed. VII, chap. 43	—	16	Canada Atlantic Railway, Ontario	282,355 20		282,355 20
50-1 Vic., chap. 24	62,400 00	16	Canada Central Ry.	1,525,250 00		1,525,250 00
56 " " 2	—	17	Canada Eastern Ry., formerly Northern and Western Ry., New Brunswick, including also Chatham Branch Ry.	374,839 84		374,839 84
48-9 " " 59	22,400 00	18	Canada and Gulf Terminal Ry. Co.	210,053 59		210,053 59
49 " " 10	27,600 00	19	Canadian Northern Quebec Ry. Co., formerly Great Northern Ry., Quebec	1,265,357 14		1,265,357 14
50-1 " " 24	128,000 00	20	Canadian Northern Alberta Ry. Co., Alberta	3,120,000 00		3,120,000 00
48-9 " " 59	128,000 00	21	Canadian Northern Ontario Ry. Co.	14,485,635 20		14,485,635 20
54-5 " " 8	12,800 00	22	Canadian Northern Ry. Co., Ontario, Manitoba, and North West Territories	1,909,132 00		1,909,132 00
1 Ed. VII, chap. 7	53,920 00	23	Canadian Northern Pacific Ry. Co., British Columbia	5,987,520 00		5,987,520 00
4 " " 34	96,000 00	24	Canadian Northern Quebec Ry., formerly Chateauguay and Northern Ry., Quebec	391,819 75		391,819 75
49 Vic., chap. 10	10	25	Canadian Pacific Ry. Co., British Columbia, (Crow's Nest Pass)	3,404,720 00		3,404,720 00
50-1 " " 24	6,400 00	26	Canadian Pacific Ry. Co. (Dymont Branch)	22,336 00		22,336 00
48-9 " " 59	96,000 00	27	Canadian Pacific Ry., Bridge at Edmonton, Alberta	126,000 00		126,000 00
49 " " 10	38,400 00	28	Canadian Pacific Ry., Gimli to Icelandic River Bridge	80,032 00		80,032 00
50-1 " " 24	180,000 00	29	Can. Pac. Ry. Co. (Kootenay and Arrowhead Branch)	153,866 00		153,866 00
43 " " 16	1,525,250 00	30	Can. Pac. Ry. Co., Moose Jaw northwesterly	485,474 27		485,474 27
57-8 " " 4	40,000 00	31	Can. Pac. Ry. Co., Bridge at Outlook	115,000 00		115,000 00
62-3 " " 7	24,439 84	32	Can. Pac. Ry. Co. (Pheasant Hills Branch)	435,200 00		435,200 00
48-9 " " 59	320,000 00	33	Can. Pac. Ry. Co. (Pipestone Branch)	160,000 00		160,000 00
49 " " 10	210,053 59	34	Can. Pac. Ry. Co. (Revelstoke to Arrow Lake)	80,000 00		80,000 00
7-8 Ed. VII, chap. 63	210,053 59	35	Can. Pac. Ry. Co. (Selkirk Branch)	83,200 00		83,200 00
47 Vic., chap. 8	32,000 00	36	Can. Pac. Ry. Co. (Staynerville Branch)	13,024 00		13,024 00
49 " " 10	32,000 00	37	Can. Pac. Ry. Co. (Teulon to Icelandic River)	112,000 00		112,000 00
52 " " 3	22,400 00	38	Can. Pac. Ry. Co. (Waskada Branch)	64,000 00		64,000 00
57-8 " " 4	96,000 00	39	Can. Pac. Ry., Winnipeg to Gimli, Man.	34,522 43		34,522 43
60-1 " " 4	164,500 00	40	Canadian Pacific Extensions	1,500,000 00		1,500,000 00
62-3 " " 7	245,465 00	41	Cap de la Magdeleine Railway, Quebec	7,424 00		7,424 00
6-7 Ed. VII, chap. 40	86,468 03	42	Cape Breton Extension Railway, Nova Scotia	196,800 00		196,800 00
7-8 " " 63	621,100 80					
2 Geo. V, chap. 7	—					
3-4 " " 10	—					
6-7 Ed. VII, chap. 40	—					
7-8 " " 63	—					
3-4 Geo. V, chap. 10	1,580,800 00					
62-3 Vic. chap. 7	385,724 00					
63-4 " " 8	6,300,000 00					
2 Geo. V, chap. 9	—					
63-4 Vic., chap. 8	341,819 75					
3 Ed. VII, chap. 57	50,000 00					
60-61 Vic., chap. 5	3,630,000 00					
63-4 Vic., chap. 8	32,400 00					
2 Geo. V, chap. 48	126,000 00					
3-4 " " 46	80,032 00					
4 Ed. VII, chap. 34	153,866 00					
3-4 Geo. V, chap. 46	485,474 27					
2 " " 48	115,000 00					
3 Ed. VII, chap. 57	435,200 00					
62-3 Vic., chap. 7	160,000 00					
55-6 " " 5	80,000 00					
1 Ed. VII, chap. 7	83,200 00					
6-7 " " 40	13,440 00					
6 " " 43	112,000 00					
63-4 Vic., chap. 8	64,000 00					
7-8 Ed. VII, c. 63	34,522 43					
48-9 Vic., chap. 58	1,500,000 00					
57-8 " " 4	9,600 00					
62-3 " " 7	196,800 00					
7-8 Ed. VII, chap. 63	—					

II.—STATEMENT showing Subsidies paid to March 31, 1928—Continued

Subsidies Voted		Number	Railways	July 1, 1883, to March 31, 1922		Total	
Authority	Amount			\$	cts.	\$	cts.
46 Vic., chap. 25	115,200 00	43	Caraquet Railway, New Brunswick.....	224,000 00		224,000 00	
47 " " 8	78,800 00						
50-1 " " 24	32,000 00						
51 Vic., chap. 3	83,612 54	44	Central Railway, New Brunswick.....	226,012 54		226,012 54	
52 " " 3							
53 " " 2							
2 Geo. V, chap. 48								66,560 00
Appn., Act. 2, 1918	175,000 00	46	Central Canada Railway.....	175,000 00		175,000 00	
6-7 Ed. VII, c. 40	—	47	Central Ontario Railway Co., Ontario, now Canadian National Railway.....				
—	—	48	Coast Line of Nova Scotia (Halifax and Yarmouth Ry.), now Canadian National Ry.....	160,000 00		160,000 00	
6 Ed. VII, chap. 43	—	49	Colchester Coal and Railway Co., Nova Scotia....	12,800 00		12,800 00	
53 Vic., chap. 2	112,000 00	50	Columbia and Kootenay Ry. Co., B.C.....	88,800 00		88,800 00	
50-1 " " 24	44,800 00	51	Cornwallis Valley Railway Co., Nova Scotia.....	44,800 00		44,800 00	
52 " " 3	44,800 00	52	Cumberland Railway and Coal Co., Nova Scotia..	39,850 00		39,850 00	
50-1 " " 5							
55-6 " " 24							
50-1 " " 24							
50-1 " " 24	96,000 00	53	Dominion Coal Co., Nova Scotia.....	87,808 00		87,808 00	
52 " " 3	14,400 00	54	Dominion Lime Co., Quebec.....	15,360 00		15,360 00	
53 " " 2	76,800 00	55	Drummond County Railway, Quebec.....	423,936 00		423,936 00	
57-8 " " 4	96,000 00						
3-4 Geo. V, chap. 46	—	56	East Richelieu Valley Railway Co., Quebec (Quebec, Montreal and Southern Ry.).....	69,952 00		69,952 00	
6-7 Ed. VII, c. 40	—	57	Edmonton, Dunvegan and British Columbia Railway, Alberta.....	338,382 48		338,382 48	
46 Vic., chap. 25	38,400 00	58	Edmonton, Yukon and Pacific Railway Co., Alberta, now Canadian National Ry.....	91,200 00		91,200 00	
51 " " 3	44,252 82	59	Elgin, Petitecodiac and Havelock Railway, N.B....	82,652 82		82,652 82	
47 " " 8	96,000 00	60	Erie and Huron Railway, Ontario.....	96,000 00		96,000 00	
47 " " 6	750,000 00	61	Esquimalt and Nanaimo Railway, British Columbia.....	1,520,560 00		1,520,560 00	
2 Geo. V, chap. 48	—	62	Fredericton and Grand Lake Railway Co., New Brunswick.....	216,576 00		216,576 00	
52 Vic., chap. 3	30,000 00	63	Fredericton and St. Mary's Ry., Bridge Co., New Brunswick.....	30,000 00		30,000 00	
60-61 " " 4	500,000 00	64	Grand Trunk Ry. Co., Victoria Jubilee Bridge, Quebec.....	500,000 00		500,000 00	
63 " " 3							
56 " " 2							
7-8 Ed. VII, c. 63	—	65	Grand Trunk, Georgian Bay and Lake Erie Ry., Ontario.....	39,744 00		39,744 00	
49 Vic., chap. 10	32,000 00	66	Grand Trunk Pacific Ry. Co.....	1,220,480 00		1,220,480 00	
50-1 " " 24	96,000 00	67	Great Eastern Railway, Quebec.....	40,345 00		40,345 00	
56 " " 2	64,000 00						
53 " " 2	37,500 00	68	Guelph Junction Railway, Ontario.....	46,000 00		46,000 00	
50-1 " " 24	51,200 00	69	Gulf Shore Railway Company, New Brunswick....	53,699 20		53,699 20	
57-8 " " 4	—	69	Ha-Ha-Bay Railway Co., Quebec.....	231,462 00		231,462 00	
9-10 Ed. VII, c. 51	—	70	Halifax and Southwestern Railway Co., Nova Scotia, now Canadian National Ry.....	1,238,450 93		1,238,450 93	
50-1 Vic., chap. 24	9,600 00	71	Harvey Branch Railway Co., New Brunswick....	5,553 57		5,553 57	
49 " " 10	108,000 00	72	Hereford Railway, Quebec.....	155,200 00		155,200 00	
52 " " 3	48,000 00	73	International Railway, Quebec.....	156,800 00		156,800 00	
46 " " 25	156,800 00						
53 " " 3							
7-8 Ed. VII, c. 63	—	74	International Ry. of New Brunswick, formerly Restigouche and Western Ry. Co.....	726,080 00		726,080 00	
47 Vic., chap. 8	160,000 00	75	Inverness Railway and Coal Co.....	368,545 97		368,545 97	
52 " " 3	38,400 00	76	Irondale, Baneroff and Ottawa Railway, Ontario, now Canadian National Ry.....	144,000 00		144,000 00	
49 " " 10							
50-1 " " 24							
6 Ed. VII, chap. 43							
46 Vic., chap. 24	89,600 00	77	Joggins Railway, Nova Scotia.....	37,500 00		37,500 00	
49 " " 10	70,000 00	78	Kettle Valley Ry., British Columbia.....	2,174,190 72		2,174,190 72	
50-1 " " 24	12,800 00	79	Kingston, Napanee and Western Ry., formerly Napanee, Tamworth and Quebec Ry., Ontario, now Canadian National Ry.....	208,732 80		208,732 80	
52 " " 3	32,000 00						
55-6 " " 5	64,000 00						
47 " " 8	480,000 00						
6 Ed. VII, chap. 43	—	80	Kingston and Pembroke Ry., Ontario.....	48,000 00		48,000 00	
2 " " 48	—	81	Klondike Mines Railway.....	197,184 00		197,184 00	
50-1 Vic., chap. 23	118,400 00	82	Kootenay Central Ry. Co., British Columbia....	1,065,856 00		1,065,856 00	
55-6 " " 4	224,000 00	83	Lake Erie and Detroit River Railway, Ontario....	475,851 00		475,851 00	
62-3 " " 5							
2 Geo. V, chap. 48	—	84	Lake Erie and Northern Ry. Co., Ontario.....	320,192 00		320,192 00	
50-1 Vic. " " 24	65,022 00	85	Lake Temiscamingue Colonization Ry., Quebec..	310,335 95		310,335 95	
57-8 " " " 4	274,940 00						

II.—STATEMENT showing Subsidies paid to March 31, 1928—Continued

Subsidies Voted		Number	Railways	July 1, 1883, to March 31, 1922		Total
Authority	Amount			\$	cts.	
49 Vic., chap. 10	11,200 00	86	L'Assomption Railway, Quebec.....	11,200 00		11,200 00
50-1 " " 24	217,000 00	87	Laurentian Railway, now Canadian National Ry..	217,600 00		217,600 00
48-9 " " 50	44,800 00	88	Leamington and St. Clair Ry., Ontario.....	51,200 00		51,200 00
50-1 " " 24	6,400 00					
6-7 Ed. VII, c. 40	—	89	Liverpool and Milton Ry., now Canadian National Ry.....	32,000 00		32,000 00
45 Vic., chap. 14	—	90	Lindsay, Bobcaygeon, Pontypool Ry. Co., Ontario.....	185,173 06		185,173 06
55-6 " " 5	48,000 00	91	Lotbiniere and Megantic Railway, Quebec.....	96,000 00		96,000 00
57-8 " " 4	48,000 00					
7-8 Ed. VII, c. 63	—	92	Maganctawan River Railway Co., Ontario.....	3,552 00		3,552 00
—	—	93	Maritime Coal and Railway Co.....	3,200 00		3,200 00
—	—	94	Massawippi Valley Railway Co., Quebec.....	5,376 00		5,376 00
—	—	95	Midland Railway Co., Nova Scotia.....	399,060 40		399,060 40
—	—	96	Middleton and Victoria Beach Railway Co., Nova Scotia, now Canadian National Ry.....	125,760 00		125,760 00
3 Ed. VII, chap. 57	—	97	Minudic Coal Co., Nova Scotia.....	18,544 00		18,544 00
56 Vic., chap. 2	67,200 00					
57-8 " " 4	38,400 00	98	Montfort Colonization Railway, Quebec, now Canadian National Ry.....	167,440 00		167,440 00
60-1 " " 4	66,000 00					
48-9 " " 50	30,000 00					
50-1 " " 24	64,000 00	99	Montreal and Champlain Junction Railway, Quebec.....	103,600 00		103,600 00
51-1 " " 3	9,600 00					
49 " " 10	32,000 00	100	Montreal and Lake Maskinonge Railway, Quebec..	41,280 00		41,280 00
53 " " 2	10,200 00					
50-1 " " 24	—					
53 " " 2	192,000 00	101	Montreal and Ottawa Railway, Ontario.....	192,000 00		192,000 00
54-5 " " 8	—					
57-8 " " 4	—					
1 Ed. VII, chap. 7	—	102	Montreal and Province Line Railway, Quebec....	58,560 00		58,560 00
48-9 Vic., chap. 59	72,000 00	103	Montreal and Sorel Railway, Quebec (Quebec, Montreal and Southern Ry.).....	93,757 57		93,757 57
53 " " 2	40,000 00					
53 Vic., chap. 2	361,270 00	104	Montreal and Western Railway, Quebec.....	361,270 00		361,270 00
57-8 " " 4	121,600 00	105	Nakusp and Slocan Railway, British Columbia....	117,760 00		117,760 00
Ed. VII, chap. 43	—	106	Napierville Junction Railway Co., Quebec.....	173,440 00		173,440 00
—	—	107	New Brunswick Coal and Railway Co., New Brunswick.....	48,000 00		48,000 00
48-9 Vic., chap. 59	118,400 00	108	New Brunswick and Prince Edward Island Ry....	113,440 00		113,440 00
55-6 " " 5	40,000 00	109	New Glasgow Iron, Coal and Railway Co., Nova Scotia.....	39,840 00		39,840 00
Ed. VII, chap. 57	—	110	Nicola, Kamloops and Similkameen Coal Railway Co.....	300,800 00		300,800 00
7-8 " " 63	—	111	North Shore Railway Co., formerly Beersville Coal and Railway Co.....	27,616 00		27,616 00
—	—	112	Northern Colonization Railway Co., Quebec.....	355,200 00		355,200 00
2 Geo. V, chap. 47	—	113	Northern New Brunswick and Seaboard Railway Co., New Brunswick.....	108,160 00		108,160 00
3-4 " " 46	—					
46 Vic., chap. 26	660,000 00	114	Northern and Pacific Junction Railway, Ontario..	1,320,000 00		1,320,000 00
53 " " 2	660,000 00					
55-6 " " 5	240,000 00	115	Nova Scotia Central Railway Co., Nova Scotia, now Canadian National Ry.....	235,200 00		235,200 00
61 " " 6	—					
56 " " 2	32,000 00	116	Ontario, Belmont and Northern Ry. Co., Ontario (Marmora Ry. and Mining Co.), now Canadian National Ry.....	30,720 00		30,720 00
53 Geo. V, chap. 2	99,200 00	117	Orford Mountain Railway Company, Quebec.....	202,926 50		202,926 50
3 Ed. VII, chap. 2	—					
53 Vic., chap. 2	22,400 00	118	Oshawa Railway and Navigation Co., Ontario....	22,400 00		22,400 00
55-6 " " 5	—	119	Ottawa, Arnprior and Parry Sound Ry., Ontario..	779,712 00		779,712 00
—	—	120	Ottawa and New York Railway Company, Ontario.....	262,384 00		262,384 00
52 Vic., chap. 3	320,000 00					
57-8 " " 6	64,000 00	121	Ottawa, Northern and Western Railway, Quebec, formerly Ottawa and Gatineau Valley Railway.....	414,931 20		414,931 20
60-1 " " 4	—					
52 " " 3	128,000 00	122	Parry Sound and Colonization Railway, Ontario..	152,800 00		152,800 00
57-8 " " 4	64,000 00					
—	—	123	Pembroke Southern Railway, Ontario.....	64,000 00		64,000 00
55-6 Vic., chap. 5	—	124	Phillipsburg Junction Ry., Quarry Co., Quebec....	23,712 00		23,712 00
47 " " 8	272,000 00					
51 " " 3	41,000 00	125	Pontiac Pacific Junction Railway, Quebec.....	193,578 00		193,578 00
53 " " 2	24,000 00					
60-1 " " 4	212,500 00	126	Pontiac Pacific and Ottawa and Gatineau Ry. Co. (Interprovincial Bridge over Ottawa River)....	212,500 00		212,500 00
63-4 " " 2	—					
52 " " 3	19,200 00	127	Pontiac and Renfrew Railway, Ontario.....	13,600 00		13,600 00
51 " " 3	287,200 00	128	Port Arthur, Duluth and Western Ry., Ontario now Canadian National Ry.....	271,200 00		271,200 00
53 " " 2	—					
62-3 " " 7	1,000,000 00	129	Quebec Bridge Co., Quebec.....	374,353 33		374,353 33
63-4 " " 8	—					
47 " " 8	60,342 00					
51 " " 3	—	130	Quebec Central Ry., Quebec.....	585,038 90		585,038 90
53 " " 2	288,000 00					
7-8 Ed. VII, c. 63	—					

II.—STATEMENT showing Subsidies paid to March 31, 1928—Concluded

Subsidies Voted		Number	Railways	July 1, 1883,	Total
Authority	Amount			to March 31, 1922	
	\$			\$	
	cts.			cts.	cts.
45 Vic., chap. 14	384,000 00	131	Quebec and Lake St. John Railway, Quebec, now Canadian National Ry.....	1,261,463 50	1,261,463 50
46 " " 25	80,000 00				
48-49 " " 59	96,000 00				
49 " " 10	186,295 00				
50-1 " " 24	28,800 00				
51 " " 3	96,000 00				
52 " " 3	64,000 00				
53 " " 2	40,000 00				
54-5 " " 8	5,250 00				
57-8 " " 4	44,800 00				
52 " " 3	96,000 00	132	Quebec, Montmorency, and Charlevoix Railway Co., Quebec.....	96,000 00	96,000 00
56 " " 3	—				
7-8 Ed. VII, c. 51	—	132½	Quebec, Montreal and Southern Railway Co.—See South Shore Ry., Quebec.		
—	—	134	Quebec and Saguenay Railway Co., Quebec.....	248,801 28	248,801 28
52 Vic., chap. 3	162,200 00	135	Schomberg and Aurora Railway Co., Ontario.....	46,144 00	46,144 00
2 Geo. V, chap. 48	—	135	Shuswap and Okanagan Railway, British Columbia	163,200 00	163,200 00
50-1 Vic., chap. 24	54,400 00	136	Southampton Railway Co., New Brunswick.....	81,280 00	81,280 00
7-8 Ed. VII, c. 63	—	137	South Norfolk Railway, Ontario.....	54,400 00	54,400 00
50-1 Vic., chap. 24	138,300 00	138	South Shore Railway (Quebec, Montreal and Southern), Quebec.....	529,442 00	529,442 00
55-6 " " 5	108,000 00	139	St. Catharines and Niagara Central Railway, Ontario.....	38,400 00	38,400 00
57-8 " " 4	108,800 00				
52 " " 3	375,000 00	140	St. Clair Frontier Tunnel Co., Ontario.....	375,000 00	375,000 00
2 Geo. V, chap. 48	—	141	St. John and Quebec Railway Co., New Brunswick.	1,005,902 42	1,005,902 42
53 Vic., chap. 2	57,600 00	142	St. Lawrence and Adirondack Railway, Quebec..	149,481 60	149,481 60
55-6 " " 5	25,024 00				
60-61 " " 4	—	143	St. Louis and Richibucto Railway, New Brunswick.....	22,400 00	22,400 00
47 " " 8	22,400 00				
—	—	144	St. Mary River Railway Co., Northwest Territories.....	148,094 00	148,094 00
7-8 Ed. VII, c. 63	—	145	St. Mary's and Western Ontario Railway Co., Ontario.....	67,709 00	67,709 00
7-8 " " 63	—	146	St. Maurice Valley Railway Co., Three Rivers to Grand'Mere, Quebec.....	173,120 00	173,120 00
56 Vic., chap. 2	—	146½	St. Stephen and Milltown Railway, New Brunswick.....	14,848 00	14,848 00
3-4 Geo. V, chap. 53	—				
45 Vic., chap. 14	240,000 00	147	Temiskaming and Northern Ontario Railway Co., Ontario.....	2,134,080 00	2,134,080 00
48-9 " " 58	258,000 00				
51 " " 3	109,000 00	148	Temiscouata Railway, New Brunswick and Quebec	645,950 00	645,950 00
53 " " 2	51,200 00				
7-8 Ed. VII, c. 63	—	149	Thessalon and Northern Railway Co., Ontario....	6,112 00	6,112 00
52 Vic., chap. 3	54,400 00	150	Thousand Islands Railway, Ontario.....	29,840 00	29,840 00
63-4 " " 8	—				
55-6 " " 5	—	151	Tilsonburg, Lake Erie and Pacific Railway, Ont...	150,071 48	150,071 48
57-8 " " 4	—				
60-1 " " 4	—	152	Tobique Valley Railway, New Brunswick.....	134,016 00	134,016 00
62-63 " " 7	—				
54-5 " " 8	9,600 00	153	Toronto, Grey and Bruce Railway, Ontario.....	14,656 00	14,656 00
53 " " 2	35,200 00				
55-6 " " 5	9,600 00	154	United Counties Railway Co., Quebec (Quebec, Montreal and Southern).....	188,816 00	188,816 00
59 " " 10	16,000 00				
56 " " 2	102,400 00	155	Vancouver and Lulu Island Railway Co., British Columbia.....	61,760 00	61,760 00
57-8 " " 4	102,400 00				
7-8 Ed. VII, c. 34	—	156	Waterloo Junction Railway, Ontario.....	32,800 00	32,800 00
53 Vic., chap. 5	35,200 00	157	West Ontario Pacific Railway and Ontario and Quebec Railway.....	256,000 00	256,000 00
49 " " 10	256,000 00				
53 " " 2	—	158	York and Carleton Railway, New Brunswick.....	32,896 00	32,896 00
62-3 " " 7	—				
47 " " 8	2,394,000 00	159	Provincial Govt. of Quebec—Quebec-Montreal....	2,394,000 00	2,394,000 00
Total.....				†78,785,471 09	78,785,471 09

†This amount does not include the subsidy of \$25,000,000 to the Canadian Pacific Railway, nor the amount of \$660,683.08 expended on the Annapolis and Digby Railway, both of which are included in Capital Account.

Agreement with Public Accounts 1927-28 as follows	\$	cts.
Above statement shows.....	78,785,471	09
Total as per Public Accounts.....	76,115,221	09

Difference..... 2,670,250 00

Difference is located as follows:—

Public Accounts Statement does not include, in Subsidy Account	\$	cts.
(a) Item 40 (part).....	970,000	00
(b) Item 46.....	175,000	00
(c) Item 16½.....	1,525,250	00

REPORT OF THE CHIEF ENGINEER OF THE DEPARTMENT OF RAILWAYS AND CANALS

SIR,—I have the honour to submit my annual report for the fiscal year ending March 31, 1928.

The canal system of Canada comprises a series of canals and canalized waters by which a total waterway of 1,831 miles has been opened to navigation. These canals may be considered under two main classes: the through St. Lawrence and Great Lakes route and the subsidiary canals or branches. By the former, communication with seaports is made possible for vessels of not more than 14 ft. draught which navigate the Great Lakes. The latter or branch system of canals serves for the most part the requirements of a merely local traffic.

The through water route between Montreal, at the head of ocean navigation, and Fort William, and Port Arthur, on the west shore of lake Superior, comprises 74 miles of canal, with forty-nine locks and 1,140 miles of river and lake waters, or a total of 1,214 miles. The minimum depth of water on this route, at normal low water level, is 14 feet. From Montreal to Duluth, at the southwest end of lake Superior, the total distance is 1,337 miles, and to Chicago 1,244 miles. Connection is made with the Canadian Pacific Railway from points west and south at Fort William and Port Arthur (6 miles apart). From Fort William, connection with the main transcontinental line of the Canadian National Railways is made by the branch line originally constructed by the Grand Trunk Pacific Railway, but now operated by the Canadian National Railways. At Port Arthur, the Canadian National Railways have an additional connection with points west and south *via* the old main line of the Canadian Northern Railway.

A full statement of the various canals and canalized waters now in operation, with their mileage, limiting dimensions, etc., is the subject of a separate departmental publication. "The Canals of Canada". A summary of this data is, however, appended to this report.

In the detailed report which follows, the various canal systems, etc., are taken up in the following order:—

1. The present St. Lawrence and Great Lakes route between Montreal and Lake Superior, including the Lachine, the Soulanges, the Cornwall, the Farran's Point, the Rapide Plat, the Galops, the Welland, the Welland Ship, and the Sault Ste. Marie canals.
2. The route from Montreal to Kingston *via* the Ottawa and Rideau rivers, including the Ste. Anne lock, the Carillon and Grenville and the Rideau canals.
3. The navigation of the Richelieu river from its junction with the St. Lawrence at Sorel to lake Champlain, including the St. Ours lock and the Chambly canal.
4. The route from lake Ontario to Georgian bay *via* the Trent river, including the Murray and both divisions of the Trent canal.
5. The St. Peters canal across the isthmus at the southerly end of Cape Breton island connecting the Bras d'Or lakes with the Atlantic ocean.
6. Miscellaneous works.

1. THE ST. LAWRENCE AND GREAT LAKES ROUTE

(a) LACHINE CANAL

This canal, which lies across the southeasterly portion of the island of Montreal, overcomes the Lachine rapids, between the harbour of Montreal and lake St. Louis. It is $8\frac{1}{2}$ miles long and has five locks with a minimum depth, at normal low water level, of 14 feet.

Navigation opened April 25 and closed December 12.

There were only two accidents of importance which occurred in the navigation of the canal during the year. On September 3 the ss. *Manon L.*, of the St. Lawrence Navigation Limited, in entering north lock 1 collided with the gates both of which were displaced and badly damaged. The further operation of this lock was delayed for three days. Navigation, however, was carried on without interruption through the south lock. All expenses in connection with this accident were defrayed by the owners of the vessel. On November 18, the yacht *Vidor*, downbound, struck and damaged the lower chord of "Black's Bridge". A delay to navigation of about twenty-four hours resulted. The bridge was repaired at the cost of the owners of the yacht.

Among the more important works of construction and maintenance attended to during the year the following may be noted:—

An emergency gate, 49 feet long by 20 feet 3 inches wide to be laid flat on the canal bottom immediately above lock 5, was constructed in the canal shops and transported to the site.

In connection with the new power-house, to be constructed at Côte St. Paul, a few preliminary operations were carried out. It is intended to continue this work early next season.

A heating system to serve the various buildings in the Mill Street yard was installed with a boiler located in a new concrete building at the south end of the new storehouse. Pipes have been laid to steam radiators in the new and old stores and in the machine shop, garage and oil house.

Along the four walls of north and south locks 2, four strips of concrete pavement 10 feet in width have been laid, an area of 8,000 square feet being covered.

New wooden floors were laid at Black's, Wellington, Seigneurs and Atwater bridges, on the roller bridge at the St. Paul Land and Hydraulic Company's basin and at the Rockfield bascule. Black's and Charlevoix bridges were sandblasted and painted. The usual temporary pontoon bridge was constructed across the upper end of Basin No. 2 for use during the extra-navigation season.

The wooden frames around eight of the sixteen openings of one of the Lachine weirs were renewed as well as the flooring over the head race of the weir at St. Gabriel lock.

Canal side walls were underpinned with dry masonry at three points—350 feet on the north side below lock 5, 90 feet on the north side at McCord street and 50 feet on the south wall of north Basin No. 1, below lock 2. Concrete underpinning was done along 731 feet of the south wall opposite the property of Crane Limited and a short distance below lock 4, and 20 feet of the south wall was rebuilt in dry masonry. Along the south side of the canal near the Canadian Pacific Railway bridge at Rockfield, for a distance of about 400 feet, all protruding points of rock were blasted off so that vessels can now safely pass this point without scraping.

The brick pavement on the wharf on the north side of Basin No. 2 was relaid, about 220 square yards being thus improved. Eighteen wooden snubbing posts were replaced by cast iron on the wing dam at Lachine. A new boom, 500 feet in length, was constructed and anchored along the south wall of the upper entrance.

Extensive repairs were made to the St. Patrick street pavement west of Côte St. Paul lock. The pipe railing on the north side of this street was replaced by a concrete wall.

The bed of the river St. Pierre was cleaned out during the summer between Ville St. Pierre and the siphon culvert and a large quantity of debris removed from the culvert outlet.

The floating plant, consisting of tug *Dandy*, dipper dredge *No. 2*, clam derrick *No. 2*, three dump scows, six flat scows, one coal scow, one sounding scow and six row boats, underwent the usual repairs while wintering in the Montreal Dry Dock and in Basin No. 2. The new hull for the tug *Dandy*, begun during the previous year, was completed and launched last August. Early in the season the basin opposite the terminal warehouse, as well as Basin No. 2, was thoroughly dredged out, about 1,680 cubic yards being removed from the two areas. 560 cubic yards was also dredged out in St. Gabriel Basin No. 4 and 2,600 cubic yards of hardpan removed from the canal bottom above Wellington bridge.

(b) SOULANGES CANAL

The entrance to this canal lies 16 miles west—or up-stream, of the upper end of the Lachine canal. The canal is 14 miles in length, has five locks, with a minimum depth of 15 feet, and extends from Cascades Point to Coteau Landing, overcoming the Cascades, Cedars, and Coteau rapids.

Navigation opened April 24 and closed December 10.

No accidents or delays to navigation occurred during the entire season of navigation.

Repairs and improvements carried out during the year included the following:—

Four lock gates were replaced. The lower sill of lock 2 was renewed. The space between the lock wall and grass plot at locks 4 and 5 and at the guard lock was paved in concrete, a total area of 2,040 square yards being thus treated. At the guard gate a semaphore was installed to indicate to eastbound vessels the condition at lock 4.

The pivot of bridge 2 was replaced and all bearing rollers and tracks were renewed. Bridge 3 received a coat of metalastic paint and at bridge 4 about forty-four of the bearing rollers and tracks were partly renewed.

At the upper and lower entrance walls, decayed and crushed rubbing fenders were replaced. A stone-filled crib, 12 feet by 20 feet, was added to the north face of the quarry wharf at Cascades Point. The canal banks were reinforced with about 1,400 cubic yards of riprap.

The operations at the quarry at Cascades Point for the year covered the supply of 1,483 cubic yards of one-man stone, 3,273 cubic yards of crushed stone, 505 cubic yards of screenings and 1,152 cubic yards of smaller screenings and sand. About half of the total output of the quarry was made use of at Baker's dam, at the Ste. Anne lock and on the Lachine canal.

The road on the north side of the canal between locks 1 and 3 was paved with watered macadam. The road on the south side, from lock 3 to the quarry was paved with asphalted macadam. Other roads in the vicinity of the canal were rolled and put in good condition.

About 150 rods of fencing between the canal and Quinlan properties was renewed with steel posts and woven wire, and along the line of the Birmingham property the fence was rebuilt with old material. From the canal superintendent's house westward, the fencing was renewed for a length of about 240 rods.

General repairs were made to the superintendent's lodging, to stores, shops and various other buildings and the travelling crane was extended on both sides of the gate mill.

The various units of the dredging fleet underwent the usual general repairs. Scow *No. 2* was totally rebuilt. The steam derrick was engaged during part of August and September in cleaning the canal bottom in the vicinity of the guard gate.

(c) CORNWALL CANAL

This canal, the foot of which lies at the westerly or upstream end of lake St. Francis, 31 miles from the head of the Soulanges canal, is $11\frac{1}{4}$ miles long, with six locks and a minimum depth of 14 feet. It surmounts the Long Sault rapids.

Navigation opened April 23 and closed December 10. The canal was opened again for the passage of the steamer *John Gehm* on December 14 to enable the owners to take the vessel to Buffalo for the winter. No serious delays to navigation occurred during the entire season. On one occasion, however, traffic was delayed for 10 hours when, on May 30, the steamer *Canmore*, collided with the lower south gate, breaking the anchor pin and carrying the gate out of the hollow quoin. The cost of the necessary repairs was met by the owners of the vessel, the Canada Steamships, Limited.

Traffic during the 1927 season, both as to number of vessels and tonnage carried, was the heaviest ever recorded.

Of repairs and improvements effected or in progress during the past year, the more extensive were as follows:—

Under contract with R. C. Sutherland, of Ottawa, the southeast masonry retaining wall of the Cornwall swing bridge, 238 feet in length, which had moved out into the canal about seven feet in April, 1926, was taken down and rebuilt in a heavier section. The portion of the wall below the water line was reconstructed in concrete; the upper portion was laid in stone masonry as before, so that the new wall, while of largely increased stability, retains the appearance of the old. This work, commenced in January, 1927, was fully completed the following June.

To provide for vessels of greater draught the old canal, which forms the entrance to the repairing basin, was dredged over its entire length of 1,225 feet and for a width of 60 feet. The presence of a brick sewer, which passes under this section of the canal, rendered it impossible to carry this dredging to a greater depth than 13 feet. The repairing basin, which during the winter is filled with steam vessels and other floating plant, is utilized for extensive repairs. During the past season, sixteen vessels, in addition to the canal floating plant, were accommodated for this purpose.

To provide better facilities for vessels docking at the Mille Roches wharf, a channel 450 feet long and 100 feet wide was dredged through the old south canal bank a little above the Mille Roches bridge.

The timber crib work surrounding the Hamilton Island light in the river St. Lawrence, which was badly decayed and broken down by ice, was removed to low water level and rebuilt in concrete and the inner area filled to coping level with broken stone.

Smaller improvements carried out included the placing of new sills and floors at the lock houses of locks 18, 19 and 20, at the bridge house at Mille Roches and at the store-houses at locks 18 and 21, the provision of a temporary transformer house at lock 20 to replace the previous building destroyed by fire in November last, the construction of a new ice house, the rebuilding in concrete of a short section of the government sewer opposite the repairing basin, replacement of stoplogs, repairs to lock gates, booms, etc., relaying of stone protection along canal banks and other lesser undertakings.

(d) FARRAN'S POINT CANAL

This canal, together with the Rapide Plat and Galops canals, which succeed it up-stream, form the group known as the "Williamsburg canals." The length of the Farran's Point canal is $1\frac{1}{4}$ miles. It has one lock and is situated 5 miles west of the Cornwall canal.

The season of navigation extended from April 25 till December 10, and no serious delays were occasioned either through accident or other cause.

The substitution of electric for acetylene lighting was taken in hand last season, and it is expected that the new system will be fully installed and ready for operation at the opening of this year's navigation. The work has been carried out under contract with the St. Lawrence Power Company of Cornwall, and comprises the erection of a transmission line over the entire length of the canal with a capacity of forty 100-watt lamps, all materials supplied remaining the property of the department. The former acetylene lighting system had been in use for twenty-four years and was in need of extensive repairs.

(e) RAPIDE PLAT CANAL

This canal extends from the town of Morrisburg to Flag's bay, a distance of $3\frac{3}{4}$ miles. It is situated $9\frac{1}{2}$ miles above the Farran's Point canal and has two locks.

Navigation opened April 25 and closed December 10. No accidents or delays occurred during this period.

Improvements carried out included the erection of a double garage near the canal shops, the rebuilding in timber above the water line of about 100 feet of the old government wharf at the foot of old lock 23, the relaying and patching of about 6,000 feet of stone protection along the canal banks and a few other smaller undertakings.

(f) GALOPS CANAL

Situated about $4\frac{1}{2}$ miles west of the Rapide Plat canal, the Galops canal extends from the village of Iroquois to a point about $1\frac{1}{2}$ miles above the town of Cardinal, a distance of $7\frac{1}{3}$ miles. It surmounts the last series of rapids met with between Montreal and lake Ontario, and has three locks, a lift lock at the easterly entrance, a guard lock at the upper entrance and a lift lock beside the guard lock for overcoming the Galops rapids only.

This canal was opened to navigation on April 25 and closed December 10. It was operated without accident or delay to vessels during the entire season.

Of improvements effected during the past year may be mentioned the deepening by dredging of the lower entrance to lock 28, the relaying and lining up of about 14,000 lineal feet of stone protection along the canal banks, the laying of new floors on the swing bridges at Iroquois and Cardinal, the installation of a furnace in the bridge-master's house at Cardinal, the replacement of the lower gates at lock 27 and various other smaller undertakings.

(g) WELLAND CANAL

This canal, which overcomes the falls of the Niagara river, lies between Port Dalhousie on lake Ontario and Port Colborne, on lake Erie. It is $26\frac{3}{4}$ miles long, has twenty-six locks and, under usual water conditions, provides, like the St. Lawrence system of canals, 14 feet of water on lock sills.

Navigation in the past fiscal year opened April 18 and closed December 16.

An increase in traffic, amounting to 38.2 per cent over the figures of the previous year, was recorded. A total of 7,654 vessels passed through the whole canal, the upbound and downbound passages being nearly balanced. In addition to the foregoing, 620 trips were made by vessels to intermediate points. The largest upbound cargo to pass through the canal was a shipment of approximately 3,054 tons of pulpwood carried by the steamer *Kingdoc*. The steamer *J. H. Price* carried the heaviest downbound cargo, a shipment of 99,052 bushels of wheat, or 2,972 tons. During the season a total of 7,247,459 tons was transported through the canal, an increase of about 39 per cent over the previous year's record and of 22 per cent over the 1925 record, which had previously been the highest in the history of the canal. Wheat shipments for the season totalled 3,614,609 bushels, an increase of 54 per cent over the year before; oat shipments, however, were about 55 per cent less than for the

previous season. At many times during the season the canal was operated to maximum capacity. On June 2, during a period of 24 hours, forty-seven vessels passed through lock 7 exceeding all previous records for this lock.

Three accidents only, and these of a minor nature, occurred during the navigation period. On June 24, at lock 2 during the locking through of the steamer *Cedarton*, failure to properly close and mitre the upper gates caused the vessel to surge ahead damaging the gates below. A delay of 21 hours resulted while the damaged gates were replaced. On July 21, the steamer *Waterloo* damaged one of the gates at lock 20 causing a delay of 17 hours. The steel tug *Ballenas* on October 12, in attempting to pass through the blind channel east of the new highway bridge at Queenston Street, St. Catharines, damaged a portion of the bracketed sidewalk of the bridge and carried away the electric cables supplying power to the bridge. A delay of one hour only ensued.

Of the various improvements carried out during the year the following may be noted:—

The approaches to the Queenston Street bridge at St. Catharines were improved by the resurfacing of the macadam roadway in bituminous macadam, the work being carried out under contract with Roy Honsberger.

In December, 1927, a contract was let to the Standard Steel Construction Company Limited of Welland for the erection of a 115-foot through steel truss over the entrance to lock 1 weir at Port Dalhousie to replace the present wooden highway bridge. Alterations to the masonry have already been made by the department and it is expected that the erection of the steel will be completed early in the coming fiscal year.

Along the summit level of the canal, between Marlatt's bridge and Welland, stone protection was laid, under contract with A. E. Rigby & Son, to counteract the somewhat serious effects of erosion which has been taking place at various points.

A steel pontoon gate lifter has been manufactured under contract with the Collingwood Shipyards Limited and an early delivery is expected.

Of minor improvements and repairs made during the year may be mentioned the repairing and rebuilding of the masonry retaining wall below the lock 1 weir at Port Dalhousie, the closing of a leak under the westerly wall at the head of lock 24 and the replanking of the floor of the Port Robinson bridge.

Old Canal.—On the old canal the mitering gates at the upper ends of locks 6, 7, 8 and 9 were replaced by gate bars of timber and reinforced concrete, the wooden flooring of the spillway between the two regulating weirs at lock 2 was replaced by reinforced concrete and various other minor repairs were attended to.

Canal Feeder.—A concrete sidewalk was laid along the easterly side of the dam at Dunnville replacing the former wooden walk, and at No. 1 weir at Dunnville a quantity of large stone was placed below the apron as a protection against scour. The freshet on the Grand river in the spring of the present year occasioned no damage to any canal works.

Port Colborne Elevator.—During the past fiscal year the government elevator received 77,621,713 bushels of grain, an increase over the record of the previous year of 15,086,111 bushels, which established the highest record in the history of the elevator. Of the total grain received, 60 per cent was from Canadian ports and 40 per cent from United States ports. The largest receipts of grain during the navigation season for a 31-day period (September 19 to October 19, 1927) were 16,177,000 bushels, an amount 1,000,000 bushels in excess of any previous monthly record.

The record of outturn from the elevator for the year, or the amount of grain leaving the elevator as compared with that received, showed an average loss in handling of only 0.099 per cent.

A total of 54 accidents occurred among members of the elevator staff but of these none were serious and in only 14 cases was loss of time involved.

No serious delays due to breakdown, labour trouble or other cause occurred during the year. A break in a power cable in February last caused a stoppage in operation of five days; this however had no serious effect as very few orders were waiting to be filled at the time.

Delays to vessels were greater than had been experienced since 1924. Of a total of 329 vessels unloaded and lightered, 60 per cent were held up beyond 24 hours, the greater number of such delays occurring between the opening of navigation and the middle of June. During the remainder of the season a better condition prevailed. Delays may be ascribed both to lack of docking space and to insufficient handling capacity in the elevator.

Owing to its limited capacity for handling and storage, a considerable quantity of grain is every year diverted from this elevator to other grain receiving depôts. Many cargoes, originally routed to Port Colborne, are diverted to other ports on the way when it becomes evident that congestion at the elevator will give rise to undue delays in unloading.

While the amount of grain carried over into winter storage was slightly less than for the previous year, the revenue derived from winter operation continues to be highly gratifying.

The new two-storey building, 30 feet by 60 feet, providing accommodation for a work shop, blacksmith shop, plate shop, material rack, rope room, electricians' and general stores and employees' rest rooms, the construction of which was commenced in 1926, has now been completed and taken into general use.

(h) WELLAND SHIP CANAL

This work, which has been in progress since the latter part of the year 1913, is now well advanced. A brief summary of the general scheme involved in the undertaking will first be presented.

The proposed ship canal leaves lake Ontario at the original mouth of Ten Mile creek, now known as Port Weller, about 3 miles east of Port Dalhousie, where a harbour of entry has now been constructed, and follows an entirely different route from the present canal as far south as Allanburg. From here it proceeds in general along the line of the existing canal to a point about one mile north of the village of Humberstone, where another diversion, about two and one-half miles in length, is made to the east of the present waterway. The route of the present canal is then followed for the final half mile to the lake Erie entrance at Port Colborne. The total distance traversed from lake to lake will be 25 miles. The difference in level between the two lakes, 325½ feet, will be overcome by seven lift locks, all of which are now well advanced towards completion, each having a lift of 46½ feet, and one guard lock of variable lift. The locks are 829 feet long and 80 feet wide in the clear and will provide a depth of 30 feet of water over the mitre sills. The width of the canal prism at bottom is to be 200 feet. A new breakwater, now practically completed, at Port Colborne, extends 2,000 feet farther into the lake and at right angles to the existing structure. At Port Weller, the lake Ontario entrance, the extensive harbour works have now been practically completed. The route of the new canal has been divided for purposes of construction into eight sections numbered in order from Port Weller southerly. The entire canal is now under contract.

For the past six years work on the canal, which during the war years and for some time after was, through many causes, greatly retarded or entirely at a standstill, has progressed in a very satisfactory manner.

Following is a brief account of the more important work carried out or still in hand on the various sections of the canal during the year just ended.

Section No. 1.—Commencing with the harbour works of Port Weller, this section extends in a southerly direction, a distance of nearly 3 miles, and comprises the harbour construction, prism excavation, one lock with weirs, two highway bridges over the canal, etc.

When work on the present contract with Johnston P. Porter was commenced in September, 1912, about 30 per cent of the entire undertaking still remained unfinished. During the past two years all work on this section has been practically completed. The final dredging of Port Weller harbour included the removal, during the 1926 season, of about 176,000 cubic yards of material. Other work carried out in the completion of this section of the canal included the taking up of the connection of the construction railway with the east side of the harbour, the levelling off of the east and west embankments, the placing of concrete mooring posts, the completion of all concrete work at lock 1, including the slope protection on the east side of the lower entrance and above the regulating weir and the construction of the control house for lock 1 regulating weir and the intake valve house for lock 1. All the required grading, sodding of slopes and macadamizing have now been completed with the exception of a stretch of about 500 feet along the outer end of the west harbour wall, where the contractor's sand piles have not yet been removed.

At lock 1 the temporary shops and buildings have been taken down. The four steel gates are completed and can be placed in position as soon as the heel plates on the gate leaves have been correctly aligned. The machinery for gate operation has been manufactured and delivered by the Dominion Bridge Company and is now being installed.

Bridge 1 over the upper entrance to lock 1, begun in January, 1927, was fully completed last November, the work being carried out by the Hamilton Bridge Company.

The addition to the intake valve building of the upper control house at lock 1 was completed last season and the lower control and machinery house at the north end of the east wall of this lock was erected. The same force which carried out this work also installed the tile conduit for the power distribution cables in both lock walls. Work has now just been commenced on the erection of the gate machinery house on the west wall of the lock and of the substation.

In the vicinity of lock 1 all unoccupied right-of-way has been cleaned up and cultivated and over 100,000 seedling trees and cuttings have been planted for future distribution along the canal zone.

All the principal items of work on this section have now been completed.

Section No. 2.—The extent of this section is approximately $4\frac{1}{3}$ miles. The work involved comprises the taking out of canal prism and construction of embankments, the building of locks 2 and 3 with entrance walls, etc., and of three highway bridges.

The work on this section is being prosecuted under the same contract as that of Section 1. Under the original pre-war contract about 58 per cent of the entire undertaking had been completed.

All concrete work, sodding and macadamizing have now been completed at locks 2 and 3, with the exception of a small amount of grading, sodding and macadamizing at the latter lock. This last must be held over until—it having become possible to divert traffic to the ship canal *via* Port Weller—the present canal, which crosses just south of this lock, can be abandoned.

The eight valves for lock 3 have been delivered at the site. The seals and lintels for these valves have been set and grouted in.

The material for the steel gates of both locks 2 and 3 was received towards the close of the 1927 season. At lock 2 both leaves of the upper and lower gates are assembled and rivetting has been proceeding. At lock 3 the framework of both upper and lower gates is erected and the sheet plating placed.

All work at bridge 3, across the head of lock 2, was completed with the installation of the machinery and electrical equipment and the construction of the operator's house. The work of re-conditioning the foundations of the west main pier of bridge 4 was completed in May, 1927, as also the construction of the west abutment and piers. The erection of the superstructure under contract with the Hamilton Bridge Company, was commenced in August. At the present time all steel work is in place and fully rivetted. There still remain the placing of the concrete counterweights, the laying of the wood floor on the movable span and the installation of the operating and electrical equipment. It is expected that this bridge will be ready for traffic by the end of May. The control and operating houses were completed last summer.

The concrete intake valve house and its control house addition, as also the control house for the regulating weir, were completed at lock 2 during the past year. The clay ducts in the conduit tunnels on both walls of this lock were also completed ready for the installation of power cables. At lock 3 the intake valve house and control house addition were completed.

In the completion of the canal prism between lock 2 and bridge 4, the Queenston Road crossing, a distance of about $1\frac{3}{4}$ miles, the drainage ditch was cleaned up and a small gap filled in the west watertight bank. The concrete slope protection, with the exception of a few hundred feet, has all been placed. A short distance south of bridge 4, a slide occurred in the east slope of the prism in April, 1927, involving the movement of about 100,000 cubic yards of material. The removal of this material was taken in hand at once and carried on until the end of November, when about three-quarters of the work had been completed. Extra right-of-way has been purchased and the remainder of the work will be finished up during the coming season. On the west slope, in the same vicinity, where similar trouble had already been experienced, a large quantity of stone was placed for protective purposes. The prism at the south end of the section, with the exception of the portion now occupied by the present canal, has now been fully completed.

To summarize the progress of work on this section to date, it may be stated that all rock excavation and work on watertight embankments has been finished; earth excavation is 97 per cent completed and concrete work $98\frac{1}{2}$ per cent.

Section No. 3.—This section extends southerly from Section 2 for a distance of about 2 miles. The work involved, which since 1922 has with Section No. 4 been carried on under contract with the P. Lyall & Sons Construction Company Limited, comprises the excavation of canal prism and lock sites, the construction of three twin locks in flight and one single lock, together with masonry approach walls, three bridges, a core wall for a dam, control weirs and other minor structures and the building of a large earth dam at the head of the flight locks.

The concrete work in twin locks 4, 5 and 6 is now 95 per cent completed. There still remain the placing of a portion of the lower west entrance wall of twin locks 4 and the floor slab in the lower entrance, the breast wall and gate sill in the west chamber of locks 5 and the floor slab in the upper entrance of the west chamber of locks 6. The backfilling of the east wall of twin lock 4 is practically complete; the backfilling of the west wall about 80 per cent. At twin locks 6, about 60 per cent of the backfilling for the west wall has been placed. At lock 7, the concrete work of the two monoliths at either side of the upper entrance was finished last season together with the floor section and the lower storey and supporting pillars of the operating house for bridge 7. Concrete work at this lock is now 98 per cent completed. Along the west wall between locks 6 and 7 the backfill for the northerly half has been completed and about 80 per cent of the remainder. The concrete work in the east wall between these locks is completed, with the exception of one monolith.

The side seals and lintels of the taintor valves in the centre and side walls of twin locks 4 were installed during the past winter. The lock is now ready for the installation of the valves.

In July, 1927, the erection was commenced of the lower 82-foot gates for the east chamber of twin locks 5. Work was carried on until the end of October by which time the frame work had been fully erected and the sheathing placed and partly rivetted.

With the completion of the bridge operator's house and the installation of machinery and electrical equipment during the summer of 1927, all work in connection with bridge 7 was finished and this bridge is now ready for operation.

North of twin locks 4 the backfilling of the lower east entrance wall was completed.

At the turning basin south of bridge 8, a small amount of concrete work was done on the west wall. No further work was carried on in the basin area.

Summarizing the work done on this section to date, it may be stated that progress on the four principal items of work now stands as follows: Rock excavation, 97 per cent; earth excavation, 82 per cent; concrete work, 93 per cent; and watertight embankments, 74 per cent.

Section No. 4.—The extent of this section is about 2 miles southerly from the end of Section No. 3 or from the southerly end of the town of Thorold to $\frac{1}{4}$ mile north of the northerly end of the village of Allanburg. The work involved comprises excavation for canal prism and for foundations of guard-gates and weir, the construction of Shriner's and Beaver Dams culverts, the relocation of a branch of the Canadian National Railways, the construction of two bridges, and various other lesser undertakings.

This section, as previously stated, is included with Section No. 3 under the P. Lyall and Sons Construction Company's contract.

The contractor's attention during the past season was concentrated mainly on excavation operations over the south end of the section. At the site of the guard gate the super stratum of earth was removed to rock surface and in November the removal of this underlying rock was commenced. About 70 per cent of the total, or 12,000 cubic yards of rock, has now been excavated. In the turning basin area, immediately north of the site of the guard lock, about 13,000 cubic yards of rock have also been removed. The excavation of the prism southerly from the guard lock to the end of the section, a distance of about $1\frac{3}{4}$ miles, was resumed and carried on from May until November, the output being utilized for watertight embankments, for the re-establishment of slopes and for backfilling completed structures on Section No. 3.

The construction of watertight embankments along the sides of the prism was completed by the end of August. Of this class of work, it remains only to connect the prism embankments with the guard gate and safety weir. Prism slopes were trimmed and have been revetted with concrete slabs for a distance of about 4,700 feet south of the guard lock site on the west side and, on the east bank, to the end of the section. Considerable portions of both slopes were sodded above the protection slabs.

At the site of bridge 10, a crossing of the Canadian National Railways about one mile south of the turning basin, excavation for the substructure was completed and both abutments constructed and backfilled.

The progress made on the principal items of work on this section to date may be thus summarized: Rock excavation, 84 per cent; earth excavation, 82 per cent; concrete work, $35\frac{1}{2}$ per cent; watertight embankments, 96 per cent.

Section No. 4B.—This section, which lies immediately south of Section No. 4, includes a stretch of canal prism one-quarter of a mile in length. It is situated immediately north of the junction of the present canal with the route of the ship canal near the village of Allanburg. The work to be performed consists

of prism excavation, the construction of watertight embankments, and the building of a syphon culvert to carry the Davis creek under the canal. A contract covering this work was let to Johnston P. Porter, July 28, 1926.

The work of excavating the prism was carried on last season between the north end of the section and a point 1,300 feet south. All the overlying earth was removed to rock surface and drilling and blasting carried out from September last through the winter months. Very little rock, however, was removed. From the material excavated, watertight embankments were constructed along both sides of the prism, about 44,000 cubic yards being thus placed.

The excavation for the Davis culvert, begun in the previous year, was completed. Concrete work was started at the end of June, and the entire structure completed and backfilled by the beginning of September.

About 37 per cent of the work covered by the contract has now been completed.

Section No. 5.—This section is about $3\frac{1}{4}$ miles in length extending from Allanburg to Port Robinson. The work involved comprises rock and earth excavation and dredging, the construction of two bridges, one at Allanburg and one at Port Robinson, and small quantities of concrete and stone protection along the canal banks.

The work on this section has been under contract with the Canadian Dredging Company, Limited, for the past seven years.

Since the month of March, 1925, no further work has been done on this section and the contractor has removed his entire plant to Section No. 7. Of the whole work covered by the contract, only about 3 per cent still remains unfinished. This will be completed with the removal of the swing bridges over the present canal route at Allanburg and Port Robinson and their replacement by new bridges 11 and 12.

Section No. 6.—This section extends from a point on Section No. 5 about one mile north of Port Robinson for a distance of approximately 5 miles southerly to Welland. The overlap on Section No. 5 became necessary on account of some silting which had taken place in the canal prism north of the original northerly boundary of Section No. 6. The work to be performed includes the dredging and enlargement of the present canal prism, the diversion of the Welland river, which crosses the line of the canal at the north end of the town of Welland, by means of a large syphon culvert, the construction of a highway bridge over the Welland river at Port Robinson, the building of watertight banks, concrete protection for slopes, etc.

A contract for the work on this section was awarded to the Atlas Construction Company, Limited, and E. O. Leahey & Company, Limited, October 12, 1925.

Of Class I excavation, about 3,500 cubic yards were removed during the year consisting mostly of old masonry taken out in the vicinity of the syphon culvert and, to a lesser extent, of large boulders encountered in the construction of the canal prism. About 38 per cent of the total rock excavation on this section has now been completed. During the same period, about 1,715,000 cubic yards of Class II material were removed from the canal prism. Commencing at a point 900 feet south of the north end of the section, where the present canal diverges westerly from the line of the ship canal, excavation operations have been in progress along the line of the prism to within 1,400 feet of the site of the syphon culvert, a distance of about three miles, reaching various depths, final grade being attained in several places. Rock dams, to allow of the unwatering of the original Welland river bed were also constructed and the unwatering of this portion of the prism carried out. During the past winter, however, through a failure of a portion of the rock bank, the cut again became flooded and will require to be again unwatered next season. Operations

were carried on by means of two hydraulic dredges, dragline excavation, revolving shovels and elevating grader units. The material removed was utilized largely in the construction of the east watertight bank of the prism, about 462,000 cubic yards being thus disposed of. In the removal of Class II material, about 35 per cent of the total has now been completed.

Concrete protection slabs were laid on two sections of the west bank, a total of slightly over a mile of bank being thus revetted. The sodding of the west bank was also carried out over a considerable area. Along the Welland river diversion about 27,000 cubic yards of stone were placed on the east and west slopes.

All excavation on the Welland river diversion, between the site of the syphon culvert at Welland and the junction of the diversion with the natural course of the river at Port Robinson, has now been completed. In the carrying out of this work about 1,046,000 cubic yards of Class II material have been taken out.

The progress of work on the syphon culvert for the diversion of the Welland river under the ship canal from the west to the east side has been very satisfactory. At the beginning of April, 1927, the excavation of a portion of the area along the north side of the total area required for the six 22-foot pipes had been completed and a start made along the south side. During the past year, with the exception of the portion of the pit to be occupied by the two central tubes, all excavation work has been completed. In addition to this, the concrete inlets and outlets for all six tubes have been constructed and four tubes, the outer ones on either side, fully completed. The two concrete wing walls at the intake end are also completed with the exception of a small portion of the southwest wing wall. The concrete work still remaining to be carried out in the completion of the structure, therefore, will consist in the construction of the two centre tubes between the head walls, the carrying up of the east head wall another eight feet, the building of the east wing walls and the uncompleted portion of the southwest wing wall and the construction of the stoplog piers and apron at the east or discharge end of the syphon. Up to the present, 136,000 cubic yards, or about 70 per cent of the total amount of excavation required, has been taken out, of which about 83 per cent was removed during the past year. Of the concrete work, 71 per cent of the total has now been completed, most of which has been placed since March, 1927. It is now anticipated that the new culvert will be fully completed and canal traffic diverted to the new route by the end of the coming fiscal year.

To summarize the work thus far carried out on this section, it may be stated that rock excavation is now 38 per cent completed; earth excavation, 42 per cent; concrete work, 54 per cent; and watertight embankments, 48 per cent.

Section No. 7.—This section, which is about 6 miles in length, extends from the town of Welland to the northerly limits of the village of Humberstone. The work to be performed, which since December 30, 1924, has been under contract with the Canadian Dredging Company, Limited, includes the dredging and enlargement of the prism of the existing canal to a point about one mile north of the end of the section, where the new line diverges from the old, the excavation of the new line from this point to a junction again with the present canal, the construction of five bridges, the building of retaining and dock walls at both ends of the section, slope protection works, etc.

At the south end of the section, from a point just beyond the divergence of the new line westerly from the present canal, excavation operations were carried on along the new prism and completed to grade elevation for a distance of 2,150 feet. From this point southerly to the present canal the westerly portion of the prism was excavated to within $1\frac{1}{2}$ foot of finished grade. These operations represented the removal of about 245,000 cubic yards of Class I

material. Of the total rock work on this section, approximately one million cubic yards have now been taken out, or about 64 per cent of the total estimated quantity. Along the line of the present canal north of the diversion, two hydraulic dredges were continuously employed in widening and deepening the prism. The excavation of the west slope was carried out with a drag line excavator, the material being cast out to one or other of the dredges. The west slope has now been fully excavated, and of the total amount of Class II excavation required, about 80 per cent is finished. Various stretches of prism, aggregating in all $2\frac{1}{4}$ miles, have now been fully completed to finished grade and on the remaining portions to within $8\frac{1}{2}$ feet of the required depth. A total of 7,823,000 cubic yards has thus far been excavated.

Along the west slope of the prism concrete and stone protection has been placed for a length of $4\frac{3}{4}$ miles. Stone has been used at those places where, due to the unstable nature of the material, it was found more suitable. The sodding of considerable areas along the slope has also been completed.

The construction of concrete dock walls on both the east and west sides of the cutting, at the southerly end of the section along the diverted portion of the line where dry excavation has been in progress, was continued last season. The west wall has now been completed from its north end for a distance of about 5,000 feet and the east wall for about 2,000 feet. About 44,000 cubic yards of concrete have thus been placed.

There are six bridges over the canal on this section—numbers 13 to 18, inclusive. After the removal of the original Welland canal bridge at Main street, Welland to a new site, commencing in the spring of 1927 the old substructure was demolished for the placing of new bridge 13. The west pier of this bridge was constructed during the summer and the construction of the east pier and west abutment is now in progress. Bridge 14, a vertical lift span between steel towers, has been practically completed and will be ready for operation at the opening of this year's navigation. The steel work for this bridge was erected under contract with the Canadian Bridge Company. Bridge 15 of the Michigan Central Railway was reconstructed in 1910 by and at the expense of that company, the Welland canal having had prior rights at this crossing. The substructure of bridge 16 was completed last summer. The erection of the steel work, a lift span similar to Bridge 14, by the Canadian Bridge Company is now practically completed and it is expected that the bridge will be ready for operation at the commencement of the coming season of navigation. Bridge 17, a single leaf rolling lift for the crossing of the Wabash Division of the Canadian National Railways, was completed by the middle of May, 1927, the substructure having been erected under contract with the Canadian Bridge Company. The east and west abutments of bridge 18, together with the west pier, were completed last summer; the east pier will be finished early next season.

The construction of a new roadway along the east side of the canal between Welland and Humberstone, included in the contract of the Canadian Dredging Company, was commenced in August, 1927. This road will form part of the main highway between Welland and Port Colborne. Up to the present all subgrade excavation, together with the greater part of the ditching and lateral and cross drains, and the placing of subgrade rock foundation has been completed, as also the placing of a considerable portion of the surfacing material. The full completion of this road will be taken in hand early next season.

The work thus far performed on this section may now be summarized as follows:—Rock excavation, 64 per cent; earth excavation, 80 per cent; concrete work, 73 per cent; concrete slope protection, 99 per cent.

Section No. 8.—This section, which extends from the north end of the village of Humberstone to deep water in lake Erie, is about 3 miles in length. The work to be performed consists in the excavation of a new route from the north

end of the section for a distance of about $1\frac{1}{2}$ miles, the dredging and enlargement of the present canal for the remainder of the route, the construction of guard lock 8 with entrance walls, etc., the construction of three bridges, the erection of various harbour works and numerous other minor undertakings. The main contract for this work was let in February, 1924, to A. W. Robertson, Limited.

All concrete work at the north end of lock 8 was completed last year. At the south end of the lock, in which portion are included guard and service gates and the unwatering gates, the service and unwatering gate monoliths of the west wall were completed with the exception of seven monoliths, to within six feet of coping level. In the east wall the upper gate recess monoliths have reached an elevation 12 feet above the floor level of the lock. With the placing of about 20,000 cubic yards at the south end, the concrete work of the entire structure will be completed.

The construction of the inner east harbour wall south of the guard lock was continued northerly from the point reached in the previous season's operations (about 1,000 feet south of the site of bridge 21), and completed, with the exception of a small portion at the temporary diversion of the Canadian National Railway, for a distance of about 1,400 feet, which included the abutments of bridges 20 and 21. The west wall, including the abutments of bridges 20 and 21, was completed, with the exception of a portion at the temporary railway diversion. There have been placed thus far about 197,800 cubic yards of concrete on the land division of this section, or about 72 per cent of the total estimated quantity.

On the land division satisfactory progress continued in the excavation of Class I material. Three shovels were employed at the site and just north and south of bridges 20 and 21. The prism excavation is now completed, with the exception of slightly over 75,000 cubic yards still to be removed at the north end of the section and at the temporary crossing of the Canadian National Railway between the sites of bridges 20 and 21. From the inception of the work about 1,939,000 cubic yards of rock have been taken out, representing about 93 per cent of the entire undertaking. Of earth excavation, about 21,000 cubic yards were removed during the year, chiefly in the vicinity of the west inner harbour wall. The total of this class of material now removed is about 96,000 cubic yards, or 88 per cent of the entire estimated quantity.

In the harbour division of the work drilling was carried on along the inner east harbour wall on both sides of the entrance channel and for about 2,500 feet southerly on the west side. The total amount of drilling done during the year amounted to about 162,000 lineal feet. Two dredges were employed over a period of eight months, chiefly in rock excavation, and during this time excavated about 361,000 cubic yards. About 70 per cent of the total rock excavation in the harbour division has now been performed. The east half of the channel in the lake division has now been excavated, approximately to final grade, out to deep water in lake Erie. About 61,000 cubic yards of rock has been taken out, or about 30 per cent of the whole undertaking. At the site of the new Canada Furnace Company's dock and in cleaning up in front of the east harbour wall about 230,000 cubic yards of Class II material have been removed, or about 80 per cent of the total of this class of excavation. In the lake division about half of the total Class II material has now been dredged. It is proposed during the coming season to concentrate on the west half of both the harbour and lake divisions and with this end in view both drilling and dredging operations have been in progress over this portion of the work for the last six weeks of the fiscal year. This will, it is hoped, make possible the early operation of large vessels at the Government and Maple Leaf elevators.

During the year the nine harbour cribs for the construction of the Canada Furnace Company's dock, built in 1926, were placed in position and rock filled. The concrete substructure was constructed and all backfilling completed. All

work in connection with this dock was finished in November, 1927. Owing to the new dock face being 63 feet farther east than the former one, the two unloading gantries of the Canada Furnace Company had to be shortened by this amount. This work was carried out by the Dominion Bridge Company and completed by the end of October.

The concrete work of the new breakwater was completed during the summer of 1927. All cribs had been placed and the substructure of eighteen cribs completed in previous seasons; the substructure of the remaining three cribs was placed last season. At the southerly end of the structure, the Department of Marine and Fisheries have erected a reinforced concrete lighthouse. The placing of about 125,000 cubic yards of stone on the west or seaward side of the breakwater will fully complete this structure.

Under contract with the Hamilton Bridge Company the superstructure of bridge 19, a single leaf bascule, across the north end of lock 8, was erected last season and with the completion of the concrete counterweights, the electrical equipment and the bridge operator's house this structure, with the exception of the safety gates, which will be installed early next summer, is now complete. A small amount of preliminary work has also been done on the superstructure of bridge 20, for the crossing of the Canadian National Railway over the guard lock at Port Colborne. This structure, which is to be a vertical lift span similar to bridges 14, 16 and 17, is also under contract with the Hamilton Bridge Company.

The building for the housing of the pumping equipment on the east wall of lock 8 was completed last year. The equipment has now all been placed and it only remains to install the power wiring. It is expected that all work at this power house will be completed within another month.

To summarize the work thus far performed on Section No. 8, it may be stated that rock excavation is now 86 per cent completed; earth excavation, 86 per cent; concrete work, 78 per cent; reinforcing steel, 93 per cent and steel sheet piling, 99 per cent.

Construction Railway.—The construction railway continued in operation throughout the past year, but traffic was very much lighter than in the earlier years of construction. A total of 14,741 cars was handled during the twelve months.

Bridges.—The progress of work on the various bridges now completed or under construction has already been noted in dealing with the sections of the canal on which these bridges are located. When finished, the route will be spanned by twenty bridges, one on Section No. 1, three on Section No. 2, three on Section No. 3, two on section No. 4, two on Section No. 5, six on Section No. 7, and three on Section No. 8. Of these, six are railway crossings, the remaining fourteen, highway bridges. Bridges 1, 3, 7, 8, 14, 16, 17, and 19, are now completed. Bridge 4 is well advanced and should be ready for test operation early in the coming season. Bridges 14, 16, and 17 are all of the vertical lift type, bridge 8, a swing span, bridges 1, 3, 7, and 19 are of the single leaf rolling lift bascule type, and bridge 4, a double leaf rolling lift bascule. Of the remaining bridges, contracts have not yet been let for bridges 5, 6, 9, 11, 12, 13, 18. The contract* for bridge 10 has recently been awarded to the Canadian Bridge Company and for both bridges 20 and 21 to the Hamilton Bridge Company. Bridge 15 is the property of the Michigan Central Railway.

Steel Lock Gates.—A contract was awarded June 18, 1926, to the Steel Gates Company Limited for the fabrication and erection of thirty-one pairs of steel gates for various locks. Preliminary work in connection with the erection of these gates was begun in October 1926 and during the past year the progress made in their construction has been satisfactory. At the present time this contract is about 31 per cent completed. The status of this work at various locks has already been dealt with under the different sections in which the gates are located.

Laboratory.—During the past year 594,883 $\frac{3}{4}$ barrels of cement were received and accepted and distributed to various parts of the canal. Tests were made of samples taken from bins and from each car as loaded, 3,183 samples being thus tested during the year. Tests have also been made of sand, gravel, and crushed stone as well as compression tests of concrete. Various other materials, such as paints, clays, anchor bolts, concrete aggregates, etc., have also been tested.

Miscellaneous Contracts.—Of Ontario white oak for lock gates and wall fenders 640,000 feet board measure have now been received, a remaining 12,000 feet only being required to complete requirements. Other extensive orders of building materials include switches and equipment for bridge substations, guide and bearing plates for emergency dam, cables and fittings for lock 1, transmission line materials, etc.

General Summary.—For the various classes of work involved in the construction of the entire canal, the estimated quantities of the principal items of work with percentages of each now completed are as follows:—

Rock excavation.....	8,750,000 cu. yds.	86 per cent.
Earth excavation.....	50,657,000 "	79 "
Watertight embankments.....	5,434,000 "	67 "
Concrete, all classes.....	3,411,000 "	88 "
Reinforcing steel.....	26,000,000 pounds.	97 "
Steel sheet piling.....	37,162,000 "	87 "

(i) SAULT STE. MARIE CANAL

This canal provides communication between lakes Huron and Superior, surmounting by a single lock the rapids of the St. Mary river. It is 1 $\frac{1}{2}$ mile in length between the east and west extremities of the entrance channels and lies entirely within Canadian territory.

The canal was opened to traffic April 12 and closed December 18, a period of 251 days. The total registered tonnage of vessels which passed through the lock was 4,484,724, a decrease of 10.4 per cent from the record of the previous year. An increase, however, in freight tonnage, amounting to 3.3 per cent, was recorded. For the Canadian and American canals taken together, the registered tonnage showed a decrease of 10 per cent and freight tonnage of 3 per cent. Traffic in Canadian vessels only through both canals showed a decrease of 9 per cent in registered tonnage and 4 per cent in freight tonnage. The total number of vessels to pass through the lock was 3,239 as compared with 3,350 during the season of 1926.

The canal was operated without accident throughout the season.

The work of renewing the top of the upper south pier, which has been in progress for several seasons, was completed in the summer of 1927. A few minor repairs to the concrete, now required, will be made this year.

The dredging of the harbour by the Department of Public Works, noted in last year's report as then in contemplation, was taken in hand last summer. This dredging, which will be carried down to grade of the St. Mary's river 1.6 feet below the lower entrance grade of the canal and which will be completed this year, will allow vessels loaded to their maximum for the river channel to enter the Canadian canal.

A small shoal, which had accumulated below the lock on the south side of the canal, was removed by the canal forces.

The water elevation below the lock, which governs the depth available in the lock for navigation, showed a marked improvement over the elevations of the past three years, the mean depth for the lock during the 1927 season being nearly sixteen inches greater than the average for the season of 1926.

2. OTTAWA AND RIDEAU RIVERS

(a) ST. ANNE LOCK

This canal surmounts the Ste. Anne rapids between Ile Perrot and the island of Montreal at the junction of lake St. Louis with the Ottawa river. It consists of two parallel locks, the old and the new, each with a lift of 3 feet. The old lock (now disused) has a depth of only 6 feet, but in the new lock there is 9 feet of water on the sills.

Navigation opened April 25 and closed November 30. There were no accidents or delays to traffic during this period.

Of repairs and improvements carried out during the year the following are among the more important:—

The upper gates of the old lock, being considered no longer safe, were removed and replaced by reinforced concrete stoplogs, the joints being rendered watertight by a layer of rubberoid paper. Over the stoplogs a foot bridge with reinforced concrete floor and an iron handrail was constructed. The gates of both the old and new locks were painted, as also the six bridges over slips on the town side of the entrances. For a distance of 2,000 feet above and below the lock the masonry walls of the entrance piers were pointed. The snubbing posts along these walls were given a coat of white lead. The four wooden boom piers on the north side of the upper entrance were demolished to one foot below water level, an outer wall of concrete was then laid around each pier and the interior filled with stone. At the lower entrance to the lock, and distant therefrom in a southeasterly direction about one-half mile, is situated a protective channel about 1,200 feet long and 120 feet wide constructed between cribwork walls known as "Baker's Dam." Between September and the end of November of last year the inner face of the crib superstructure of the southwest wall of this structure was removed to below water level and replaced by a concrete wall 9 feet in height with an average thickness of 3 feet 6 inches and backfilled as before with stone.

Lesser works carried out consisted in repairs to fences, buildings and electrical lines, the care of canal grounds, etc.

In connection with the floating plant the derrick scow and row boat were caulked and painted.

(b) CARILLON AND GRENVILLE CANALS

From the Ste. Anne lock to the foot of the Carillon canal there is a navigable stretch of water 27 miles in length through the lake of Two Mountains and the Ottawa river. The Carillon canal, which is three-quarters of a mile in length, with two locks, giving a total lift of 16 feet, surmounts the next rise in the river level produced both by the Carillon dam at the head of the canal and the natural fall of the river below.

The Long Sault rapids, 6 miles above the Carillon canal, are surmounted by the Grenville canal, $5\frac{3}{4}$ miles in length, with five locks. Both canals provide a depth of 9 feet of water over the lock sills.

These canals were opened to navigation May 1 and closed November 30. No accidents occurred to delay traffic nor was any damage done to canal structures.

Improvements made on this system of canals during the year have included the following:—

Extensive repairs were made to the Carillon dam between the middle of last September and the close of navigation. For a length of 105 feet on the Pointe Fortune side of the dam, the rear apron and crib had been completely carried away and an additional 40 feet of the apron badly damaged. All this portion of the dam was rebuilt. On the Carillon side, the rear and front aprons

were damaged for a length of 50 feet and a large hole was discovered under the dam. This hole was filled with field stone deposited on the upstream side. Repairs to the apron, which were not completed, will be continued next season.

Other works carried out included the general maintenance of locks, repairs to two bridges, guide piers, roads, fences and ditches, canal buildings, telephone lines, etc.

Repairs were made to the vacuum pump of the tug *Shirley*, one scow was re-decked and another repaired, a lifeboat was constructed for use with the *Shirley*, and small craft caulked and painted.

(c) RIDEAU CANAL

This canal connects with the Ottawa river about 56 miles above the head of the Grenville canal and provides a waterway between the cities of Ottawa and Kingston. It consists of a series of natural watercourses joined by artificial cuttings, is $126\frac{1}{4}$ miles long and has forty-seven locks with a minimum depth of 5 feet over the sills. It rises by thirty-three locks to a summit in the upper Rideau lake, from which body of water it descends by fourteen locks to the level of lake Ontario. A subsidiary canal, 7 miles in length, known as the "Tay Branch", connects the town of Perth with the north end of the lower Rideau lake. Its minimum depth is 5 feet.

Navigation opened, both at Ottawa and Kingston Mills, May 1 and closed at Ottawa November 30 and at Kingston Mills November 25.

During the past year an ample supply of water was available for the navigation of all parts of the canal.

The total number of lockages for the season was 16,440, a decrease of 265 from the total recorded for 1926.

The principal repairs and improvements carried out during the year may be stated as follows:—

At Ottawa lock station the large stone building near the head of the locks, transferred from the Department of National Defence, has been converted for the use of canal stores and the former stores building abandoned for demolition by the Federal Commission. At the head of the locks a concrete catch-basin has been constructed for the interception of mud and other debris from the basin above, which had caused considerable trouble in the operation of the river lock gates. The filling and grading of the new Echo Drive wharf, commenced last year was completed. A large brick building for freight and offices has been erected along this wharf by the Ottawa Transportation Company. The former canal basin has now been abandoned and filled, and all buildings fronting thereon are to be demolished. During the past winter a concrete wall 1,455 feet long was built along the west side of the canal from Cannought Place to Laurier avenue. Between Bank street and Bronson avenue on both sides of the canal concrete walls were also constructed aggregating a total length of 6,119 feet. Another wall, 655 feet in length, was built along the north side of Dow's lake in front of the old St. Louis dam. It is now proposed to continue this last wall for a further distance of about 3,000 feet to connect easterly with the walls already built. The lift span of the Pretoria avenue bridge was cleaned and painted under contract with the Dominion Bridge Company.

At Hartwell's locks, the rebuilding of the chamber walls of lock 10, commenced last year, was completed. A portion of the apron below the waste weir was rebuilt in concrete and various small repairs to both locks attended to.

A new plank floor was laid on the west weir at Hogsback and at the swing bridge across the upper lock a new floor on new joists was laid.

The decayed chamber walls and upper mitre sill at Black Rapids lock were taken down and rebuilt with concrete blocks.

At Manotick bridge the joists and floor were renewed.

The wooden swing bridge at Beckett's Landing, which had become unsafe for traffic, was taken down and replaced by a new bridge 4 feet wider than the former one and the old crib abutment was replaced by a concrete abutment.

At Nicholson's lock station the old timber approaches and rest piers, on each side of the swing bridge, were rebuilt in concrete.

On the river side of Clowe's lock, two courses of the long protection crib were taken down and rebuilt.

The long wooden wing crib at the head of the cut at Kilmarnock lock was rebuilt for four courses.

At Smiths Falls the old timber waste weir on the west side of the basin dam was taken down and rebuilt in concrete, together with the portion of the dam which adjoins the weir. The old lock house was remodelled and a new storey added to it.

At Poonamalie the long timber lay-by piers above the lock were rebuilt from the water-line up, filled with stone and replanked.

The old timber approaches at Chaffey's lock, on either side of the swing-bridge, were taken down and rebuilt in concrete and furnished with an iron handrail. A new travelling stoplog lifter was installed at the waste weir.

At Jones' Falls the invert arch bottom of lock 41, which was much decayed, was taken up and relaid in concrete.

The dipper dredge *Rideau* with tug *Agnes P.* and two dump scows was employed during the season in deepening the "deep cut" at Ottawa, in dredging and placing material behind the new concrete wall along Echo Drive, placing clay at Hogsback dam, excavating crib work, placing clay for the coffer dam at Clowe's lock waste weir and completing the cut above the lock at Burritts Rapids. The tug *Loretta* was employed throughout the season in towing flat scows, delivering stores, setting spar buoys, etc.

3. RICHELIEU RIVER NAVIGATION

(a) ST. OURS LOCK AND DAM

At a point on the Richelieu river, 14 miles above the town of Sorel, the level of that river has been raised 5 feet by a dam. This difference in level is overcome by the St. Ours lock. There is 7 feet of water on the upper lock sills, but the depth of water on the lower sill is governed by the level of the St. Lawrence river and has been as low as 5 feet, 3 inches in October, 1923.

The lock was opened to navigation May 1 and closed November 30.

Repairs of a minor nature only were found necessary during the past year. These included the painting of the lock gates, small repairs to the dam, the renewal of snubbing posts, repairs to fencing, the rebuilding of the derrick scow from bottom up, etc.

(b) CHAMBLY CANAL

Between the St. Ours lock and Chambly basin, a distance of 32 miles, the river is navigable with a depth of 7 feet. The Chambly canal, which enters at this point, is 12 miles in length and has nine locks. It surmounts all the rapids between Chambly and St. Johns, thus establishing communication with lake Champlain. The locks, nine in number, provide a depth of 6½ feet of water over sills.

The canal was opened to traffic May 1 and closed November 30.

All locks on the canal were gone over and repairs made where necessary. These included the pointing of masonry, repairs to mitre sills, gates, and gate platforms, painting lock gates, etc.

The bridges crossing the canal required only minor repairs. At bridge 1 a window was added to the cabin. The flooring of bridge 2 was repaired and

wooden fenders on abutments renewed. At bridge 5 the floor and floor sills were replaced. Chains were installed at bridge 8 to prevent access to the towpath. The east approach to bridge 10 was raised. Bridges 4, 5 and 6 were scraped and painted.

The decayed wooden fence of the wharf on the west side of the canal above lock 3 was replaced with a concrete wall 196 feet long and 10 feet 6 inches high.

Between bridge 1 and lock 4, on the west side of the canal, the old stone wall was taken down and rebuilt. At the lower entrance to the canal both sides of the guide pier were dredged to provide greater depth for barges.

All canal buildings were kept in good repair including the superintendent's residence and canal office at Chambly, various lock and bridge houses, carpenter shop, machine shop, power-house, electrician's residence, etc., and all grounds and flower beds were neatly maintained.

The boiler, engines and rudder of tug *Chambly* were repaired and the hull caulked and painted. General repairs were also made to the derrick, repair scow and flat scows.

4. LAKE ONTARIO TO GEORGIAN BAY

(a) MURRAY CANAL

This canal, an open waterway 80 feet in width with 11 feet depth at low water across the isthmus of the Prince Edward County peninsula connecting the bay of Quinte with lake Ontario, is without locks.

Navigation opened April 14 and closed December 6. No delays, due to accident or other cause, occurred during the season.

The principal repairs found necessary during the year were as follows:—

At the Trenton road bridge the decayed cribwork between the pivot and rest piers was replaced on the navigation side by a concrete wall 114 feet long. On the other side of the pier a dry wall was constructed to retain the filling. At the Canadian National Railway swing-bridge, the masonry carrying the locking device, which had become so broken that the bridge lock was useless, was replaced by concrete into which anchor bolts carrying the lock were embedded.

During the sweeping of the canal bottom, a portion of a wrecked barge containing large stone was discovered and removed by dredging.

The customary repairs were made to stone protection along the canal banks, fences were repaired and the canal bank was kept in passable condition.

(b) TRENT CANAL

The route of the Trent canal, as now in operation, lies between Trenton, on the bay of Quinte, where direct connection is made with lake Ontario, and Port Severn, on Georgian bay, from which the waters of the Great Lakes are accessible. The canal is made up of a series of lakes and rivers connected by relatively short lengths of artificial cuttings. Connection between the water levels of the various reaches is effected by locks, except at Swift Rapids and Big Chute where marine railways are employed. The through route may be briefly described as follows: Between Trenton and Rice lake the canal follows the line of the Trent river. Passing through Rice lake it enters the Otonabee river, the route of which is followed to its source in Katchiwano lake. From this lake the line of the canal passes in succession through Clear lake, Stony lake, Lovesick lake, Buckhorn lake, Pigeon lake, Sturgeon lake and Cameron lake to the west side of Balsam lake. From here connection is made by an artificial cutting with Mitchell lake about two miles westward, and from the latter lake another cutting makes connection with Cranberry lake. From the south end of Cranberry lake connection is made with lake Simcoe by another artificial cutting.

Passing through lake Simcoe the route of the canal continues to the Severn river, the line of which is followed to the Georgian bay outlet at Port Severn. From Trenton the canal rises to a summit at Balsam lake, the level of which is about 597 feet above that of lake Ontario. From Balsam lake to Georgian bay there is a fall of 262 feet. The total length of the route from lake to bay is about 240 miles. It is made up of two main divisions: the Eastern division between Trenton on lake Ontario and the outlet of lake Simcoe and the Western division from lake Simcoe to Georgian bay.

Eastern Division, (Lake Ontario to lake Simcoe).—This division includes, in addition to the main route of the canal, the Scugog branch, 35 miles in length, from Sturgeon lake to Port Perry *via* the Scugog river and lake, and various other navigable channels aggregating in all about 60 miles. The total extent of canal and canalized waters maintained in operation on this division is therefore about 240 miles. There are 42 locks and lock structures, two of which are hydraulic lift locks, 8 guard gates, 47 bridges, 7 emergency dams, 40 lockhouses, 30 watch-houses and 24 storehouses. Included also under this division are various reservoir lakes and dams taken over from the Ontario Government in 1905 under Order in Council, which are maintained and operated by the department. Of such dams there are 50 in all, 36 of them being concrete structures and the remainder timber.

Among the principal works carried on in the past year the following may be noted:—

During the 1926 season the new dam at lock 23 was completed. It still remained to remove the old dam. This work was carried out by the dredge *Fenelon*, which had been rented by the contractors for the purpose, during July of last year. At the same time camp buildings were dismantled, the grounds on both sides of the river were cleaned up and the entire site left in a thoroughly neat and orderly condition.

Under contract with Construction and Engineering Limited, work was started in July, 1927, on the construction of a concrete dam at lock 24 to replace the old timber dam, which had seen over thirty years' service. By the middle of October the north abutment and five northerly piers had been completed and the greater portion of the intermediate breast walls. The unwatering of the southerly half of the dam for the construction of the remaining four piers and abutment was then commenced and completed early in November. Concreting then proceeded until the end of December by which time the southerly half of the dam had been completed with the exception of the cut-off core adjoining the south abutment and the platform over the piers and sluices. The entire undertaking will be fully completed during the coming season.

At Gore's Landing, on Rice Lake, the old wharf, which had fallen into a serious state of disrepair, was completely reconstructed. A concrete wall 180 feet long was built along the outer face and backfilled with stone and gravel. Seventeen anchor piers were constructed in the interior of the dock and connected to the face wall with steel tie rods. Along the inner face and east side the piles have been cut off below water level for the placing of caps, stringers and deck. The whole undertaking will be completed early in the coming season.

A lockmaster's house, recently completed, was constructed at lock 6, Frankford, there being no living quarters obtainable in the district.

The dredge *Auburn* was employed first in the lower Scugog river, afterwards in removing a submerged light-house pier in Pigeon lake and again, until the beginning of August, on the lower Scugog. For the remainder of the season this dredge was employed between the Portage road and Victoria road bridges in deepening and widening the channel. The entire season's operations covered an area of 49,000 square yards. The dredge *Fenelon* was first utilized by the contractors for the new dam at lock 23 in removing the old dam. Between the middle of July and the end of September work was carried on in the narrows below Buckhorn in deepening and widening the channel. After this, until the

close of the season, dredging was carried on at the lower entrance to lock 27 at Young's Point. The total quantity of material removed during the season amounted to 1,375 cubic yards, a large proportion of which was rock.

The new dam and logslide at Elliott's Falls, begun in 1926, was completed last season, the work which still remained to be done, consisting in the demolition of the old dam, the construction of the concrete logslide and side dam and the general cleaning up of the area, being finished up early in June.

A small amount of preliminary work was done in 1927 on the new dam proposed for Hawk river. Concrete work, however, was not commenced until March of this year. Thus far, 222 cubic yards of concrete have been placed, representing about 20 per cent of the total quantity estimated for the finished structure. At Eel's lake, the two small timber dams were reconstructed in timber, the work being completed early in February. The timber logslide of the Hall's lake dam, which had fallen into a state of disrepair, was reconstructed in concrete. Some preliminary work was done at the Big Bear lake dam, which is to be rebuilt in concrete, and minor repairs were made to the dam at Bottle lake.

At the Peterborough hydraulic lift-lock further trouble from leakage through the floor of the west upper entrance had been experienced. To overcome this, additional puddle was added to provide for the subsidence which was found to have taken place and stone again placed about the collecting drain. A bad vertical crack in the seal wall opposite to the collecting drain was cut out, the crack caulked and grouted and the wall restored. A horizontal crack at the first step in the seal wall received similar attention. All valves, operating machinery, etc., were gone over and put into satisfactory working condition.

The Kirkfield hydraulic lift lock was also thoroughly inspected. The recess, which had not been unwatered since 1907, was thoroughly cleaned, four small scow loads of mud and other debris being removed. The buoyancy tanks and gate were painted. Disintegrated concrete wherever found was removed and replaced. All mechanism was put in good working order.

Complete new decks were placed on the Montreal-Toronto highway bridge at Trenton and on the Balsover bridge. Elm floors were placed on bridges at lock 19, Chemong and Lakefield. The bridges at Lakefield and Wellington street, Lindsay, were completely cleaned and painted.

The floating plant of the canal, which includes the dredges *Fenelon* and *Auburn*, one drill boat, seven scows, the tugs *Bessie Butler*, *Bob Hall*, *J. B. McColl* and *Harwood* and two cook boats, received such repairs as were found necessary.

During the 1927 season the number of recorded lockages on the canal was 13,137, a slight decrease from the figures of the previous year. The heaviest traffic recorded since the year 1919 was for the year 1922, when the total lockages numbered 15,388.

Western Division (Lake Simcoe to Georgian bay)—Under this division, as previously noted, is included that portion of the route of the canal which lies between the navigable waters of lakes Simcoe and Couchiching and Georgian bay, in addition to which must also be included the now abandoned canalization of the Holland river from Cook's bay, at the southerly end of lake Simcoe, to the town of Newmarket, a distance of about 12½ miles.

The original scheme for this division provided for a lock and terminals at Honey Harbour on Georgian bay connected to Gloucester pool *via* Go Home bay and lake. This, however, has not yet been carried into effect. The navigation of this division is now effected by means of the lock at Washago, the marine railways at Swift rapids and Big Chute, which provide for the transportation of 15 to 20 ton boats of 13½ foot beam with a length of 55 feet and draught of 4 feet, and the lock at Port Severn.

Special work carried out during the year on this division included the following:—

New range lights of the "Aga" gas lantern type were received during the year to be placed at the entrance to the dredged channel at the northerly end of lake Couchiching and on the Orillia shore of the lake. For the channel entrance light a stone-filled crib with concrete top was constructed and for the shore light a concrete base. These lights will be put in service for the coming season of navigation.

At Swift Rapids a frame dwelling, 24 feet by 32 feet with an extension summer kitchen, was erected for the use of the marine railway operator. The building is equipped with a concrete floored cellar, furnace and concrete cistern.

All three submerged sluiceways in the Swift Rapids dam were unwatered in September last and thoroughly inspected. They were found in practically as good condition as when last examined in 1924.

A few repairs were found necessary at the marine railway at Big Chute. A number of badly bent rails, which caused considerable jerking on the steep grade, were taken out and replaced by better rails, thus improving the line and surface of the track and reducing the strain on the operating machinery.

A double boathouse, with facilities for lifting out, repairs and painting, was erected at Washago for the accommodation of the two service launches, which had previously been housed in old and unsuitable buildings. At Swift Rapids also, where boathouse accommodation was similarly inadequate, a commencement was made in the late autumn on a new boathouse for the cruiser *Oriental*.

Thirty-five new buoys were placed during the season, for the most part to replace those carried away or broken by high water or ice. All buoys on the division were painted.

5. ST. PETER'S CANAL

The St. Peter's Canal, which was constructed between the years 1912 and 1917, connects the Bras d'Or lakes with St. Peter's bay on the southeast coast of Cape Breton island. It consists of a tidal lock 300 feet in length and 48 feet in width and provides for a minimum depth of 18 feet of water on the lock sills.

During the past season of navigation this canal was in operation between April 25, 1927, and January 21, 1928, and was operated during this time without any serious delay to traffic. The total number of vessels making use of the lock was 1,270, a decrease of 33, or about 2½ per cent from the record of the year before.

Early in the season the old cribwork on the east side of the lake entrance from the swing bridge to the outer entrance, a distance of 627 feet, which had been in service about 35 years and had become completely decayed, was removed down to low water level and rebuilt. After the stone filling had been replaced behind the new timbers, the ground, for a considerable distance behind the cribwork, was regraded and ten cast-iron mooring posts were set at intervals behind the face of the new wall. The concrete lock walls and long entrance walls at the Atlantic end of the canal also received extensive repairs.

A new wooden floor, consisting of 1½-inch spruce, longitudinally laid over heavy pine plank, was placed on the swing bridge over the canal.

The superintendent's house received extensive repairs and a new furnace was installed in the basement. The roof of the warehouse was re-shingled.

Other lesser works carried out included the annual scraping of the lock gates below water level to remove barnacles and mussels, the inspection and repairing of gate valves, the painting of lock gates above water level, the replacement of wooden by cast iron mooring posts, and the construction of a small scow for use on the canal.

6. MISCELLANEOUS WORKS

(a) HUDSON BAY TERMINALS

During March and April, 1927, twelve men with equipment were transported by aeroplane from Cache lake on the Hudson Bay railway to Fort Churchill where 22 borings and 3 test pits were put down during the months of May, June, and July. At the same time the staff at Port Nelson was increased by twenty-one men who were employed in the reconditioning of the tug *Yates*, a deck scow, a gasoline boat and a well drilling machine.

In August an inspection trip was made by Hon. C. A. Dunning, Minister of the Department, Mr. F. Palmer, Consulting Engineer, and other officials from the end of steel on the railway line to Port Nelson and Fort Churchill. Following this inspection Mr. Palmer recommended the abandonment of Port Nelson and the selection of Fort Churchill as the northerly terminus of the railway. Orders were then issued for the removal of all plant and equipment from Port Nelson to the newly selected terminus.

An additional one hundred and seventy-five men were immediately despatched to Port Nelson and the work of demolition commenced. During the month of September two successful trips were made by the tug *Yates* with a scow in tow loaded with building materials, equipment, machinery, etc. from Port Nelson to Fort Churchill. The schooner *Fort York* also made two similar trips.

The ss. *Canadian Raider* of the Canadian Government Merchant Marine chartered by the department, made the voyage from Sydney to Fort Churchill, arriving September 26, with a cargo of 3,500 tons of coal and 500 tons of other supplies. Of this ship load 2,000 tons of coal was discharged and the remainder of the cargo. On the return trip a portion of the coal which had not been unloaded was put off at Port Burwell, at the northeast point of Ungava bay, after which the vessel, meeting with an accident, was beached at Port Burwell for the winter.

The sea-going tug *Ocean Eagle*, purchased from the St. John Drydock Company, together with a sister ship, the *Ste. Anne*, chartered from the Bathurst Company, left Halifax for Fort Churchill September 15 having in tow the dredge *Kennequhair*, and a steel dump scow. During a storm, while off the Labrador coast some 300 miles south of Hudson Straits, the *Kennequhair* sprang a leak and sank. The remainder of the convoy arrived at Port Burwell October 1. The two tugs then returned to their home ports. The dump scow was left at Port Burwell for the winter. The self-propelling hopper barge *No. 2*, taken over from the Department of Marine and Fisheries, which had left Montreal September 10, arrived at Port Burwell with the *Ocean Eagle* and *Ste. Anne* and proceeded immediately to Fort Churchill where she arrived October 11. From here she proceeded to Port Nelson with the *Yates* and *Neophyte* and docked for the winter.

During the winter months the force at Port Nelson was engaged in the rebuilding of temporary bridges along the railway grade from "end of steel" to Port Nelson, in the preparation of a road and in the transportation of materials delivered at "end of steel". For the transporting of materials four large 100-horsepower tractors, and two small tractors with 24 sleighs were employed.

During the month of March the transportation of materials and supplies along the coast from Port Nelson to Fort Churchill was begun, one trip being made when four tractors successfully covered the distance with 20,000 feet of timber, dynamite, gasoline and other materials.

At Fort Churchill, during the winter, twenty-two men were employed in the erection of a wireless station and in the cutting of native timber.

Contracts have now been let for the building of two 8-cubic yard dipper dredges, one 450-cubic yard dump scow and one 500-cubic yard self-propelling hopper barge. This plant, the delivery of which is expected next August, will be sent to Fort Churchill.

In the spring of 1927 the ice began to move at Flamboro Head, June 4. The river was clear by June 18. Ice began to form again in the river November 5. The river was full of ice by November 9 but was cleared three days later by a high tide. The ice formed again shortly after and by January 2, 1928, solid ice extended as far out to sea as the eye could reach.

At Churchill the ice went out of the river June 19. The bay was clear by July 10. Ice again formed in the Churchill river November 1 and by November 20 the ice field extended for fifteen miles out to sea.

(b) ST. LAWRENCE SHIP CANAL

For many years the question of the ultimate enlargement of the St. Lawrence canal system between lake Ontario and Montreal has been studied by the engineers of this department, and much data relating thereto has been obtained.

During recent years the work of completing definite plans for such an enterprise became necessary in order to enable the department to deal intelligently with proposals, by private corporations, for the development of isolated water-powers which might seriously conflict with any reasonable development of the navigation and power potentialities of the river as a whole. Under this impetus, plans were evolved for a comprehensive development of the upper section of the river.

Early in the fiscal year 1924-25 a board of engineers was appointed by the Canadian Government and a similar board appointed by the United States Government for the purpose of jointly reviewing the Wooten-Bowden report of 1921 and reporting on the cost of a through deepwater route from the head of the Great Lakes to the sea. The members of the Canadian board are Mr. D. W. McLachlan (Chairman), Brig.-Gen. C. H. Mitchell, and Mr. Olivier O. Lefebvre. A number of meetings of the board have been held and instructions as to the form and scope of the report to be made were finally agreed upon in joint session at Washington in December, 1924, and forwarded to both the Canadian and American Governments. On January 5, 1925, these instructions, after having been considered by the National Advisory Committee for Canada, were transmitted to the board. Meantime, in anticipation of the eventual receipt of these instructions, much study has been given both to the Canadian and American sections of the river. Ice conditions have been carefully investigated, stream discharges determined, soundings taken, test borings driven, surveys carried out, and numerous plans prepared. As a result, a large amount of valuable information has now been got together for use in the preparation of the required designs and report.

Forty meetings with the American section of the board have been held since its inception, three of which took place during the past year. These meetings extended over periods of from two to three days and consisted of a general discussion of the various matters on which the board was preparing to make its report. The main body of the report was eventually signed at Washington, November 16, 1926. The appendices to accompany the report were completed in July, 1927, and have been available for distribution since December last.

In the Ottawa office a staff of two engineers, one draughtsman and two clerical assistants has been maintained. For the field work, with headquarters at Cornwall, one survey party and one boring party were employed during the greater part of the year.

The office staff has been engaged in the preparation of estimates and plans for inclusion in the appendices to the report and in connection also with estimates

and plans to accompany the report on a lake terminal for use with the Welland Ship canal. In addition to this an economic study of the St. Lawrence Waterway project was made and various plans and estimates prepared in response to enquiries of a special committee of the Senate appointed to enquire into the St. Lawrence river project. The survey party was employed in surveying various sites for a terminal for use with the Welland Ship canal and on other related work. During the winter ice conditions was observed and water levels and temperatures recorded. In the vicinity of Chrysler island seventeen additional borings were put down by the boring party. As a result, better foundation conditions were discovered than had previously been thought available making possible the recommendation by the Canadian section of the board the Chrysler island project for the improvement of this section of the St. Lawrence river.

(c) HUNGRY BAY AND STE. BARBE DYKES

These dykes extend westward along the south shore of lake St. Francis from the upper entrance of the Beauharnois canal for a distance of about 7 miles. They are maintained as a protection against the waters of the lake, the level of which was raised when the canal was constructed. It may here be mentioned that since the opening of the Soulanges canal in 1899 the Beauharnois canal has ceased to be used for navigation and is under lease for power purposes only. The Hungry bay dyke has been in existence since 1856. The top of this dyke is maintained as a road. The Ste. Barbe dyke was constructed in 1889. At various places along the lake shore, protection walls have been built outside the dykes.

The road along the Hungry bay dyke was thoroughly repaired, holes and ruts being filled with a mixture of crushed stone and liquid asphalt and afterwards oiled and sanded. These repairs, which extended southerly from a point about one mile beyond the town of Valleyfield, were made over a length of about 5 miles along the dyke.

Along the lake shore, fronting the Ste. Barbe dyke, additional dry stone protection walls were constructed at various points. The aggregate length of walls thus constructed in 1927 was 8,550 feet, or 1.62 miles.

All ditches were kept in good order, weeds were cut and burned and the road kept free of snow during the winter months.

I have the honour to be, sir,

Your obedient servant,

A. E. DUBUC,

Chief Engineer.

OTTAWA, April 1, 1928.

G. A. BELL, Esq., C.M.G.,

Deputy Minister, Department of Railways and Canals,
Ottawa, Canada.

CANALS OF CANADA

Name	Location	Length in Miles	No. of Locks	Locks		
				Minimum dimensions		
				Length	Width	Depth at ordi- nary low level
				Ft.	Ft.	Ft.
<i>St. Lawrence and Great Lakes</i>						
Lachine.....	Montreal to Lachine.....	8.50	5	270	45	14
Soulanges.....	Cascades Point to Coteau Landing	14.00	5	280	45	15
Cornwall.....	Cornwall to Dickinson's Landing	11.25	6	270	45	14
Farran's Point.....	Farran's Point Rapid.....	1.25	1	800	50	14
Rapide Plat.....	Rapide Plat, Morrisburg.....	3.66	2	270	45	14
Galops.....	Iroquois to Cardinal.....	7.33	3	800	50	14
Welland.....	Port Dalhousie, Lake Ontario to Port Colborne, Lake Erie.....	26.75	26	270	45	14
Sault Ste. Marie.....	St. Mary's Rapids, 47 miles west of Lake Huron.....	1.30	1	900	60	19
<i>Ottawa and Rideau Rivers</i>						
Ste. Anne Lock.....	Junction of St. Lawrence and Ottawa rivers.....	0.12	1	200	45	9
Carillon.....	Carillon rapids, Ottawa river.....	0.75	2	200	45	9
Grenville.....	Long Sault rapids, Ottawa river.....	5.75	5	200	45	9
Rideau.....	Ottawa to Kingston.....	126.25	47	134	33	5
	Rideau Lake to Perth (Tay Branch).....	7.00	2	134	33	5
<i>Richelieu River</i>						
St. Ours Lock.....	St. Ours, Que.....	0.12	1	200	45	6.5
Chambly.....	Chambly to St. Johns, Que.....	12.00	9	118	22.5	6.5
<i>Lake Ontario to Georgian Bay</i>						
Murray.....	Isthmus of Murray, Bay of Quinte	5.17	None			11
Trent.....	Trenton to Peterboro Lock, Peter- boro.....	89.0	18	175	33	8.4
	Peterboro Lock to Washago.....	114.6	23	134	33	6
	Sturgeon Lake to Port Perry (Scu- gog Branch).....	35.0	1	142	33	6
	Port Severn Lock.....		1	100	25	6
<i>Miscellaneous</i>						
St. Peters.....	St. Peters Bay to Bras d'Or Lakes, Cape Breton, N.S.....	0.49	1	300	48	18

TABLE SHOWING THE DATES OF THE OPENING AND CLOSING OF THE CANALS FOR THE SEASON OF 1924, 1925, 1926 AND 1927

Canals	1924		1925		1926		1927	
	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed
Lachine.....	April 21	Dec. 13	April 27	Dec. 11	April 26	Dec. 11	April 25	Dec. 12
Soulanges.....	" 23	" 12	" 26	" 11	" 26	" 11	" 24	" 10
Cornwall.....	" 22	" 14	" 22	" 12	May 3	" 11	" 23	" 10
Williamsburg—								
Farran's Point.....	" 22	" 14	" 22	" 12	" 3	" 11	" 25	" 10
Rapide Plat.....	" 22	" 14	" 22	" 14	" 3	" 11	" 25	" 10
Galops.....	" 22	" 14	" 22	" 14	" 3	" 11	" 25	" 10
Welland.....	" 16	" 13	" 15	" 17	" 1	" 16	" 16	" 16
Sault Ste. Marie.....	" 19	" 15	" 8	" 17	" 1	" 17	" 12	" 18
St. Anne.....	May 1	Nov. 30	May 1	Nov. 30	" 1	Nov. 30	" 25	Nov. 30
Carillon & Grenville.....	" 1	" 30	" 1	" 30	" 1	" 30	May 1	Nov. 30
Rideau—								
At Ottawa.....	" 1	" 30	" 1	" 30	" 1	" 30	" 1	" 30
At Kingston Mills.....	" 1	" 28	" 1	" 14	" 1	" 30	" 1	" 25
Trent—								
Ontario-Rice Lake Division,								
Lower Section.....	" 13	" 4	April 25	" 6	" 1	" 6	" 11	" 12
Trenton Bridge.....	" 17	Oct. 4	May 11	Oct. 26	—	" 8	" 3	" 11
Ontario-Rice Lake Division,								
Upper Section.....	" 20	Nov. 29	May 5	Nov. 14	May 25	" 9	" 10	" 12
Hastings to Rice Lake.....			May 5	" 14	" 24	" 6	" 9	" 30
Hastings to Peterborough.....	May 15	Nov. 18						
Rice Lake to Peterborough.....			May 3	Nov. 22	May 24	Nov. 7	April 29	Nov. 15
Peterborough to Lakefield.....	May 12	Nov. 15	" 6	Oct. 29	June 8	" 5	May 7	" 15
Peterborough Lift Lock.....	" 12	" 6	" 6	Nov. 4	" 8	Oct. 31	" 10	" 5
Lakefield to Bobcaygeon.....	April 26	" 26	" 7	" 6	May 17	Nov. 15	" 7	" 5
Bobcaygeon to Balsam Lake.....	" 28	" 3	" 12	" 19	" 11	" 15	" 2	" 1
Kirkfield Lift Lock.....	May 18	Oct. 24	" 9	Oct. 23	" 17	Oct. 23	" 13	Oct. 25
Kirkfield to Lake Simcoe.....	" 18	" 24	" 21	" 31	" 10	" 23	" 13	Nov. 8
Lake Simcoe to Orillia.....	" 12	Nov. 19						
Seugog River to Lindsay Lock.....	April 27	" 15	April 8	Oct. 22	May 5	Nov. 15	May 12	Nov. 7
Murray.....	" 15	Dec. 9	" 8	Dec. 3	April 8	Dec. 3	April 14	Dec. 6
St. Ours.....	May 1	Nov. 30	May 1	Nov. 30	May 1	Nov. 30	May 1	Nov. 30
Chambly.....	" 1	" 30	" 1	" 30	" 1	" 30	" 1	" 30
St. Peters.....	April 23	Jan. 7	April 6	Jan. 9	" 10	Jan. 15	April 25	Jan. 21
		1925		1926		1927		1928