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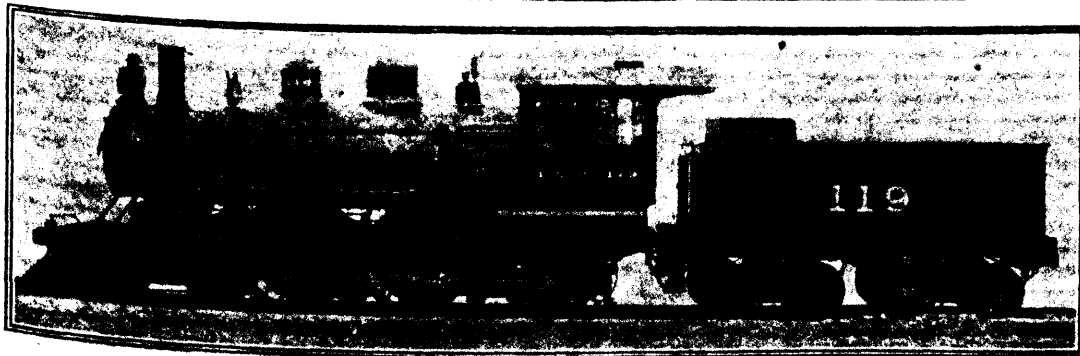
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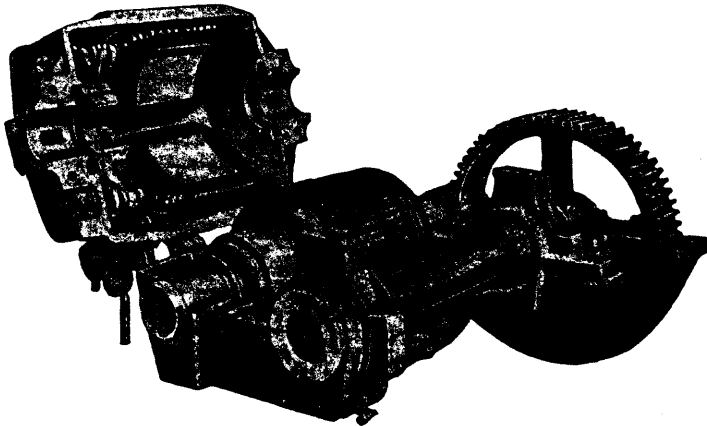
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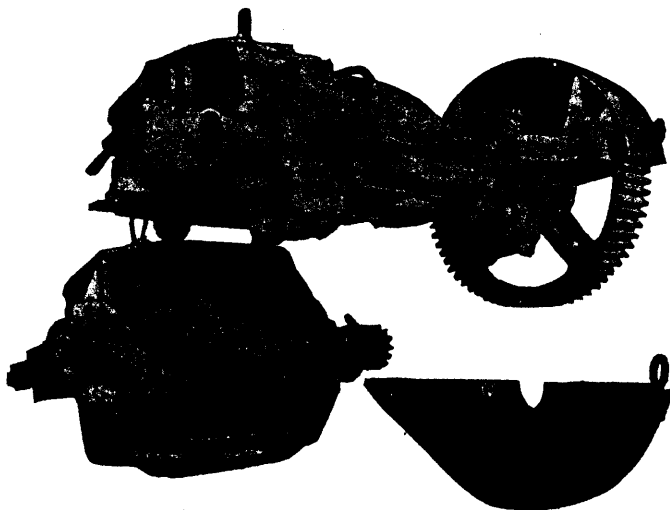
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TORONTO, CANADA, MAY, 1904.

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Grand Trunk Pacific Railway.

The following memorandum has been prepared by Jas. White, Geographer of the Department of the Interior: "During the summer of 1903 preliminary surveys were made of the line between North Bay and Winnipeg, and location surveys were made of a large portion of the line between Winnipeg and White Earth lake, about 300 miles. The extraordinarily wet weather not only interfered with the work and movements of the survey parties, but made the carriage of supplies extremely difficult and expensive. Enough work has been done, however, to show that it is possible to get a line from Winnipeg to the point at which the North Bay branch diverges from the main line, with gradients not to exceed 0.4% and curves of not more than 4°. Mr. Stephens (Assistant Chief Engineer of the G.T.R.) is confident that on the final location he can reduce most of the 0.4% to 0.3%, and he can shorten the line. All curves are compensated and the line is in every way a more favorable one than the C.P.R. through the corresponding sections. In general terms, it follows the valley of the English river to Lac Seul; thence to the Ogoki branch of the Albany river; thence in almost an air line to Opazatika lake. From this point it will probably follow a little to the south of and parallel to a base line run by Messrs. Niven & Speight, in about latitude 49° 30', for the Ontario Government. From the Interprovincial Boundary line it will probably run southward to the headwaters of the St. Maurice, thence down the valley of the last named river; thence across country to Quebec. "The first 100 miles from Winnipeg can be built for \$25,000 a mile; that between the 100th and 350th miles, will cost \$35,000 a mile, and between the 350th and 530th miles, \$30,000 a mile. From the 530th mile eastward to Quebec cannot be estimated with any degree of accuracy till further surveys are made, but Mr. Stephens considers \$30,000 a mile ample. He also stated that all these estimates were liberal and that the road should easily be constructed at these figures. The \$30,000 estimate for the line through the 'clay belt' may seem high, but it is largely due to the heavy cost of getting in supplies. For the reverse reason the cost of the Quebec-Moncton section—other costs being equal—should be correspondingly reduced.

"It should be mentioned that in Ontario and Quebec the line has been located well to the north, that as much as possible of the timbered area shall be above the track. At the same time it has been kept above the edge of the upper plateau or 'fall line' where the streams plunge down in falls and rapids to the lower plateau.

"Prairie Section—Cost, gradients and curvature. Edmonton to Winnipeg, 850 miles by preliminary surveys, but will be reduced by 25 or 30 miles. Maximum gradient in western portion, 0.4%, and maximum curve, 3°; in

eastern portion maximum grade against east-bound traffic, 0.3% and 0.4% against west-bound. The maximum gradient in the eastern portion has been reduced on the assumption that the branch lines will feed in freight to the main line, and it is highly desirable that the locomotives should be able to haul the maximum loading. There is nothing to be gained by reducing the gradient below 0.3%, as it does not require the expenditure of more power to haul a train up such a gradient than it would to start it on the level. The maximum curve, as stated above, is 3°, but there are very few as sharp as this, and the alignment is very favorable.

"Winnipeg-Missinaibi Section—The G.T. Pacific has numbered its sections from North

ent against east-bound traffic, 0.35%; of which there are only three short stretches between the 39th and 100th mile—and 0.38% against west-bound traffic. From the 100th mile to the end of this section—at its 130th mile—the preliminary location shows a maximum of 0.4%, which can be reduced on the final location.

"Sec. 6, From White Earth Lake to Otter River—80 miles. The western portion, 0 to 35th mile, has not been returned, but as it follows the Ogoki River through a generally sandy country, there will not be any difficulty in getting a maximum gradient of 0.4%.

"Sec. 5, From Otter River to 9 miles west of Kenogami or English River—89 miles. Preliminary surveys show that a 0.4% line can be got.

"Sec. 4, From 9 miles west of Kenogami to Missinaibi River—132 miles. This is an air line, which shows that nearly all the maximum gradient will be against west-bound traffic. This extraordinary tangent shows an extremely level country.

"Sec. 3, From Missinaibi River to Kakozisk or Ground Hog River—102 miles. Easy gradients with a maximum of 0.4% and an excellent line. From the eastern end of the last section the surveyed line turns south-eastward via the Mattagami, Wanapitai and Sturgeon Rivers to North Bay. No attempt has been made to keep the maximum gradient on this portion not to exceed 0.4%, as it is only a branch. A very good line has been secured."

The Nelson and Fort Sheppard Ry. Co. has appealed against the valuation of \$1 an acre placed on its land grant of 500,000 acres, on the ground that the land was practically worthless for agricultural or ranching purposes, and that the standing timber, where it has not been burned over, could not be got out at a profit. The provincial tax for which purpose the valuation was made is 5% on the value.

The amount of fees paid by the Newfoundland Government for legal assistance in connection with the railway arbitration of 1902 was \$19,060. The return recently presented to the Legislature by the Finance Minister showed that the following amounts were paid: Hon. E. P. Morris, \$6,000; M. W. Furlong, \$5,000; J. A. Cleft, \$2,015; C. H. Emerson, \$2,015; C. O'N. Conroy, \$2,015; Horwood & Conroy, \$2,015.

At the annual meeting of the Railway Transportation Association, recently held at Cincinnati, Ohio, applications for membership were received from the Canadian Northern Ry. and the Toronto, Hamilton and Buffalo Ry. A report was received from the committee appointed to consider the question of the amalgamation of the International Association of Car Accountants and Car Service Officers and the Railway Transportation Association, but action thereon was deferred.



W. WAINWRIGHT,

General Assistant and Comptroller, G. T. R.

Bay westward, and, to avoid confusion, this arbitrary numbering has been used below, though the arrangement is not a convenient one.

"Sec. 9, Winnipeg to the Winnipeg River crossing, 110 miles. The first 70 miles is practically an air line, and from the 70th mile to the eastern end of the division is an excellent location. Maximum gradient 0.35%, except $\frac{3}{4}$ mile at 0.40; maximum curve 4' and a very few, nearly all 1° and 2°.

"Sec. 8, Winnipeg River to Lac Seul, 90 miles. Maximum gradient 0.4%, most of it against west-bound traffic, maximum curve 4°.

"Sec. 7, Lac Seul to White Earth Lake, 130 miles. In first 100 miles maximum gradi-

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MASTER, Capt. Jas. Wilson, Collingwood, Ont.; FIRST OFFICER, Capt. Milligan, St. Catharines, Ont.; SECRETARY, W. Ireland, Parry Sound, Ont.; TREASURER, Capt. M. McKay, Owen Sound, Ont.

Canadian Excursion Agreement Meeting.

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Canadian Pacific Railway Club.

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NEXT MEETING, Buffalo, N.Y., Feb. 8th, 1905.

National Association Marine Engineers of Canada.

PRESIDENT, T. J. S. Milne, Kingston, Ont.; VICE-PRESIDENT, N. Ducap, Montreal, Que.; SEC.-TREAS., N. J. Morrison, St. John, N.B.; SECRETARIES OF LOCAL COUNCILS—Toronto, R. Beals; St. John, N.B., G. T. G. Blewett; Collingwood, Ont., A. McDougall; Kingston, Ont., J. Gillie; Montreal, N. Ducap; Victoria, B. C., P. Gordon; Vancouver, B. C., T. M. Heard; Lewis, Que., E. Belanger; Sorel, Que., A. L. de Martigny; Owen Sound, J. M. Wilson; Windsor, Ont., N. Maitland. NEXT ANNUAL MEETING of the Grand-Council, in Collingwood, Ont., fourth Tuesday in Jan., 1905.

Niagara Frontier Summer Rate Committee.

CHAIRMAN, H. H. Gildersleeve, Kingston, Ont. SECRETARY, G. C. Wells, Montreal.

The Shipping Federation of Canada.

PRESIDENT, H. A. Allan; CHAIRMAN OF EXECUTIVE COMMITTEE, W. I. Gear; MANAGER, T. Robb; SECRETARY, T. B. Odell. Office, 536 Board of Trade, Montreal.

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The Brockville, Westport and Northwestern Ry. commenced running a second daily train each way on April 1, thus doubling the service.

The Prudential Securities Co. (Ltd.) has been incorporated under the Ontario Companies' Act to invest and deal in debentures and stock of any corporation, etc., but without power to issue debentures or receive deposits. The capital is \$100,000, and the offices are at Toronto. The provisional directors are A. J. Mitchell, A. N. Mitchell, J. T. Franks, J. Davie and E. R. Gossett, accountants, and who are all employes of Mackenzie, Mann & Co.'s undertakings.

Alphabetical List of Advertisers.

Table listing various companies and their locations, such as W. Abbott, Montreal; The Accident and Guarantee Co. of Canada; American Locomotive Co., New York; Babcock & Wilcox (Ltd.), Montreal; Baldwin Locomotive Works, Philadelphia, Pa.; Bell Telephone Co. of Canada; Bradstreet Company; The Acton Burrows Co., Toronto; Canadian Locomotive Co., Kingston, Ont.; Canadian Northern Railway; Canadian Pacific Railway Land Department; Canadian Railway Accident Insurance Co.; Canadian Shipbuilding Co.; Canadian Steel and Wire Co., Hamilton; Canadian Westinghouse Co., Hamilton; W. H. Coddington, Hamilton; B. J. Coghlin & Co., Montreal; Estate of James Cooper, Montreal; Dominion Bridge Co., Montreal; Dominion Steamship Line; Dominion Wire Manufacturing Co., Montreal; Dominion Wire Rope Co., Montreal; E. L. Drewry, Winnipeg, Man.; Drummond, McCall & Co., Montreal; Expanded Metal and Fireproofing Co., Toronto; Firstbrook Box Co., Toronto; Galena Signal Oil Co., Franklin, Pa.; J. J. Gartshore, Toronto; Government of Manitoba; The B. Greening Wire Co., Hamilton, Ont.; Gutta Percha and Rubber Mfg. Co. of Toronto; Holland Portable Light Works, Montreal; Holt, Renfrew & Co., Toronto; Hudson's Bay Company; Hunter, Rose Co., Toronto; James Hutton & Co., Montreal; Illinois Central Railroad; Imperial Bank of Canada; Intercolonial Railway; International Mercantile Marine Co.; Wm. Jessop & Sons (Ltd.), Sheffield, Eng.; Lima Locomotive & Machine Co., Lima, Ohio; Lehigh Valley Railroad; Rice Lewis & Son, Toronto; Locomotive and Machine Co. of Montreal; London Guarantee and Accident Co., Toronto; Mail Job Printing Co., Toronto; McCaskill, Dougall & Co., Montreal; John S. Metcalf Co., Chicago, Ill.; Mica Boiler Covering Co., Montreal; Midland Towing and Wrecking Co.; Momentum Brake Co., Toronto; Montreal Steel Works, Montreal; James Morrison Brass Mfg. Co., Toronto; T. A. Morrison & Co., Montreal; W. H. C. Mussen & Co., Montreal; New York Central Railroad; Northern Electric and Manufacturing Co., Montreal; A. O. Norton, Coaticook, Que; Ontario Wind Engine and Pump Co., Toronto; Page Wire Fence Co., Walkerville; Eugene F. Phillips Electrical Works, Montreal; The Hiram L. Piper Co., Montreal; N. L. Piper Railway Supply Co., Toronto; Place Viger Hotel, Montreal; Polson Iron Works, Toronto; J. W. Pyke & Co., Montreal; Queen City Oil Co., Toronto; Rhodes, Curry & Co., Amherst, N. S.; Richelieu and Ontario Navigation Co.; St. Thomas Brass Co., St. Thomas, Ont.; Safety Car Heating & Lighting Co., New York; Saxon Engine Works, Chemnitz, Germany; Simplex Railway Appliance Co., Montreal; Sonne Awning, Tent & Tarp'n Co., Montreal; J. & J. Taylor, Toronto; Toronto Bolt and Forging Co., Toronto; Toronto Engraving Co., Toronto; Wire & Cable Co., Montreal.

The Dominion Government paid out during the year ended June 30, 1903, on account of railway subsidies, \$1,463,222.

The St. Thomas Brass Co. recently passed a by-law increasing its capital stock from \$25,000 to \$100,000, and this has been confirmed by the granting of supplementary letters patent under the Ontario Companies' Act.

The Press Association of the Province of Quebec will visit the St. Louis Exposition in May, leaving Montreal May 13 and returning May 22. They will travel via G.T.R. and Illinois Central Rd., and from Toronto will be on the special train carrying the Canadian Press Association, particulars of which were given in our last issue.

The Canadian Inspection Co. (Ltd.), recently incorporated under the Dominion Companies' Act, to inspect and report on railway works, bridges, docks, etc., and materials entering into the construction of the same, has been registered under the Ontario act respecting extra provincial companies. A. A. Wighton, Toronto, is the Company's attorney in Ontario.

RAILWAY FINANCE, MEETINGS, ETC.

Algoma Central and Hudson Bay Ry.—The Ontario Legislature has passed an act authorizing the guarantee of bonds to the extent of \$2,000,000 in connection with the reorganization of the Consolidated Lake Superior Co., under the name of the Canadian Improvement Co. The Premier in introducing the measure stated that the first thing to be done if the reorganization were completed, was the completion of the A.C. and H.B. Ry. This would take \$1,640,700. Of this road 91 miles were completed, 110 miles graded, and to complete it to the C.P.R. would entail the construction for 25 miles of what was as yet unbroken ground. But the engineer certified that the route of this 25 miles ran across reasonably level country, well adapted for inexpensive railway construction. This would make a total length of railway, including the Michipicoten branch, of 225 miles. The amount of money to be expended for the completion was to a certain extent provided for already. As against this expenditure by the Company there was the Dominion subsidy of \$645,000, of which \$341,440 had already been earned and the balance would have been earned when the line already graded was completed. There would be a further sum of \$142,500 to be earned in respect of the 25 miles to connect with the C.P.R., making altogether \$787,764, or nearly half of the amount which it would cost to complete the line. The Government was to have as security a first mortgage on this 225 miles of line, as well as a mortgage on the following securities: \$6,750,000 first mortgage bonds of the A.C. and H.B. Ry.; \$405,000 of first mortgage bonds of the Manitoulin and North Shore Ry.; a mortgage on the rolling stock valued at \$1,000,000; \$725,000 first mortgage bonds of the steamers of the Company; the common stock of the A.C. and H.B. Ry., \$10,000,000; the common stock of the M. and N.S. Ry., \$214,000, as well as the land grants of both companies. The new company was to have a capital of \$40,000,000, and there was to be issued \$3,000,000 of income bonds, and \$10,000,000 of first mortgage bonds, which would be secured on all the properties of the Company except the railways and steamships. The main security of the Government was its first mortgage on the railways, their rolling stock, the steamships and the land grants, but in addition the Government was to have collateral in the shape of bonds. The guarantee of the Government would extend over two years, and in the case of default, by the non-completion of the line, possession could be taken of the line. The Government would also have three representatives upon the directorate, the total number of directors being nine. From statements issued during the discussion it appeared that under the reorganization plans the Canadian Improvement Company would have a working capital of \$4,340,000 after paying off all liabilities, and that the total cash investments in the various undertakings amounted to \$28,259,177.00, of which there had been expended on the A.C. and H.B. Ry. \$9,017,297.27; on the Manitoulin and North Shore Ry., \$533,186.95; on the Trans-St. Mary's Traction Co., \$217,784.41; and on the International Transit Co., \$308,744.51, a total of \$10,076,993.14.

Bellingham Bay and British Columbia Ry.—The Great Northern Ry. (U.S.) is reported to have secured an option on the B.B. and B.C. Ry., which connects with the C.P.R. on the International Boundary at Sumas.

British Columbia Electric Ry.—The earnings for the half-year ended Dec. 31, 1903, were £85,286 and the working expenses £46,932, leaving £38,354 net earnings, compared with £29,905 for same period 1902, and £27,350 for same period 1901. In view of the good results of the half year's trading the di-

rectors increased the dividend on the deferred ordinary stock to 3% for the half-year, being at the rate of 6% a year. The dividend was paid April 21.

Earnings and expenses for Feb.:

GROSS EARNINGS.	1903.	1904.	Increase or Decrease.
Railway—Vancouver division	\$10,619	\$14,008	\$3,389+
Victoria	7,800	9,266	1,466+
Westminster	8,060	8,189	129+
Lighting—Vancouver division	17,336	23,292	5,956+
Victoria	8,376	10,690	2,314+
	52,191	65,445	13,254+
Less working expenses	33,488	38,093	5,415+
	18,703	26,542	7,839+
Renewal funds	4,222	5,988	1,766+
Net income	14,481	20,554	6,073+
Aggregate gross earnings, July 1, to Feb. 29	455,428	552,084	97,556+
Aggregate net earnings, July 1, to Feb. 29	155,544	203,958	48,414+

Buffalo and Lake Huron Ry.—The report for the half-year ended Dec. 31 showed that after providing for the interest on the 1st and 2nd mortgage bonds, the available balance on revenue account, including the amount brought forward from the previous half-year, was £14,224 15s. This allowed of the payment of the usual dividend of 5s. 3d. a share, and left a balance of £440 1s. 9d. to be carried forward. The dividend was paid early in March. The B. and L.H. Ry. Co. owns the line between Fort Erie and Goderich, Ont., 162 miles, which is leased to the G.T.R. at a fixed rental of £70,000 a year, payable half-yearly, Mar. 1 and Sept. 1. The capital account shows that there have been issued 52,513 ordinary shares of £10 each, on which there has been paid £525,130, and that there have been issued 5½% first mortgage bonds to the amount of £297,600, and 5½% second mortgage bonds to the amount of £466,158, making a total capital indebtedness of £1,288,888. The half-yearly meeting was held in Liverpool, Eng., Mar. 2, when the report was adopted, and a resolution authorizing the payment of the dividend passed.

Canada Atlantic Ry.—J. R. Booth recently stated that the press reports to the effect that Mackenzie, Mann & Co. were negotiating for the purchase of the C.A.R. had no foundation; in fact, he denied that overtures looking to the sale of the line had come from anybody.

The net earnings for 1903, a press report states, show an increase of \$122,069 over 1902.

Canada Coals and Ry. Co.—The report for the year ended Sept. 30, 1903, as filed with the Provincial Engineer of Nova Scotia shows total receipts of \$34,516.84 made up as follows: passengers, \$3,073.05; mails and express, \$686.28; freight, \$29,521.71; mileage, \$1,235.80. The expenditures were: maintenance of ways and works, \$4,978.41; locomotive power, \$5,488.74; repairs and renewals of cars, \$2,937.66; traffic expenses, \$2,933.31, total, \$16,338. The net revenue was \$18,178.72.

Canada Eastern Ry.—Rumors to the effect that the C.P.R. has acquired the C.E.R. from the Alexander Gibson Ry. and Manufacturing Co. continue to be circulated in Montreal and New Brunswick. The latest are that the C.P.R. had an option on the line which expired Mar. 10, and that T. C. Burpee has inspected the line with a view to its purchase by the Dominion Government as a part of the Intercolonial system. The price mentioned as being asked is \$700,000.

The Canadian Electric Traction Co. (Ltd.) recently issued a prospectus in England inviting subscriptions for 53,000 shares of £1 each, part of an issue of 78,000 shares. The Company has a capital of £120,000 in £1 shares, and has been formed for the purpose

of financing the construction of electric railways in Canada, and, as a first operation, has entered into contracts which provide for the construction of certain lines in the province of Ontario. We are advised that the Company has entered into a contract with the South-Western Traction Co. for financing the construction of the line and equipping it with rolling stock. C. G. Steele, formerly chairman of the Great Northern Ry. of England, is chairman of the board, and A. E. Welch, of London, Ont., is Managing Director and Secretary-Treasurer of the South-Western Traction Co.

The Canadian Improvement Co. is the title of the new Company in course of formation to take over the Consolidated Lake Superior Co. and its subsidiary companies. The Company will have a capital of \$40,000,000, with a bond issue of \$13,000,000.

See Algoma Central and Hudson Bay Ry.

Canadian Northern Ry.—Earnings:—

	1903-04.	1902-03.	Increase or Decrease.
July, 1903	\$254,800	\$132,000	\$122,800+
Aug "	250,800	131,200	119,600+
Sept "	270,800	182,300	88,500+
Oct "	334,100	236,500	97,600+
Nov "	338,300	240,500	97,800+
Dec "	279,200	201,700	77,500+
Jan., 1904	211,800	154,700	57,100+
Feb. "	175,100	147,750	27,350+
Mar. "	201,900	174,700	27,200+
	\$2,316,800	\$1,601,350	\$715,450+

+Increase.

Net earnings for Feb. \$51,800, against \$50,100 for Feb., 1903, making net earnings for eight months ended Feb. 29 \$725,600, against \$500,610 for same period 1903. There are in operation 1,350 miles, against 1,277 in 1903.

W. Mackenzie, President, on his return from a recent visit to London, Eng., was interviewed regarding the future of the line, and stated that he had been able to place a large issue of the guaranteed bonds of the Company at a satisfactory rate, notwithstanding the sluggish state of the money market. The issue of bonds will be sufficient to provide for the Company's construction requirements for a couple of years.

The Company is applying at the current session of the Dominion Parliament for an act authorizing the consolidation of a number of the securities issued from time to time in the past, by the issue in place thereof of new stock. The Manitoba Legislature at its recent session passed an act providing for the exchange of certain outstanding guaranteed bonds and the exchange therefor of a new issue of guaranteed securities. Under the agreement of 1901 the Company was authorized to issue 2nd mortgage 5% bonds to rank after the guaranteed bonds, the total of both issues being \$10,000 a mile. Under the present act the Government guarantees the principal and interest of bonds, debentures or other securities to the extent of \$10,000 a mile, in respect of which it has guaranteed or agreed to guarantee bonds, and provision is made for the issue of such securities in exchange for the mortgage bonds at present issued.

Cape Breton Electric Co.—See Sydney and Glace Bay Ry.

Cape Breton Ry.—The report of the operations of this railway to Sept. 30, 1903, which extends from Point Tupper to St. Peter's, N.S., 31 miles, and which was opened for traffic Sept. 7, 1903, is given in the report of the Provincial Engineer of Nova Scotia. The receipts were \$788.11 and the expenditure \$1,386.43, showing a net loss on the 23 days' operation of \$598.32. The Company ran mixed trains 1,395 miles during the period under review.

Central Ry. Co.—The report of this Company, which now forms part of the Halifax and Southwestern Ry., for the year ended

Galena-Signal Oil Company,

Franklin, Pa., and Toronto, Ont.

**Successor to Galena Oil Company and
Signal Oil Company, sole Manufacturers
of the celebrated Galena Coach, Engine
and Car Oils, and Sibley's Perfection
Valve and Signal Oils.**

CHARLES MILLER,
PRESIDENT.

Sept. 30, 1903, as published by the Nova Scotia Provincial Engineer, shows receipts of \$65,342.82, made up as follows: Passengers, \$32,742.26; parcels and mails, \$4,073.70; freight, \$27,850.79; rents, etc., \$676.05. The expenditure was: Maintenance of way and works, \$20,005.10; locomotive power, \$12,776.26; repairs and renewals of cars, \$2,776; traffic expenses, \$7,440.84; general charges, \$4,069.94; total, \$47,068.18. The net revenue was \$18,274.64.

Columbia and Western Ry.—The Dominion Government has announced that the B.C. Legislature was within its rights in passing an act confirming the cancellation by the Government of blocks 4,593 and 4,594 of the land grant of the C. and W. Ry. The granting of these blocks, which are about 100 miles from the railway, was made the subject of a special inquiry by the Legislature in 1903, when it was found that in the original reserve there was sufficient land to satisfy the land grant earned, and that the granting of the blocks in question was in violation of the subsidy act and against the public interest.

Dominion Atlantic Ry.—Gross earnings for Feb., \$52,400, against \$43,525, making for two months ended Feb. 29, \$106,200, against \$91,723 for same period, 1903.

The eighth annual meeting was held in London, Eng., Mar. 30. C. F. Kemp, President, was in the chair, and in moving the adoption of the report said the directors were satisfied with the result of the past year's working, in view of the weather and other conditions, and they were still more satisfied with the prospects of the undertaking. There had been unusual floods and rain, and a day or two previously the directors received a telegram stating that a portion of the line was under water. But their officers in Canada had assured them that the injury done by the floods would not cost more than £200 to repair. The traffic receipts for the past year showed an increase of £12,000 as compared with those for 1902, but the expenses had also been higher. About 500 tons of rails had been put into the track, and the siding accommodation had been increased, in view of the additional traffic they now had to carry. The Government toll was also larger by £1,700. The working expenses had been about 74% of the gross earnings. The merchandise traffic showed an increase of 46,000 tons. The directors were confident that the railway was now in a thoroughly efficient condition, and, with favorable seasons, the traffics might be expected to go on increasing. The finances of the Company were in a sound and healthy condition, and about £10,000 had been invested in consols. The general development of the traffic was highly satisfactory in view of the circumstances. He hoped that the day was not far distant when they would again be able to pay 5% on the preference stock, and then the ordinary stockholders would begin to participate in the revenue. The undertaking gave every hope of a successful future. The steamers cost £250,000, and the amount to the credit of the suspense account represented about 14%. P. Gifkins, General Manager, emphasized the very considerable development which was taking place, and which he hoped would continue to take place. Owing to the abnormal wet of last summer passenger business fell below his expectations. The tourist travel represented a very valuable element to the Annapolis Valley, and any absence of tourists was therefore to be deplored. On the other hand, the essential features of trade in their territory were satisfactory, and with an improvement in the recent conditions of weather they would have every reason to be gratified. The report and statement of accounts were adopted, as also was a resolution determining the right of priority as to capital of the preference over the ordinary stock of the Company. It was pointed out that

owing to an error made by the Company's former solicitors, the preference shareholders had been put into a worse position, in the event of the liquidation of the Company, than they were in under the old act. The solicitor said it was understood that the preference stock had a priority as to capital over the ordinary stock, and it was part of the terms on which the preference shareholders came into the arrangement, adding that he could mention a large number of stocks which were non-cumulative as to dividend, but which had priority as to capital.

Elgin and Havelock Ry.—The mortgage deed dated Feb. 10, 1904, given to the Eastern Trust Co., to secure an issue of bonds to the amount of \$50,000, has been deposited with the Secretary of State at Ottawa. (Mar., pg. 90.)

G.T.R. Assessment.—The G.T.R. secured an act at the recent session of the Ontario Legislature for an act confirming a by-law of the town of Barrie, fixing the rate of taxation for certain of the Company's property in the town. The assessment has been fixed at \$35,000, at which figure it will remain for 25 years, except in respect of additions, may be made to the Company's property after 1904. Should Barrie cease to be a divisional point the agreement is to become void.

G.T.R.—The list of applicants for the £161,000 of first mortgage 4% 50 year gold bonds of the Grand Trunk Western Ry., closed April 8, when it was notified that the issue had been over-subscribed. The bonds are redeemable in 1950, and the interest is guaranteed unconditionally by the G.T.R. The first coupon is payable in full July 1.

Great Northern Ry. of Canada.—Ross & Macrae, railway contractors, have started an action in Montreal to recover \$50,000 from the G.N.R. Co. for work done on the Company's lines and for material and rolling stock supplied.

Halifax and Yarmouth Ry.—The report for the year ended Sept. 30, 1903, as filed with the Provincial Engineer of Nova Scotia, shows receipts of \$38,806.08, made up as follows: Passengers, \$25,784.61; mails, \$2,008.85; freight, \$10,576.27; miscellaneous, \$526.35. The expenditure included maintenance of way and works, \$8,460.77; locomotive power, \$9,385.24; car repairs, \$1,570.34; traffic expenses, \$5,880.79; general charges, \$1,594.00; total, \$26,891.14. Net earnings, \$12,004.94. The general balance sheet shows a surplus of \$34,322.86.

Halifax Electric Tramway Co.—Gross receipts from railway:

	1904.	1903.	Increase or Decrease.
Jan.	\$10,677.51	\$10,867.33	\$189.82—
Feb.	9,894.47	9,321.75	572.72+
Mar.	11,151.74	10,195.12	956.62+
	\$31,723.72	\$30,384.20	\$1,339.52

+ Increase. — Decrease.

Hamilton, Grimsby and Beamsville Electric Ry.—By an act passed at the recent session of the Ontario Legislature, by-law 287 of the city of Hamilton, respecting the issue of additional bonds for the construction of the extension from Vineland to St. Catharines, Ont., was confirmed.

Intercolonial Ry.—The public accounts for the Dominion, recently presented to Parliament, show that the expenditure charged to capital on the I.C.R. for the year ended June 30, 1903, was \$2,254,266.

Inverness Coal and Ry. Co.—The railway portion of this Company's undertaking earned \$130,514.44 for the year ended Sept. 30, 1903, as shown by particulars given in the report of the Nova Scotia Provincial Engineer. Of this income \$21,208.34 was received from passenger traffic, \$312.16 from express; \$107,678.58 from freight, and \$1,315.36 from miscellaneous sources. The expenditure was: maintenance of ways and works,

\$19,219.46; locomotive power \$39,662.06; repairs and renewals of cars and equipment, \$6,388.82; traffic expenses, \$18,198.97; general charges, \$8,709.81; total, \$92,179.12. The net revenue was \$38,335.32. The Company has expended on its railway, mines, plant, property, rights, construction and development, \$10,126,609.65, and has issued \$2,115,000 out of a total of \$3,000,000 of bonds.

Irontdale, Bancroft and Ottawa Ry.—By an act passed at the recent session of the Ontario Legislature the I. B. and O. Ry. Co. has been authorized to sell its line to, or amalgamate with the James Bay Ry., the G.T.R. or the Toronto, Lindsay and Pembroke Ry. In connection with the passing of the act some opposition was made by the Misses Pusey, daughters of the original promoter, the late C. J. Pusey, but was withdrawn on the promoters of the bill stating that their interests would be protected. A writ has been issued by F. C. Jones, a shareholder, who seeks, as assignee of the share of the late Sarah H. Jones in the property of the late C. J. Pusey, for an injunction against L. B. Howland, President and General Manager; Z. A. Lash, K.C., and H. S. Mara, who are holders of large interests in the line, from proceeding with the sale of the railway.

Kingston, Portsmouth and Cataraqui Ry. Co. (Electric).—An act was passed at the recent session of the Ontario Legislature, on the application of the Kingston city council, amending its agreement with the Kingston Street Ry. Co., now a part of the K.P. and C. Ry. Co., by providing for the payment of a fine of \$100 a day for every day during which the Company neglects to run its cars; and for the forfeiture of the charter if the Company makes default for five successive days. In the event of an order of forfeiture being obtained the city may take over the Company's line at a valuation as provided for at the expiration of the franchise. A clause in the agreement giving the Company power to close the line in winter, and to substitute a service by sleighs was struck out, and the consequent provision of a continuous service winter and summer was provided for. (Mar., pg. 78.)

London and Port Stanley Ry.—At a recent board meeting a by-law was passed authorizing the delivery to the corporation of the city of London of certain bonds of the Company. The object of this, it was explained, was to place the control of the line in the hands of the city, otherwise the city, though, in reality, owning all the line, would be placed in the position of a mere creditor with no vote on the directorate except on 1,828 shares. The G.T.R. owns 2,317 shares. The rental received by the city of London from the Pere Marquette Rd., which now operates the line in connection with its Buffalo division (the Lake Erie and Detroit River Ry.) amounts to \$10,000, and for the year ended Dec. 31, 1903, it is entitled to an additional \$3,300 on percentage account, the receipts exceeding \$80,000 a year, upon which basis the rental is fixed.

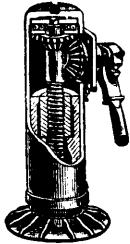
London, Ont., Street Ry.—Gross earnings:

	1903-04.	1902-03.	Increase or Decrease.
Dec.	\$14,141.83	\$15,041.80	\$899.97—
Jan.	11,409.02	12,120.87	711.85—
Feb.	9,316.03	10,716.42	1,400.39—
Mar.	11,937.00	11,533.68	403.32+
	\$46,803.88	\$49,412.77	\$2,608.89—

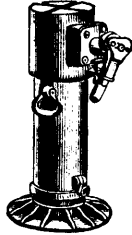
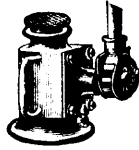
— Decrease + Increase.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—The Company has financed its extensions to date by means of the sale of first mortgage consolidated 4% bonds, guaranteed as to interest by the C.P.R., and authorized at \$20,000 a mile. The \$4,866,000 of these bonds, for which application has been made to have listed on the New York Stock Ex-

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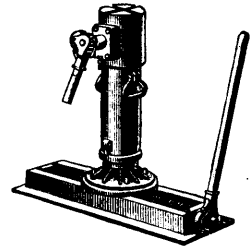
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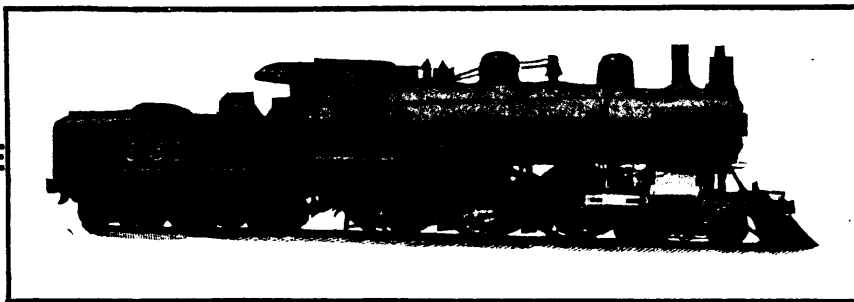
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change, represent some of the bonds sold for this purpose. This mortgage, authorized in 1888, was for \$21,000,000 on the 800 miles then existing, and at \$20,000 a mile for any additions. Out of the \$21,000,000 sufficient was reserved to retire all underlying bonds. The road is now practically 1,500 miles in length, 700 miles having been added. The authorized amount is therefore nearly \$35,000,000, including the reserve to retire \$8,545,000 underlying bonds. Not including these bonds, the total amount available would be \$26,455,000. The Company has outstanding \$25,058,000 of these bonds. The newly issued bonds represented in the \$4,866,000 now listed appears therefore to be but in the neighborhood of \$1,400,000, the rest having been issued prior to June 30, 1903.—Wall Street Journal.

Midland Ry.—At the annual meeting of shareholders held in Montreal Mar. 22, the directors' report showed a gratifying increase in the gross earnings. The following are the officers and directors for the current year: President, W. Strachan; Vice-President, A. Putnam; Treasurer, J. Beatty; Secretary, A. Hovenden; other directors: P. Lyall, B. T. Pearson, G. G. Faulkner, F. J. McMullen, J. Mackay, and Hon. S. H. Holmes.

The report for the year ended Sept. 30, 1903, as published in the report of the Provincial Engineer of Nova Scotia, gives the following information: Passenger receipts, \$30,285.55; freight receipts, \$29,938.93; parcels receipts, \$366.01; total, \$60,590.49. The expenditures were: maintenance of way and works, \$11,173.81; locomotive power, \$16,456.38; repairs and renewals of cars, \$2,639.56; traffic expenses, \$10,678.90; general charges, \$4,322.60; total, \$44,961.25. The net revenue was \$15,628.94. For the year ended Sept. 30, 1902, the receipts amounted to \$40,506.43; the expenditure to \$33,104.20, and the net revenue to \$7,402.23.

Montreal Street Ry.—Earnings and expenses for Feb., 1904:

	1904.	1903.	Increase or Decrease.
Passenger earnings.	\$167,023.44	\$139,065.47	\$27,957.97+
Miscellaneous earnings.	1,661.85	2,734.92	1,073.07-
Total earnings.	168,685.29	141,800.39	26,884.90+
Operating expenses.	131,420.59	108,803.02	22,617.57+
Net earnings.	37,264.70	32,997.37	4,267.33+
Fixed charges.	16,940.05	15,715.93	1,224.12+
Surplus.	20,324.65	17,281.44	3,043.21+
Earnings % of car earnings.	78.68	78.23	

	1903-04.	1902-03.	Increase or Decrease.
Passenger earnings.	\$929,570.88	\$831,256.48	\$98,314.40+
Miscellaneous earnings.	8,250.68	14,312.33	6,061.65-
Total earnings.	937,821.56	845,568.81	92,252.75+
Operating expenses.	618,257.81	533,378.85	84,878.96+
Net earnings.	319,563.75	312,209.96	7,353.79+
Fixed charges.	85,788.45	81,706.18	4,082.27+
Surplus.	233,775.30	230,503.78	3,271.52+
Earnings % of car earnings.	66.51	64.17	

Co. not included. — decrease.

The Supreme Court recently gave a decision in the appeal of the city against the decision of the Quebec courts in the action brought by the city to recover \$21,000, alleged to have been illegally deducted from the amount due the city for the years 1893 to 1896 inclusive. Under the agreement with the Company the city is to receive during its currency 4% on the net earnings up to \$1,000,000 and an increased percentage on further income. The Company contends that this percentage is only payable on its lines within the city, while the city holds that it is payable in respect of the income arising from all the Company's lines. The Quebec courts decided in favor of the Company, but the Supreme Court has found in favor of the city. The case will be taken to the Provincial Council by the Company.

Northern Ry.—On Dec. 20, 1850, the county of Simcoe, Ont., purchased £50,000 of stock in the Northern Ry., now a part of the G.T.R. system, and is now owner of £36,276. A committee was recently appointed to dispose of the stock to the best advantage.

Nova Scotia Steel and Coal Co.—The report of the operations of the railway portion of the undertaking of this Company for the year ended Sept. 30, 1903, as given in the report of the Provincial Engineer of Nova Scotia, shows the receipts to have been \$15,102.46, and the expenses \$17,311.31, a net loss of \$2,208.85.

Ottawa, Brockville and St. Lawrence Ry.—The following are the officers and directors for the current year: President, H. T. Shillington, M.D., Ottawa; Vice-President, Jas. Curry, Toronto; Treasurer, F. O'Reilly, Ottawa; other directors: Capt. J. W. Hutt, Liverpool, N.S.; H. Carson, J. W. Shillington, M.D.; R. T. Shillington, M.D., Ottawa.

The Company is applying at the current session of the Dominion Parliament for power to increase its capital to \$1,000,000.

Port Arthur Electric Ry.—Gross receipts for Feb. \$1,733.55, against \$1,233.70 for Feb., 1903.

Prince Edward Island Ry.—During the year ended June 30, 1903, there was expended on capital account \$829,414.

Qu'Appelle, Long Lake and Saskatchewan Ry.—Net loss for Jan., \$4,414.74, against net earnings of \$1,557.50 for Jan., 1903; making for two months ended Jan. 31, net earnings of \$2,805.09, against \$2,832.25 for same period 1902-03.

Quebec and Lake St. John Ry.—Gross earnings for Feb., \$24,498, against \$20,307 for Feb., 1902, making for two months ended Feb. 29, \$48,856, against \$43,105 for same period 1903.

Quebec Bridge and Ry. Co.—A copy of the mortgage trust deed dated Feb. 1, 1904, to the Royal Trust Co., to secure an issue of first mortgage bonds to the amount of \$6,678,000 guaranteed by the Dominion Government, has been deposited with the Secretary of State at Ottawa.

Quebec Central Ry.—Gross earnings for Feb., \$44,476.63; working expenses, \$36,585, 71; net earnings, \$7,890.92, against \$39,580.26 gross and \$4,513.64 net for Feb., 1903. Net earnings for two months ended Feb. 29, \$12,122.39, against \$8,479.09 for same period 1902.

A dividend of 2½% was paid April 15, on the new 7% income bonds for the year ended Dec. 31, 1903.

Quebec Southern Ry.—G. C. Dessaulles was appointed a receiver by the Exchequer Court on the application of creditors, Mar. 20, and was given power on Mar. 26, to borrow \$12,000 to pay wages and to operate the line. The circumstances leading up to the appointment of the receiver included a strike of employees on the South Shore division on Feb. 29, and a seizure by them to secure their wages; and a subsequent seizure of the lines forming the Q.S. Ry., before the South Shore Ry. was absorbed, to satisfy a judgment for \$24,000. Early in March J. M. M. Duff took possession of the lines as trustee for the bondholders, and it was officially announced that there had been filed with the Registrar of the Exchequer Court a scheme of arrangement in conformity with the provisions of the Railway Act, 1903, section 285. This section provides for the filing of a scheme of arrangement with creditors by the directors of an insolvent company; the effect of the filing of this scheme is that the Exchequer Court may summarily restrain any action taken against the Company, and after the publication of notice of the filing of the scheme of arrangement, no execution, attachment or other process, against the property of the Com-

pany shall be available without leave of the court. Under section 286, the scheme of arrangement to become operative must be assented to by three-fourths in value of debenture stock, or holders of other charges, but such consent is not necessary if the scheme does not prejudicially affect any right or interest of any class of stockholder. Application for confirmation of the scheme is to be made within three months, and in the event of this being done it will be enrolled, and copies of the arrangement are to be printed and sold. This is the first Company to take advantage of the provision in the new act.

St. Thomas St. Ry.—The report of operations from Jan. 1 to Mar. 31 has been presented to the St. Thomas, Ont., city council by the board of street railway commissioners. At the first of the year there was a balance of \$200.24; the ticket sales were \$930.75; cash fares, \$740.61; amounts advanced by city to meet expenses, to pay Dec. accounts and to pay coupons, \$2,361.90; miscellaneous receipts, \$75.10; total, \$4,308.60. The expenditure, including all wages, supply, equipment, repairs, power, coupons, etc., was \$4,418.02, leaving an overdraft at the bank of \$109.42.

Sandwich, Windsor and Amherstburg Ry.—This railway, which extends from Windsor to Amherstburg, Ont., and includes the City Railway of Windsor, has a mileage of 25.022, and is owned by the Detroit United Railway Co. The receipts for the year ended Dec. 31, 1903, as reported at the annual meeting held in Detroit, Mich., Mar. 16, were \$89,160.26, and the operating expenses, including taxes, were \$56,980.58, leaving net earnings from operation, \$32,179.68. The income from other sources was \$12,117.69, making a total of \$44,297.37. After providing for interest on the funded debt \$6,837.38, there remained a surplus of \$37,459.99. During the year the mileage of the line was increased from 11.890 to 25.022 miles. The following statistics are given:—

	1903.	1902.
Revenue, passengers.	\$1,715,114	\$1,463,824
Transfer.	158,913	128,248
Employs.	25,774	20,463
Receipts per rev. pass.	.0513c.	.0448c.
" per passenger.	0.463c.	.0406c.
Car mileage.	521,394	437,211
Earnings per car mile.	.1710c.	.1514c.
Expenses.	1093c.	0902c.
Net earnings.	.0617c.	.0594c.

The expenditure on completing the line to Amherstburg, and improving the track in Windsor, etc., was \$315,267.28. The balance sheet is as follows:—

Capital stock	\$297,000.00
Mortgage bonds	297,000.00
Accident fund	1,221.76
Bills payable	10,000.00
Detroit United Ry.	169,430.14
Accrued interest.	1,354.64
Unredeemed tickets	488.35
Surplus	33,518.00
Investment	\$802,809.04
Accounts receivable	506.33
Stores	3,691.56
Prepaid taxes	883.40
Cash	2,121.96
	\$810,012.29
	\$810,012.29

The directors and officers for the year are: President, H. A. Everett, Cleveland, Ohio; Vice-President, J. C. Hutchins, Detroit, Mich.; other directors: E. W. Moore, Cleveland; H. B. Van Courtlandt, New York; M. Brennan, A. Pack, C. B. King, Jos. Bampton, Detroit; Secretary, A. E. Peters; Manager, J. Anderson.

An act has been passed at the recent session of the Ontario Legislature declaring that chap. 97 of 1893 repealed sections of previous acts relating to the borrowing powers of the Company; confirming a mortgage to the National Trust Co. securing a mortgage of \$600,000; authorizing the transfer of the City Railway of Windsor to the S.W. and A. Ry. Co., and giving permission to the Company to acquire stock in other similar companies.

An action has been brought by the Company against the town of Amherstburg for the payment of \$10,000 bonus.

Shuswap and Okanagan Ry.—Net receipts for year ended Dec. 31, 1903, \$20,423, against \$17,211 for 1902.

Sydney and Glace Bay Ry.—The differences between the Cape Breton Electric Co. and the Dominion Coal Co. with reference to the management and operation of the S. and G.B.Ry. have been settled. The two Companies each own a half interest in the stock of the S. and G.B.Ry., and each obtained an in-

junction restraining the other from operating the line. As there were only four directors matters were at a deadlock, until after some negotiations it was decided to appoint a fifth director. C. Archibald, of Halifax, was subsequently appointed, and the injunctions will be dissolved.

Sydney and Louisburg Ry.—The accounts of the Dominion Coal Co. show that from Mar. 1, 1902, to Dec. 31, 1903, there was expended on capital account on the S. and L.Ry., \$43,585, and \$50,367 for rolling stock.

The accounts for the year ended Sept. 30,

1903, as presented to the Nova Scotia Government, give the following information: Revenue—passengers, \$25,996.82; mails, \$829.20; freight, \$676,970.20; mileage, \$33,429.49; total, \$737,225.71. Expenditure—maintenance of way, works, etc., \$40,704.93; locomotive power, \$134,683.55; car repairs, \$62,472.64; traffic expenses, \$88,024.36; general charges, \$37,875.00; total, \$363,760.48; net revenue, \$363,465.23.

Temiscouata Ry.—Gross receipts for Jan., \$8,151.29, against \$6,911.21 for Jan., 1903, making for seven months ended Jan. 31,

RAILWAY AND STEAMBOAT RUBBER GOODS of the Highest Grade

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For Air Brakes, Steam, Gas, Water, Pneumatic Tools, Fire Protection.



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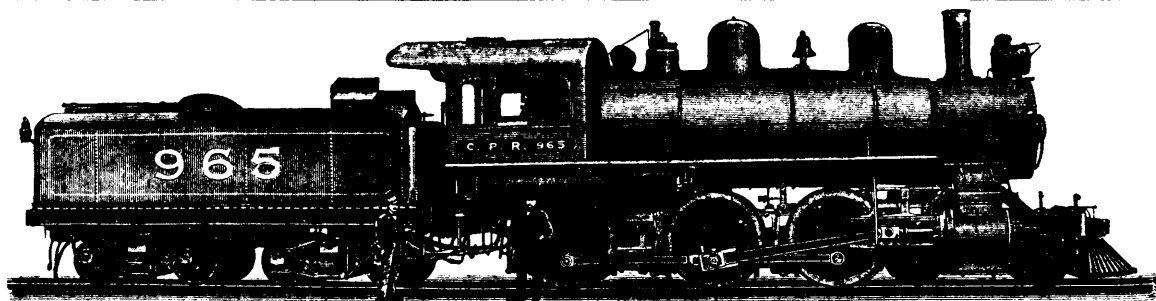
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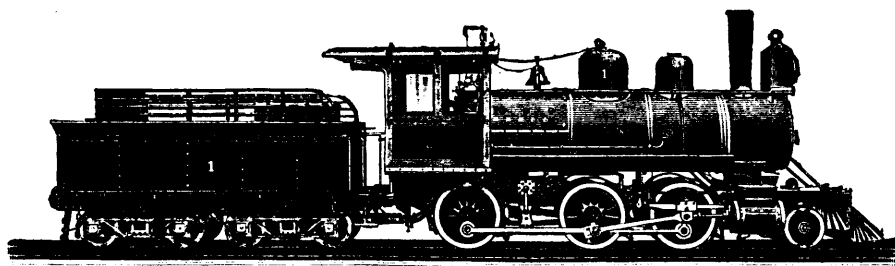


The Saxon Engine Works, late Rich. Hartmann, Limited

CHEMNITZ (Germany),

Carry on the construction of **LOCOMOTIVES** of every description.

Number of Workmen, 5,200.



Capital, \$3,000,000.

\$80,843.24, against \$82,262.61 for same period, 1902-03.

Toronto, Hamilton and Buffalo Ry.—Gross receipts for Mar., 1902, making for ten months ended Mar. 31, \$492,940.04, against \$400,041.53 for same period, 1902-03.

Toronto Railway Co.—Gross earnings:

	1904.	1903.	Increase or Decrease
Jan.	\$179,359.92	\$161,538.14	\$17,821.78+
Feb.	168,904.33	146,539.21	22,365.12+
Mar.	183,641.08	159,542.85	24,100.23+
	\$531,907.33	\$467,620.20	\$64,287.13+

Victoria Terminal Ry. and Ferry Co.—Application has been made to the Supreme Court by the Company for leave to pay in \$5,500 in favor of A. E. Henry, who has an action pending. (Feb., pg. 43).

White Pass and Yukon Ry.—Gross earnings for Feb., \$27,788, making for seven months to Feb. 29, \$1,237,767.

Windsor City Ry.—See Sandwich, Windsor and Amherstburg Ry.

Winnipeg Electric Street Ry. Co.—The following are the officers and directors for the current year: President, W. Mackenzie, Toronto; Vice-President, W. Whyte, Winnipeg; other directors, Sir Wm. Van Horne, Montreal; D. D. Mann, D. B. Hanna, Toronto; A. M. Nanton, Winnipeg; Secretary-Treasurer, F. M. Morse. The Company has not issued a report for 1903, but it is stated that the receipts were \$287,279.45, of which the city received \$14,363.96.

A Michigan Central Rate Case.

On April 1 Commissioner Prouty, of the Interstate Commerce Commission, delivered the following report and opinion of the Commission in the case of C. M. Cist vs. Michigan Central Rd. Co.:

Niagara-on-the-Lake is situated on the Canadian side of the Niagara River near where it empties into Lake Ontario. The defendant, a U.S. corporation, maintains a through passenger service from this point to Buffalo, N.Y. The route is by the railroad of the defendant from Niagara-on-the-Lake to Victoria, Canada, a distance of about 30 miles, thence across the International Bridge to Black Rock on the U.S. side and from there to Buffalo over the tracks of the New York Central, 5 miles. The bridge is operated by an independent company, which charges 6c. for each passenger carried across it in the trains of the defendant. The entire distance from Niagara-on-the-Lake to Buffalo is 35.3 miles.

By the New York Central line it is 30 miles from Buffalo to Lewiston, which is situated upon the New York side of the Niagara River about 5 miles from Niagara-on-the-Lake. Steamers ply between Lewiston and Niagara-on-the-Lake, so that it is possible to reach Buffalo from the latter point over this route as well as by the line of the defendant. The New York Central is prohibited by law from charging more than 2c. a mile passenger fare, and the boat fare between Lewiston and Niagara-on-the-Lake is 25c., making a total by this route of 85c.

The regular published schedule of the defendant from Niagara-on-the-Lake to Buffalo is \$1.10, but during the summer season it makes a special rate of 85c. to meet competition. The station of the defendant at Niagara-on-the-Lake is situated upon, or near the steamboat wharf, but it also stops its trains at Queen St. To get the benefit of the special 85c. rate it is necessary to purchase a ticket at the station; no rate less than its regular fare is charged on the train.

The complainant boarded the train at Queen St. without a ticket and was compelled to pay \$1.10 for transportation to Buffalo. He com-

plaints that this was illegal; first, because the charge of \$1.10 is unreasonably high; second, because the defendant, while charging him that amount, performed the same service for the other passengers for 85c.

We cannot find upon this record that \$1.10 is an unreasonable charge from Niagara-on-the-Lake to Buffalo. This is a branch line of the defendant, and the case does not show density of traffic nor the circumstances under which the passenger service is performed. It simply appears that a rate of 3c. a mile is imposed. While lower rates are in force in many parts of the U.S., it is also true that there is hardly any section of country in which a rate as high as 3c. a mile is not charged for a local service of this distance. The fact that a rate of 85c. is made during the summer season to meet competition via Lewiston is not controlling, nor is the further fact that the New York Central under compulsion of law establishes a rate of 2c. a mile from Lewiston to Buffalo. We do not find that this rate is reasonable; we simply fail to find that it is unreasonable, as there is no evidence in the record upon which an intelligent judgment can be formed. This is a most unsatisfactory disposition of the question, and if the case were of wider application, or the subject of more general complaint, it might be our duty to proceed on our own motion to develop the necessary facts.

The case is meagre of facts showing whether there is or ought to be a station of the defendant at Queen St. It simply appears that there is no station building and no station agent at that point, but that the defendant stops all its trains there to discharge and receive passengers. It was said by counsel for the defendant that if there were a station at that point no ticket would be sold for Buffalo at less than \$1.10.

Upon the above findings the first proposition of the complainant, that the rate which he was forced to pay was an unreasonable one, is not sustained.

The second proposition is that it was unjust to charge him \$1.10 while other passengers upon the train were carried for 85c. The regular rate from Niagara-on-the-Lake to Buffalo was \$1.10, and this was the amount collected of all persons who paid their fare to the conductor. Any person who saw fit to do so could purchase a special ticket during a certain portion of the year for 85c. We think that when a railroad company makes a reduction from its regular rates, which are not found unreasonable, it may require that the person desiring to avail himself of that reduction shall purchase a ticket, and that it may collect of all persons not holding such special ticket the reasonable ordinary fare.

But the complainant urges that in this case he could not purchase this special ticket for the reason that the defendant did not have the same on sale at the point where he boarded the train. There was no way in which he, taking the train at that point, could have obtained transportation to Buffalo for less than the amount which he actually paid. This presents the question, ought the defendant to have maintained a ticket office at Queen St.? And perhaps the further question, might the defendant impose a higher charge from an intermediate point than from a more distant point for the same service? Of these matters we think this Commission has no jurisdiction. The discrimination, if there be one, is local, and the locality is in Canada. Assuming that we have jurisdiction over the reasonableness of this through rate, it seems clear that no law of the U.S. can extend to a question of discrimination between places in a foreign country.

The complaint is dismissed.

The Canadian Railway Instruction Institute, established by H. Miller at Toronto, has opened a branch school at Norwich, Ont.

May Birthdays.

Many happy returns of the day to Garret Vliet, Assistant Master Mechanic, G.T.R., at Portland, Me., born at Milwaukee, Wis., May 5, 1854.

W. R. Baker, Assistant to Vice-President, C.P.R., at Montreal, born at York, Eng., May 25, 1852.

S. Barker, M.P., ex-General Manager Northern Ry., Hamilton, Ont., born at Kingston, Ont., May 25, 1839.

C. W. Burpee, Superintendent C.P.R. at Brownville Jct., Me., born at Keswick, N.B., May 15, 1861.

E. T. Byrne, Commercial Agent, G.T.R., at St. Louis, Mo., born at Albany, N.Y., May 3, 1859.

G. S. Cantlie, Superintendent Car Service, C.P.R. at Montreal, born there May 2, 1867.

C. L. Coon, City Passenger and Ticket Agent, G.T.R., at Buffalo, N.Y., born at Watertown, N.Y., May 20, 1868.

G. H. Dodge, Assistant Treasurer and Superintendent, Levis County Ry., Levis, Que., born at Billerica, Mass., May 14, 1875.

M. Donaldson, General Superintendent, Canada Atlantic Ry., at Ottawa, Ont., born near Edinburgh, Scotland, May 1, 1851.

G. C. Dunn, ex-Chief Engineer, Ottawa, Northern and Western Ry., Pontiac Pacific Jct. Ry., Hull Electric Ry., and Interprovincial Bridge, born at Quebec, May 13, 1862.

Hon. W. C. Edwards, Timiskaming Steamboat Co., Rockland, Ont., born at Clarence, Ont., May 7, 1844.

J. D. Evans, Engineer Central Ontario Ry., at Trenton, Ont., born at Goderich, Ont., May 27, 1843.

E. T. Galt, President Alberta Ry. and Coal Co., at Lethbridge, Alta., born at Sherbrooke, Que., May 24, 1850.

A. Hardy, General Freight and Passenger Agent, Quebec and Lake St. John Ry., at Quebec, born there May 12, 1855.

C. M. Hays, 2nd Vice-President and General Manager, G.T.R., born at Rock Island, Ill., May 16, 1856.

W. T. Huggan, Accountant and Auditor Prince Edward Island Ry., at Charlottetown, P.E.I., born at Halifax, N.S., May 24, 1851.

J. Hunter, Chief Engineer and General Superintendent Esquimalt and Nanaimo Ry., at Victoria, B.C., born at Aberdeen, Scotland, May 7, 1839.

W. S. Kinnear, Chief Engineer, Michigan Central Rd., at Detroit, Mich., born at Circleville, Ohio, May 25, 1864.

G. A. Parker, Auditor Dominion Atlantic Ry., at Kentville, N.S., born at Walton, N.S., May 1, 1855.

N. J. Power, Auditor of Disbursements, G.T.R., at Montreal, born at Rochester, N.Y., May 19, 1843.

H. B. Sherwood, Superintendent Bay of Quinte Ry., at Napanee, Ont., born at Auburn, N.Y., May 25, 1847.

E. Tiffin, General Traffic Manager, I.C.R., at Moncton, N.B., born at Hamilton, Ont., May 5, 1849.

J. H. Walsh, General Freight and Passenger Agent, Quebec Central Ry., at Sherbrooke, Que., born at Quebec May 12, 1860.

H. K. Wicksteed, Engineer in Charge of Surveys, Canadian Northern Ry., east of Port Arthur, born at Quebec May 25, 1855.

James Yeo, ex-Roadmaster Intercolonial Ry., Riviere du Loup, Que., born at Bideford, Devonshire, Eng., May 1, 1830.

There was expended on the canal system of the Dominion on capital account during the year ended June 30, 1903, \$1,823,273.

The Kingston, Portsmouth and Cataraqui Electric Ry. has been reopened for traffic, after having been closed down for some time, owing to a difference between the Company and the city council of Kingston, Ont.

MONTREAL STEEL WORKS

MANUFACTURERS OF **STEEL CASTINGS**

LIMITED

(UP TO 15 TONS)

(OPEN HEARTH SYSTEM)

SWITCHES AND TRACK WORK

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OF ALL KINDS

MANGANESE STEEL CASTINGS

For wearing Parts, Insuring Great Hardness and Durability

INTERLOCKING PLANTS

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The Locomotive & Machine Company

OF MONTREAL (Limited)

— BUILDERS OF —

SINGLE EXPANSION AND COMPOUND LOCOMOTIVES

for all Classes of Service

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for Bridges, Buildings, Roof Trusses, Etc.

Estimates furnished on application and early deliveries assured on orders placed now.

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JAS. W. PYKE & COMPANY

CANADIAN REPRESENTATIVES

FRIED. KRUPP, ESSEN, GERMANY.

Steel Rails.

Wrought Iron Steel-Tyred Disc Wheels

Locomotive and Car Wheel Tyres.

Axles, Crank Pins, Forgings, Etc.

FOR STEAM AND
ELECTRIC RAILWAYS.

OFFICE: MERCHANTS BANK BUILDING MONTREAL.
205 ST. JAMES STREET,

STEAM RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1903.

In this table the minus mark (-) before figures in the net earnings column shows that there was a deficit in the operations of the line to the extent of the figures given. The numbers in brackets—thus (1)—after the name of a railway refer to notes at the foot of the table on page 156.

Name of Railway.	Mileage.	Gross Earnings	Net Earnings	Proportion of earnings to working expenses.	Earnings per train mile.	Operating per train mile.	Train mileage.	Engine mileage.	Passengers carried.	Freight carried.
				p. c.	Cents.	Cents.	Miles.	Miles.		Tons.
Alberta Ry. & Coal Co (1)	64.62	\$ 204,889 40	\$ 104,351 70	203.79	391.00	1.92	52,333	122,841	9,434	60,947
Albert Southern (2)	19.00									
Algoma Central & Hudson Bay.	91.75	430,261 04	181,275 31	10 73	747.00	4.32	57,647	297,692	43,840	913,233
Atlantic & Lake Superior (3)	130.00	49,631 28	-8,419 00	8.55	78.00	.91	63,600	63,600	14,677	23,247
Bay of Quinte	72.82	224,248 67	99,381 87	1.79	1,486	8.27	150,832	150,832	88,537	353,347
Bedington & Nelson (4)	15.20	3,536 03	-5,918 45	372.90	9495	2.539	3,724	3,724	723	19,005
British Yukon	90.32	360,614 42	188,685 74	209.74	4,699	2.18	78,866	79,887	12,930	29,834
Brockville, Westport & Sault Ste. Marie	45.00	44,502 94	15,376 00	152.79	117.52	7.69	37,869	38,079	50,185	18,535
Bruce Mines & Algoma	16.62	2,700 90	-4,792 94	36.00	0.50	1.38	5,400	5,400	1,849	4,075
Buctouche & Moncton	32.00	18,371 65	2,798 02	118.00	83.50	.75	20,224	21,796	11,680	20,667
Calgary & Edmonton	295.93	698,255 64	277,651 78	142.00	183.86	110.00	379,786	420,506	92,612	169,869
Canada Atlantic (5)	458.60	1,908,025 53	691,090 27	157.00	143.00	.91	1,333,397	1,782,235	377,779	1,494,809
Canada Coal & Ry. Co.	12.00	31,871 78	16,037 41	201.00	170.30	85.02	8,624	21,389	9,810	67,717
Canada Eastern	136.00	116,536 43	2,674 66	1.02	68.50	64.65	170,119	170,119	53,831	107,690
Canada Southern (6)	382.19	5,705,596 16	111,871 43	101.99	164.00	160.00	3,480,049	4,957,834	760,365	4,940,868
Canadian Northern (7)	1,236.55	2,449,579 33	860,285 86	154.00	169.00	107.00	1,443,065	1,630,407	281,801	901,608
Canadian Government Rys.:-										
Intercolonial (8)	1,310.26	6,324,323 72	127,670 53	102.06	99.66	97.65	6,345,500	8,019,320	2,404,230	2,790,737
Prince Edward Island	209.00	217,714 24	-41,923 58	71.44	74.74	84.68	306,597	407,695	205,265	106,519
Canadian Pacific (9)	7,439.00	43,299,486 90	15,841,295 92	157.70	193.00	123.00	22,434,153	29,988,868	5,580,739	10,162,726
Carquet	68.00	31,206 84	-1,249 89	96.15	50.06	52.06	62,340	62,340	6,370	26,364
Carillon & Grenville	13.00	1,792 86	-1,441 34	55.40	22.83	53.00	6,100	7,000	5,868	70
Central Ontario	134.60	190,784 56	62,405 46	148.60	147.80	99.52	129,000	176,405	89,064	195,218
Central Ry. (Nova Scotia) (11)	74.00	65,342 82	18,274 64	139.00	132.00	91.06	49,494	57,319	52,698	32,233
Crow's Nest Southern	48.15	13,241 23	-16,410 95	447.47	117.00	262.00	11,319	12,685	2,224	20,362
Cumberland Ry. & Coal Co.	32.00	134,757 23	-58,319 05	69.00	18.26	261.00	73,764	138,342	29,730	512,627
Dominion Atlantic (12)	220.50	965,446 42	241,323 74	133.00	189.00	142.00	508,539	508,539	265,348	232,585
Edmonton, Yukon & Pacific	4.50	6,431 38	-232 46	90.51	118.00	122.00	5,449	5,449	9,639	11,854
Elgin & Havelock	28.00	9,380 20	156 78	101.00	54.17	532.00	17,318	17,318	4,288	9,849
Esquimalt & Nanaimo	78.00	270,960 50	62,125 54	129.00	99.00	76.39	273,360	273,360	153,326	143,129
Fredericton & St. Mary's Bge. (13)	1.33	4,858 87	3,427 34	142.00						
Grand Trunk (14)	3,154.48	25,109,562 73	8,261,863 43	147.40	146.00	98.00	17,253,750	21,473,371	7,971,587	11,818,177
Great Northern Ry. of Canada (15)	208.10	369,327 92	-8,321 82	97.79	89.56	91.58	412,366	518,852	160,019	319,856
Gulf Shore (16)	16.78	5,953 99	4,165 09	332.00	137.5	42.00	4,330	4,330	910	9,101
Halifax & Yarmouth (17)	50.20	33,318 12	8,484 54	138.00	82.15	61.23	40,554	46,824	4,2486	11,608
Hampton & St. Martins	29.00	4,261 70	44 45	101.00	39.40	38.00	10,800	10,800	3,749	3,732
Hereford	53.30	60,339 43	-25,479 80	70.30	86.31	123.00	66,481	69,792	21,206	129,778
Inverness Ry. & Coal Co.	61.00	106,935 79	21,304 41	123.72	143.00	114.00	74,879	78,622	30,147	124,172
Irondele, Bancroft & Ottawa	48.00	21,464 17	-552 10	97.49	67.28	69.16	31,900	32,200	10,301	18,265
Kaslo & Slocan	31.80	29,222 17	-14,654 85	66.00	136.00	203.00	21,550	36,065	7,595	12,759
Kent Northern (18)	34.00	14,825 86	-1,300 62	91.00	82.36	89.59	18,000	18,250	6,698	17,157
Kettle River Valley (19)	3.86	1,210 76	1,210 76		87.99		1,376	1,376	254	11,290
L'Assomption	112.85	182,832 27	26,700 35	117.10	111.00	95.18	164,030	164,030	44,857	128,079
Lake Erie & Detroit River (20)	3.50	1,210 60	-258 00	82.00	20.00	245.00	5,994	5,994	3,592	332
Leonora, Mount Sicker	222.35	815,875 49	216,569 65	136.00	124.00	81.80	652,815	892,547	604,953	977,360
Liverpool and Milton	11.50	6,934 75	-21 012 71	24.00	46.00	185.65	15,050	15,050	725	1,307
Lotbiniere & Megantic	5.00	9,989 15	3,716 16	159.00	234.00	146.00	4,300	4,300	26,400	30,104
Manitoulin & North Shore	30.34	17,794 90	2,922 87	119.65	94.75	73.81	18,780	19,719	8,766	28,669
Massawipi Valley (21)	16.00	47,896 38	28,860 77	151.00	431.30	171.00	11,105	19,272	7,282	127,032
Midland Ry. of Nova Scotia	35.46	154,615 84	23,995 02	118.37	97.50	82.00	159,905	221,761	140,527	346,453
Montreal & Atlantic (22)	57.50	57,155 49	14,056 12	133.00	69.98	52.00	81,664	81,896	46,317	28,134
Montreal & Province (23)	163.70	450,945 41	6,075 27	101.37	114.46	112.92	393,987	520,991	209,702	829,863
Montreal & Vermont Jct. (23)	40.60	73,527 07	2,090 57	97.00	91.00	88.00	80,735	80,735	105,934	86,610
New Westminster Southern	23.60	199,184 43	46,934 86	130.00	123.00	94.00	162,312	162,312	104,386	999,017
Nelson and Fort Sheppard (24)	24.10	22,079 41	-23,613 34	48.32	858.00	178.00	25,731	27,472	20,789	21,115
New Brunswick Coal & Ry. Co.	54.70	90,160 16	-11,504 91	88.68	191.00	215.00	47,184	56,080	16,085	31,219
New Brunswick & Pr. Edward Is.	44.66	9,117 72	196 96	102.00	35.80	350.20	25,470	25,470	3,674	5,200
Nosbonsing & Nipissing	36.00	26,601 26	4,391 89	119.00	66.33	55.38	40,102	46,900	20,393	41,197
New Brunswick Southern	5.50	43,047 00	5,739 34	115.00	399.00	347.59	10,762	11,838		24,107
Nov Scotia Steel & Coal Co.	82.50	36,831 08	-27,732 23	57.00	64.15	112.45	57,410	57,410	11,003	20,062
Orford Mountain	12.50	15,102 46	-2,208 85	87.00	100.07	115.00	15,000	35,000	5,821	133,856
Ottawa Northern & Western (25)	31.00	20,427 27	3,189 40	118.00	59.00	50.00	34,788	34,788	6,861	32,484
Ottawa & New York	137.20	205,303 94	15,710 09	108.00	139.00	128.00	147,468	148,539	115,577	61,265
Phillipsburg Ry. & Quarry Co.	56.79	101,239 55	7,841 22	108.00	89.00	83.00	113,141	113,141	101,191	64,799
Pontiac & Renfrew (26)	7.50	7,811 75	4,444 07	231.96	468.00	202.00	1,668	1,668		6,267
Qu'Appelle, Long Lake & Saskatchewan	4.25									
Quebec Central (27)	253.96	378,800 03	42,110 64	110.23	126.21	152.00	220,797	279,608	33,847	123,344
Quebec & Lake St. John	213.50	694,029 12	205,790 19	142.00	112.00	78.00	622,612	634,379	222,286	445,133
Quebec, Montmorency & Charlevoix (28)	240.00	431,683 38	121,102 14	135.00	126.00	90.00	341,386	527,696	207,993	233,467
	30.00	38,152 94	9,168 01	131.29	110.00	84.40	34,342	34,342	131,481	26,650

STEAM RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1903—Continued.

Name of Railway.	Mileage.	Gross Earnings	Net Earnings	Proportion of earnings to working expenses.	Earnings per train mile.	Operating per train mile.	Train mileage.	Engine mileage.	Passengers carried.	Freight carried.
				p. c.	Cents.	Cents.	Miles.	Miles.		Tons.
Quebec Southern.....	143.50	\$ 168,653 37	- 17,177 65	90.85	71.78	791.00	234,930	236,011	78,309	141,755
Red Mountain.....	9.53	66,826 98	4,574 57	107.00	398.00	370.00	16,804	31,099	13,423	255,321
Rutland & Noyan (29).....	3.39									36,546
Salisbury & Harvey.....	45.00	28,755 74	3,522 33	102.00	102.00	89.00	28,122	31,099	13,093	1,015,765
Stanstead, Shefford & Chambly.....	43.00	79,710 34	10,516 77	108.00	108.00	94.00	73,552	73,552	141,489	270,142
St. Clair Tunnel (30).....	2.25	228,425 35	96,511 26	173.16				98,087		21,757
St. Lawrence & Adirondack (31).....	32.82	224,755 26	124,463 24	224.00	126.00	54.68	178,215	178,215	225,885	3,983,760
St. Mary's River.....	30.00	26,915 28	14,684 18	220.06	151.00	68.60	17,830	20,131	4,432	92,910
Sydney & Louisburg.....	48.96	785,071 39	428,730 47	220.31	227.00	102.00	346,070	380,000	168,700	20,937
Temiscouata.....	113.00	134,913 13	1,900 23	101.00	137.00	135.00	98,312	98,312	43,142	27,285
Tillsonburg, Lake Erie & Pacific.....	35.33	19,239 12	842 51	104.00	426.00	40.75	45,140	45,140	26,672	764,846
Thousand Islands.....	6.33	31,305 69	8,160 29	135.00	89.00	65.97	35,087	35,087	46,723	12,014
Toronto, Hamilton & Buffalo (32).....	87.78	543,206 56	192,605 16	154.00	167.00	108.00	324,306	331,163	254,115	21,783
Vancouver, Victoria & Eastern.....	15.90	15,953 58	1,655 21	116.00	113.00	101.00	14,080	27,951	12,258	4,497
Victoria & Sydney.....	16.26	27,046 73	- 7,600 27	78.00	83.00	106.00	32,515	32,880	34,379	5,355
Victoria Terminal Ry. & Ferry Co.....	18.40	1,610 74	- 1,569 41	50.65	377.00	75.00	4,265	4,365	8,526	
York & Carleton.....	5.75	3,017 00	- 307 00	93.00	40.00	475 00	700	700	3,600	
	18,987.98	\$96,064,526 72	\$28,583,003 39				60,382.920	77,178,493	22,148,742	47,373,417

(1) The Alberta Ry. and Coal Co. has running powers over the C.P.R. from Montana Jct. to Lethbridge, 2.10 miles.

(2) The Albert Southern Ry., from Harvey Branch Jct. to Alma, N.B., 16 miles, and the Harvey branch from Albert to Harvey Bank, 3 miles, are not in operation.

(3) The Atlantic and Lake Superior Ry. comprises the Baie des Chaleurs Ry., 98 miles; the Great Eastern Ry., 23 miles, and the Ottawa Valley Ry., 7 miles. The Great Eastern Ry. extending from Yamaska to River St. Francis, 6 miles; from Nicolet to St. Gregoire, 7 miles; and from Yamaska to Sorrel, 10 miles; 23 miles in all, was not operated during the year.

(4) The Bedlington and Nelson Ry. has running powers over the C.P.R. from Creston Jct. to Sirdar Jct., B.C., 8.70 miles.

(5) The Canada Atlantic Ry. includes the following leased lines: Central Counties Ry., 37.40 miles, and Pembroke Southern Ry., 20.90 miles.

(6) The Canada Southern Ry. has 150 miles of double track.

(7) The Canadian Northern Ry. includes the Winnipeg-Great Northern Ry., 40 miles; the Port Arthur, Duluth and Western Ry., 85 miles; the Manitoba and Southeastern Ry., 107.90 miles; the Lake Manitoba Ry. and Canal Co.'s line, 125 miles; and the Ontario and Rainy River Ry., 164 miles, and the lines formerly occupied by the Northern Pacific Ry. in Manitoba, and leased from the Manitoba Government, 354.65 miles. It also operates as part of its through line from Port Arthur to Winnipeg, 56 miles of line in Minnesota.

(8) The Intercolonial Ry. has running powers over the G.T.R. from Point Lewis to Hadlow, 1.50 miles; Chaudiere Curve to Chaudiere, 1.18 miles; and Ste. Rosalie Jct. to Montreal, 37.62 miles; total, 40.30 miles. The mileage given, 1,301.94, is exclusive of the Windsor branch, 32 miles, worked by the Dominion Atlantic Ry.

(9) The Canadian Pacific Ry. comprises C.P.R. mileage owned, 4,651.60; leased lines, Fredericton, 22.10 miles; New Brunswick, 175.00; New Brunswick and Canada, 117.20; St. John and Maine, 92.10; St. John Bridge

and Ry. extension, 2.00; St. Stephen and Milltown, 4.60; Tobique Valley, 28.00; Cap de la Madelaine, 3.00; Montreal and Lake Maskinonge, 12.90; Atlantic and Northwest, 201.00; Montreal and Ottawa, 93.20; Ontario and Quebec, 473.00; St. Lawrence and Ottawa, 58.40; Credit Valley, 175.70; Guelph Jct., 15.00; Toronto, Hamilton and Buffalo, 2.70; Toronto, Grey and Bruce, 191.10; West Ontario Pacific, 26.60; Manitoba and Northwestern, 234.20; Manitoba Southwestern Colonization, 214.40; Kootenay and Arrowhead, 33.60; Columbia and Kootenay, 60.00; Nakusp and Slocan, 36.30; Saskatchewan and Western, 18.20; Shuswap and Okanagan, 50.80; Columbia and Western, 157.10; Great Northwest Central, 71.00; British Columbia Southern, 202.40; Vancouver and Lulu Island, 17.25. It has also running powers over the Canada Atlantic Ry. from Montreal and Ottawa Jct. to Ottawa, 0.80; and G.T.R., Toronto to Hamilton Jct., 35.20. The C.P.R. has 35.70 miles of double track.

(Continued on page 157.)

THE SAFETY CAR HEATING AND LIGHTING CO.

GENERAL OFFICES :—160 Broadway, New York.

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This Company controls in the United States and Canada the celebrated Pintsch System of Car and Buoy Lighting which is universally used. It is economical, safe, efficient, and approved by the railway managers and the Lighthouse Board of the United States, and has received the highest awards for excellence at the World's Expositions at Moscow, Vienna, St. Petersburg, London, Berlin, Paris, Chicago, Atlanta and Buffalo. 130,000 cars, 6,000 Locomotives and 1,700 Buoys are equipped with this light. 170 Railroads in the United States, Canada and Mexico have adopted this system of lighting, applied on over 23,000 cars.

Car Heating

By Steam Jacket System of Hot Water Circulation, Direct Steam and Regulating Direct Steam Systems. 130 Railroads in the United States are using these systems of Heating—applied on over 14,500 cars.

AUTOMATIC STEAM TRAPS.

STRAIGHT PORT COUPLERS.

ELECTRIC RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1903.

The following abbreviations are used in the names of railways:—E., electric; E. R., electric railway; E. S. R., electric street railway; Ry., railway; S. R., street railway. The minus mark (-) in the column for net earnings shows that there was a deficit in the operations of the line to the extent of the figures given. The numbers in brackets—thus (1)—after the name of a railway, refer to notes on page 159.

Name of Railway.	Mileage.	Gross Earnings.	Net Earnings.	Proportion of earnings to working expenses.	Earnings per train mile.	Operating per train mile	Car mileage.	Passengers carried.	Freight carried.
				p. c.	Cents.	Cents.			Tons.
Berlin & Waterloo S. R. (1)	5.52	\$24,148 53	\$ 4,921 28	126	25.60	20.40	94,810	548,000	.....
Brantford S. R.	7.00	14,367 09	1,733 07	113	22.02	19.00	66,456	318,430	.....
British Columbia E. R. (2)	46.00	393,300 63	120,808 24	140	15.98	15.98	1,704,802	7,364,289	6,158
Cape Breton E. Co.	11.80	31,149 95	5,463 18	121	22.00	22.00	115,597	626,492	.....
Cornwall E. R.	6.00	20,165 38	- 301 97	99	104.00	10.60	193,097	290,436	25,236
Galt, Preston & Hespeler S. R.	9.00	30,102 64	3,713 66	122	35.50	31.10	84,660	289,292	31,058
Grand Valley Ry. (3)	6.00	3,406 00	- 2,201 06	237	2.60	42.00	13,200	17,000	.....
Guelph Radial Ry.	5.50	17,058 74	173 82	10	8.58	8.58	196,750	380,123	.....
Halifax E. Tramway (4)	9.90	144,324 36	41,781 91	104	20.98	14.76	687,819	3,204,504	.....
Hamilton and Dundas S. R. (5)	7.25	33,108 28	14,825 53	13	46.21	25.52	71,638	290,904	1,230
Hamilton, Grimsby & Beamsville E. R.	23.00	62,531 64	31,363 02	200	255.00	16.50	248,746	345,639	6,380
Hamilton Radial E. R.	12.00	48,178 98	24,387 85	20	24.14	11.92	199,534	581,583	2,400
Hamilton S. R. (5)	22.00	183,637 82	65,676 94	15	15.43	9.73	1,190,180	4,353,637	.....
Hull E. Co. (6)	13.63	73,949 37	14,869 88	125	18.30	14.63	403,817	705,476	54,452
International Transit Co. (18)	3.30	25,861 50	1,921 59	108	212.00	19.60	12,200	.....	.....
Kingston, Portsmouth & Cataraqui E. R.	7.70	37,321 59	9,071 95	132	38.77	29.42	96,011	708,824	.....
Levis County Ry. (7)	10.25	9,688 10	174 27	98	14.20	13.90	68,335	197,700	.....
London S. R. (8)	30.00	165,209 25	63,892 43	163	13.11	8.09	1,252,162	4,059,424	.....
Metropolitan (Toronto) Ry.	28.00	74,803 09	29,428 70	165	26.00	18.00	290,000	521,083	800
Montreal Park & Island Ry. (9)	37.99	140,341 52	7,515 11	106	18.94	18.45	728,823	1,515,451	11,438
Montreal S. R. (10)	117.46	2,162,969 67	881,034 07	169	19.25	11.41	11,232,924	53,077,497	.....
Montreal Terminal Ry. (11)	14.10	56,563 39	29,804 26	211	23.96	11.34	215,764	431,953	35,316
Nelson E. Tramway	3.00	4,334 60	- 13,565 37	30	15.60	64.00	27,905	69,893	.....
Niagara Falls, Park & River Ry. (12)	13.68	101,348 10	47,507 03	188	32.00	17.00	316,089	346,560	38,200
Niagara, St. Catharines & Toronto Ry.	19.94	96,686 68	25,917 32	136	19.00	14.00	498,462	602,035	92,248
Oshawa Ry.	8.02	51,924 23	16,655 67	145	84.20	57.00	61,622	133,853	66,370
Ottawa E. R. (13)	23.85	332,100 22	139,822 28	107	14.50	8.40	2,290,065	7,649,850	.....
Port Arthur E. R.	7.60	24,048 34	7,554 95	145	22.30	15.30	108,030	509,195	.....
Port Dalhousie, St. Catharines & Thorold E. S. R.	6.82	18,799 55	7,836 70	172	19.00	11.00	94,298	252,079	.....
Quebec Ry., Light & Power Co. (Citadel Division) (14)	17.22	187,655 69	58,133 93	144	159.00	10.31	1,179,031	4,424,127	.....
Quebec Ry., Light & Power Co. (Montmorency Division) (14)	25.00	83,798 78	33,514 04	167	47.73	28.41	176,977	666,460	.....
Sandwich, Windsor & Amherstburg Ry.	23.15	83,693 99	31,237 57	159	187.00	11.72	447,468	1,720,377	.....
Sherbrooke S. R. (18)	7.00	25,000 00	9,325 00	.....	.....	22.39	.....	550,000	.....
St. John Ry.	12.00	102,154 35	36,160 34	155	95.80	12.64	521,824	2,341,167	.....
Sarnia S. R.	4.50	26,439 82	6,827 83	135	32.00	21.31	82,632	465,175	.....
St. Thomas S. R. (18)	.....	.....	.....	.....	.....	.....	.....	.....	.....
Toronto Suburban	8.50	17,248 22	558 56	103	109.00	10.60	157,438	416,854	.....
Toronto & Mimico Ry.	5.87	26,478 06	10,201 16	162	158.00	9.70	167,269	498,507	.....
Toronto Ry. (15)	96.74	2,000,067 34	868,090 57	175	181.00	10.20	11,040,257	48,619,704	.....
Toronto & Scarborough E. R.	5.07	17,007 21	5,036 05	142	98.00	6.90	172,428	424,194	.....
Wesley Park & Clifton E. R. (16)	4.50	18,967 31	8,772 25	186	13.00	7.00	139,020	349,672	.....
Winnipeg E. S. R. (17)	20.00	231,511 95	108,210 15	187	194.00	10.33	1,196,503	5,341,542	.....
Woodstock, Thames Valley & Ingersoll S. R.	11.50	22,296 18	6,440 09	140	20.00	11.48	111,456	272,214	.....
Yarmouth S. R.	2.00	9,929 21	- 3,474 73	75	15.50	18.50	73,060	180,647	.....
	759.36	\$7,233,677 35	\$2,760,819 12				38,028,529	115,662,812	371,286

(Continued from page 156.)

(10) The Central Ontario Ry. mileage includes its leased line, the Marmora Ry. and Belmont Co., formerly known as the Ontario, Belmont and Northern Ry., 9.60 miles.
 (11) The Central Ry. of Nova Scotia has running powers over the Dominion Atlantic from Middleton Jct. to Middleton, 0.33 miles.
 (12) The Dominion Atlantic mileage includes the Windsor branch, 32 miles, of the Intercolonial Ry. It has also running powers over the I.C.R. from Halifax to Windsor Jct., 14 miles.
 (13) The Fredericton and St. Mary's Bridge Co. has running privileges over the Canada Eastern Ry., 0.17 miles. The earnings are receipts from trains run across the bridge by the Canada Eastern and Canadian Pacific Railway.
 (14) The G.T.R. mileage includes: G.T.R., 883.79; Great Western, 562.30; Brantford,

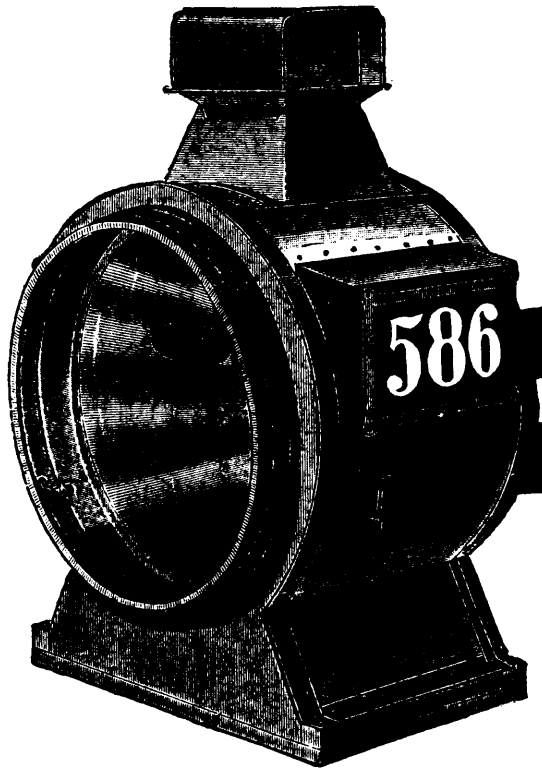
Norfolk and Port Burwell, 34.39; Buffalo and Lake Huron, 162.00; Grand Trunk Georgian Bay and Lake Erie, 170.00; Owen Sound branch, 12.42; London, Huron and Bruce, 68.00; Waterloo Junction, 10.25; South Norfolk, 17.00; Wellington, Grey and Bruce, 168.13; Northern, 172.10; North Simcoe, 33.00; Hamilton and Northwestern, 173.00; Northern Pacific Junction, 111.37; Toronto Belt Line, 12.79; Midland, 165.00; Grand Junction, 85.21; Toronto and Nipissing, 85.00; Lake Simcoe Junction, 26.00; Victoria, 53.00; Whitby, Port Perry and Lindsay, 46.00; Jacques Cartier Union, 6.50; Montreal and Champlain Junction, 61.73; Beauharnois Junction, 19.50. The Company also has running powers over the Chaudiere branch of the Intercolonial Ry., 5.77 miles. The G.T.R. had 492.89 miles of double track.
 (15) The Great Northern Ry. has running powers over the Quebec and Lake St. John Ry. from Quebec to Riviere à Pierre, 56.50

miles. Its mileage includes the Montford and Gatineau Colonization Ry., 33 miles.
 (16) The Gulf Shore Ry. is operated by the Caraquet Ry.
 (17) The Halifax and Yarmouth has 19.30 miles not in operation.
 (18) The mileage of the Kent Northern includes the St. Louis and Richibucto Ry., 7 miles, which was not operated during the year.
 (19) The Kettle Valley Ry. was in the hands of construction company until June 30, and operating expenses were not kept separate from construction accounts.
 (20) The Lake Erie and Detroit River Ry. includes the London and Port Stanley Ry., 24.00, operated under lease.
 (21) The Massawipi Valley is leased to the Boston and Maine Rd., and has running powers over the G.T.R. from Lennoxville to Sherbrooke, Que., 2.95 miles.
 (Continued on page 159.)

The N. L. Piper Railway Supply Co.

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LOCOMOTIVE HEADLIGHT

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Notes to Steam Railway Statistics.*(Continued from page 157.)*

- (22) The Montreal and Atlantic Ry. includes the Lake Champlain and St. Lawrence Jct. Ry., 60.70 miles, operated under lease, and is operated by the C.P.R. It has 5.5 miles of double track.
- (23) The Montreal and Province and Montreal and Vermont Jct. lines are leased by the Central Vermont.
- (24) The Nelson and Fort Sheppard Ry. has running powers over the C.P.R. from Five Mile Point to Nelson, B.C., 4.7 miles.
- (25) The Ottawa, Northern and Western Ry. has running powers over the Hull Electric Ry., 2.50 miles. Its mileage includes the Pontiac Pacific Jct. Ry. and the Interprovincial Bridge.
- (26) The Pontiac and Renfrew Ry., 4.25 miles, was not under traffic.
- (27) The Quebec Central Ry. has running powers over the Intercolonial Ry. from Havelock Jct. to Levis, 5.00 miles.
- (28) The Quebec, Montmorency and Charlevoix Ry. is operated by the Quebec Ry. Light and Power Co. as a steam and electric railway. The figures given in this table are those for the operation of the line by steam. It has six miles of double track.
- (29) The Rutland and Noyan Ry. is operated by the Rutland Ry., a United States company. Details of traffic were not returned.
- (30) The earnings of the St. Clair Tunnel are from tolls on vehicles hauled through the tunnel.
- (31) The St. Lawrence and Adirondack Ry. has running powers over the G.T.R. from Valleyfield to Beauharnois, 13.30 miles, and over the C.P.R. from Adirondack Jct. to Montreal, 8.70 miles.
- (32) The Toronto, Hamilton and Buffalo Ry. has running powers over the Hamilton and Dundas Ry. from Hamilton to Dundas, 3.67 miles, and over the G.T.R. from Hamilton to G.T.R. Jct., 1.50 miles. It has 4.69 miles of double track.

Notes to Electric Railway Statistics.

- (1) The Berlin and Waterloo mileage includes the Berlin and Bridgeport E.S. Ry., 2.5 miles. Power is furnished by the Berlin Light Commissioners.
- (2) The B.C. Electric Ry. has 7.50 miles of double track.
- (3) The Grand Valley Ry. obtains its power from the Brantford St. Ry., which with the Woodstock, Thames Valley and Ingersoll Ry. and the G.V.R. are controlled by the same company.
- (4) The Halifax E. Tramway Co. has 1.58 miles of double track.
- (5) The Hamilton and Dundas Ry. and the Hamilton Street Ry. obtain their power from the Cataract Power Co. The H.S. Ry. has 10.50 miles of double track.
- (6) The Hull Electric Co. has 6.85 miles of double track. Locomotives ran 15,163 miles over the line.
- (7) The Levis County Ry. was operated from Dec. 6, 1902, to June 30, 1903, on three miles of track.
- (8) The London Street Ry. has 11.68 miles of double track.
- (9) The Montreal Park and Island Ry. has 12.75 miles of double track.
- (10) The Montreal Street Ry. has 45.78 miles of double track.
- (11) The locomotive mileage over the Montreal Terminal Ry. was 20,124 miles.
- (12) The Niagara Falls, Park and River Ry. has 11.43 miles of double track.
- (13) The Ottawa E.R. has 18.28 miles of double track.
- (14) There are six miles of double track on the Citadel division, and 0.50 miles of double track on the Montmorency division of the Quebec Ry., Light and Power Co.

(15) The Toronto Ry. has 46.87 miles of double track.

(16) The Wesley Park and Clifton E. R. obtains its power from the Niagara, St. Catharines and Toronto Ry.

(17) The Winnipeg Street Ry. has 5.00 miles of double track.

(18) No returns or incomplete returns received.

Railway Equipment Notes.

The Peterborough Radial Ry. is in the market for five new cars.

The Canadian Northern Ry. has not yet definitely decided what its rolling stock requirements for 1904 will be.

The G.T.R., between Feb. 20 and April 9, added to its equipment 63 refrigerator cars, built at its Montreal shops.

The Cumberland Ry. and Coal Co. has ordered two first-class passenger coaches, and is in the market for other equipment.

The Intercolonial Ry. has received the last of an order of 70 box cars of 60,000 lbs. capacity from Rhodes, Curry & Co., Amherst, N.S.

The New Brunswick Southern Ry. is reported to be negotiating with the I.C.R. for the purchase of a locomotive and other rolling stock.

The Halifax and Southwestern Ry. has placed an order for 40 flat cars and two conductor's vans with Rhodes, Curry & Co., Amherst, N.S.

The Montreal Street Ry. is building at its own shops 50 semi-convertible cars 40 ft. over all, and containing a number of new features in car construction.

The Inverness Coal and Ry. Co. added to its equipment during the last financial year one locomotive, 49 gondola coal cars, two conductor's vans and one flanger.

The Sydney and Glace Bay Ry. during the last fiscal year added one tool car, 157 coal cars, and one snow plough to its equipment, and broke up seven platform cars.

The B.C. Electric Ry. will build, during the current year, at its Vancouver shops 10 convertible city cars, 20 ft. long; one double truck interurban car 30 ft. long; three interurban cars 50 ft. long, and one flat car.

The Cape Breton Ry., extending from Point Tupper to St. Peter's, N.S., 31 miles, is being operated with the following equipment: three locomotives, one first-class, one second-class and two composite cars and 54 platform cars.

The Wabash Rd. has received an Atlantic type passenger engine, no. 1602, for service in Canada. During the next few months some additional locomotives will be placed in service for its Canadian traffic, but how many or what class has not been determined.

Rhodes, Curry & Co., Amherst, N.S., has received orders for 50 box cars, 60,000 lbs. capacity, from the Quebec and Lake St. John Ry.; for 15 flat cars, 40,000 lbs. capacity, from the Dominion Coal Co., and for 250 coal cars, 30,000 lbs. capacity, and seven baggage cars from the I.C.R.

The C.P.R. added to its equipment between Feb. 17 and Mar. 9 three freight locomotives from the Saxon Engine Works, Chemnitz, Germany; 10 first-class cars from its Hochelaga shops, Montreal; 10 box cars (completing an order for 500), and 165 flat cars from its Perth, Ont., shops.

The G.T.R., according to a press report, is building at its Fort Gratiot, Mich., shops a new pattern of switch locomotive, especially constructed for heavy yard work. With its tender it weighs 249,500 lbs. It carries a working steam pressure of 200 lbs. a square inch. Its cylinders are 20 by 26 ins. The drivers are 56 ins. in diameter.

The Temiskaming and Northern Ontario Ry. Commission has ordered three first-class passenger coaches, four second-class passenger coaches, and two baggage, mail and express cars, for delivery in Sept. and Oct. The 100 flat cars, 60,000 lbs. capacity, ordered from Rhodes, Curry & Co., of Amherst, N.S., were delivered by April 30.

The C.P.R.'s 216 box cars, 60,000 lbs. capacity, which are being built at its Perth, Ont., shops will be 36 ft. 8 in. long, 9 ft. 1 1/2 in. wide over frame, and 36 ft. long, 8 ft. 6 in. wide and 8 ft. high inside. They will be equipped with Westinghouse air-brake, Simplex brake beams, Simplex body and truck bolsters, with Susemihl side bearings.

We are advised that there is no truth in the report that the American Locomotive Co. has purchased the Rogers Locomotive Works at Paterson, N.J. The press reports stated that the A.L. Co. had acquired a controlling interest in the Rogers Company, and that it was intended to close the works and to maintain only the Cooke Works at that place.

The C.P.R.'s first-class car, which is being constructed at its Hochelaga shops, is 60 ft. long, 9 ft. 10 1/2 in. wide. It will be equipped with wide vestibule, double body bolsters, standard steel platforms, Westinghouse air brake, acetylene gas, steam heat, and will be carried on four-wheeled trucks with Krupp 40 in. steel-tired wheels and inside hung brakes.

The C.P.R., recently placed the following orders for equipment: 10 simple consolidation locomotives with the Canadian Locomotive Co., and 11 similar locomotives with the Locomotive and Machine Co., Montreal; six switching locomotives at its Delorimier ave. shops, Montreal; 16 baggage cars and 11 mail and express cars at its Hochelaga shops, Montreal; 25 30-ton box cars and 42 30-ton flat cars at its Perth, Ont., shops; and three vans at its Farnham, Que., shops.

The Canadian Locomotive Co., Kingston, Ont., has placed an order for the installation of a hydraulic rivetting and flanging plant in its shops. The rivetter will be a 125-ton machine complete with necessary hydraulic crane, accumulator, pumps, etc. This plant will be modern and strictly up to date, and will be the equal of anything of the kind in any other locomotive shops in Canada or the U.S. The contractors agreed to have it installed in seven weeks, and its installation will increase the capacity of the boiler shop from six to at least 15 locomotives a month.

Rhodes, Curry and Co., Ltd., of Amherst, N.S., declared a dividend of 12% at the annual meeting held recently. Following are the officers and directors for the current year: President and General Manager, N. Curry; Vice-President and Assistant General Manager, N. A. Rhodes; other directors: J. C. Robertson, Hon. T. R. Black, J. M. Townsend, C. T. Hillson; Secretary-Treasurer, J. M. Curry; Manager Sydney branch, A. S. Curry; Chief Accountant, W. H. Morse; Manager car building department, N. Curry; Assistant Manager, G. T. Douglas; Master Car Builder, J. W. McCallum.

The general dimensions of the 10 simple consolidation locomotives ordered by the C.P.R. from the Canadian Locomotive Co., and for the 11 similar locomotives ordered from the Locomotive and Machine Co. of Montreal are: diameter of cylinder, 21 in.; length of stroke, 28 in.; wheels, 57 in.; weight, about 180,000 lbs.; tender-tank, 5,000 galls. capacity, 12 tons of coal, weight about 130,000 lbs.; driving wheel trucks and engine truck tyres, Krupp crucible; tender wheels, cast iron; simplex tender truck bolsters and brake beams; Westinghouse American equalized driver brake, Westinghouse Automatic air brake, straight air brake, electric headlights, and piston balanced valves.

Drummond, McCall & Co.

IRON, STEEL AND METAL MERCHANTS

Branch Office: TORONTO

Montreal

STEEL RAILS

Prompt Shipment from stock of 60 lb. and 80 lb. A. S. C. E. Standard Sections, the product of **The Algoma Steel Co.**, of Sault Ste Marie, Ont.

For Import:—English Rails, "Barrow" brand, all standard sections; also rails of best German manufacture.

IMPORTERS OF { Beams, Channels, Angles, Steel Plates, Mild Steel Bars, Cold Rolled Steel Shafting, Wire Rope, Tool Steel, Etc. } COMPLETE STOCK KEPT IN MONTREAL.

THE

INTERCOLONIAL RAILWAY

Calendar for May says:

"True eloquence consists in saying all that is necessary and nothing but what is necessary."

—La Rochefoucauld.

The fishing in the streams and lakes of Quebec and the Maritime Provinces and the ocean bordering those provinces is the finest on the continent. Write for Intercolonial detailed pamphlets.

INTERCOLONIAL RAILWAY

FAST FREIGHT TRAINS

VIA



RUNNING DAILY BETWEEN

MONTREAL, QUEBEC, ST. JOHN, HALIFAX and the SYDNEYS

Give every satisfaction to shippers



MARION STEAM SHOVELS

BALLAST UNLOADERS

CARS, RAILS, SCRAPERS, BARROWS, TOOLS, Etc.

ESTATE LATE JAMES COOPER = MONTREAL

The Locomotive and Machine Co., of Montreal, is building the following locomotives: a six-wheel saddle tank logging locomotive, cylinders 13 x 22 ins., for the British Columbia Mills Timber and Trading Co.; two 10-wheel locomotives, cylinders 19 x 26 ins., and one switching locomotive, cylinders 18x24 ins. for the Toronto, Hamilton and Buffalo Ry.; two 6-wheel switching locomotives, cylinders 19 x 26 ins., for the Dominion Coal Co., Sydney, N.S., for delivery May 15; one 6-wheel saddle tank locomotive, cylinders 20 x 24 ins., for the Cumberland Ry. and Coal Co., for delivery June 15; one 8-wheel passenger locomotive, cylinders 17 x 24 ins., for the Brockville, Westport and Northwestern Ry. for delivery June 15; 11 consolidation locomotives, cylinders 21 x 28 ins., for the C.P.R., delivery to be completed by Sept. 1; 10 10-wheel passenger locomotives, cylinders 20 x 26 ins., for the G.T.R., delivery to be completed by Oct. 15.

The legal arrangements confirming the merging of the business of the Locomotive and Machine Co. of Montreal with that of the American Locomotive Co. were completed Mar. 31. We are advised that there will be no change in the title or policy of the Montreal company, as it will be carried on as a Canadian industry, and as an entire and separate organization from any of the American Locomotive Co.'s plants. Additional machinery is being placed as rapidly as possible, and at an early date some portions of the plant will be enlarged so that there may be no delay in handling the business. The structural steel plant is complete and modern. The general layout of the works and the modern plant installed is calculated to enable the Company to turn out work expeditiously. A temporary board has been elected, including the following officers and directors: President, S. R. Callaway, New York, President of the American Locomotive Co.; Vice-President, A. J. Pitkin, New York, Vice-President A. L. Co.; other directors: K. W. Blackwell, Montreal, President Montreal Steel Co.; D. W. Morrow; Manager, Roger Miller, Montreal, a member of the board of the old company; Secretary, Leigh Best, New York, Secretary of the A. L. Co.; Treasurer, C. B. Denny, New York, Treasurer A. L. Co.; Assistant Manager, S. T. Callaway; Superintendent, G. Garry, formerly Superintendent of the Rhode Island Works of the A. L. Co.; Chief Engineer, M. J. Butler.

The Michigan Central Rd. has added to its equipment in Canada 20 new 36 ft. merchandise cars, 80,000 lbs. capacity, built at its St. Thomas, Ont., shops, and 16 new 80,000 lb. box cars. It has also received 14 compound consolidation locomotives from the Schenectady works of the American Locomotive Co. 10 of these locomotives are now in service on the Canadian Division. The general dimensions are:

Cylinders	23 in. and 35 in. x 32 in.
Diameter driving wheel centre	36 in.
Inside diameter of boiler	68 1/2 in.
Total weight of engine	190,000 lbs.
Boiler straight, radial stay type	164,000 lbs.
Steam pressure	160 lbs.
Firebox, length	210 lbs.
" width	96 ins.
Flues, 2 in. diameter	75 3/8 in.
" length	365
Heating surface, tubes	3,040.8 sq. ft.
firebox	148.05 sq. ft.
arch flues	28.27 sq. ft.
Total heating surface	3,217.1 sq. ft.
Grate area	50.3 sq. ft.
Valves, high pressure	Piston
Tonnage rating	3,300 tons

The Canadian Locomotive Co. is building one geared locomotive for the Johnsons Co., Theford Mines, Que. The following are the general dimensions:

Gauge	3 ft. 6 in.
Fuel used	Bituminous coal
Weight in working order, drivers	40,000 lbs.
" total	40,000 lbs.
Wheel base of engine, rigid	20 ft.
" total	20 ft.

Length over all, engine	25 ft. 8 in.
Width	7 ft. 6 in.
Height	9 ft. 10 in.
Diameter of driving wheels	30 in.
Material of driving wheel centres	Cast iron
Diameter and length of driving journals	4 in. x 6 in.
Diameter of cylinders	12 in.
Stroke of cylinders	10 in.
Type of boiler	Radial stay
Working pressure of boiler	160 lbs.
Number of tubes	87
Diameter of tubes	2 in.
Length of tubes	6 ft.
Injectors	Locomotive type
Safety valves	Steam
Brakes	550 gallons
Tank capacity	

The Canadian Locomotive Co. is building a six-wheel saddle truck locomotive for the Hamilton Steel and Iron Co. Following are the general dimensions:

Gauge	4 ft. 8 1/2 in.
Fuel used	Bituminous coal
Weight in working order, drivers	70,000 lbs.
" total	70,000 lbs.
Wheel base of engine, rigid	9 ft. 6 in.
" total	9 ft. 6 in.
Length over all, engine	28 ft. 0 in.
Width	8 ft. 3 in.
Height	11 ft. 4 in.
Heating surface, firebox	61.0 sq. ft.
tubes	612.0 sq. ft.
total	673.0 sq. ft.
Diameter of driving wheels	42 in.
Material of centres	Cast iron
Diameter and length of driving journals	6 1/2 in. x 8 in.
" of cylinders	14 in.
Stroke of	22 in.
Type of boiler	Radial stay
Working pressure of boiler	180 lbs.
Number of tubes	124
Diameter	2 in.
Length	9 ft. 7 1/2 in.
Injectors	Locomotive type
Safety valves	Locomotive type
Brakes	Steam brake
Tank capacity	500 gallons

The Intercolonial Ry. has completed at its Moncton shops three 10-wheel passenger locomotives, and has another of a similar type under construction there. Following are the general dimensions:

Weight on drivers	114,204 lbs.
" on truck wheels	31,236
total	145,440
Wheel base, total of engine	24 ft. 4 in.
" driving wheels	14 ft. 1 in.
total engine and tender	50 ft. 9 1/2 in.
Length over all, total engine and tender	60 ft. 10 1/2-16 in.
Driving wheels, diameter	72 in.
Cylinders, diameter and stroke	20x26 in.
Working steam pressure	200 lbs.
Firebox, length	108 in.
" width	40 1/2 in.
Tubes, material	charcoal iron
" number	275
" diameter	2 in.
Heating surface tubes	1844.69 sq. ft.
fire-box	155.13
total	1999.82
Grate area	30.5
Weight of tender loaded	130,000 lbs.
Wheels, diameter	36 in.
Water capacity	6,000 gals.
Coal	10 tons

The Central Ontario Ry. has ordered an eight-wheel passenger locomotive from the Canadian Locomotive Co. Following are the general dimensions:—

Gauge	4 ft. 8 1/2 in.
Fuel used	Bituminous coal
Weight in working order, drivers	75,000 lbs.
" total	115,000 lbs.
Wheel base of engine, rigid	9 ft. 0 in.
" total	23 ft. 7 in.
" and tender	47 ft. 0 in.
Length over all, engine and tender	46 ft.
Width	9 ft. 11 in.
Height	13 ft. 11 in.
Heating surface, firebox	150.0 sq. ft.
tubes	1377.2
total	1527.2
Diameter of driving wheels	63 in.
Material of driving wheels, centres	cast iron
Diameter and length of driving journals	8 in. x 8 1/2 in.
" of cylinders	18 in.
Stroke	24 in.
Type of boiler	extension wagon top
Working pressure of boiler	180 lbs.
Number of tubes	236
Diameter	2 in.
Length of	11 ft. 9 1/2 in.
Brakes	Westinghouse automatic
Weight of tender, loaded	75,000 lbs.
Capacity of tank	3,500 Imp. gals.
Style of tank	U
Coal capacity	6 tons
Style of truck	centre bearing
Diameter of wheel	33 in.
Kind of wheel	wrought iron centres, steel tires
Diameter and length of journal	4 1/2 in. x 8 in.
Brake beam	steel

Victoria Rolling Stock Co. of Ontario, Ltd.

The directors' report for the year ended February 15, says:—"Towards the close of the Company's year the directors completed arrangements for a lease, against which bonds will be issued to the amount of \$2,400,000. and it was considered advisable, inasmuch as a considerable portion of the Company's bonds are held in Great Britain, to make part of the issue in sterling. The bonds are therefore being issued, \$1,440,000 in currency and £197,200 in sterling, bearing 4% interest, and while the rate of interest for this class of security is rather higher than for some time past, the directors have thought it best to issue the bonds on the above basis and to sell them at a discount rather than issue the bonds at a higher rate. Up to date the Company has sold of these bonds \$223,000; the discount and commission on same, \$16,100.04, have been written off in the accounts for the year. The full amount of this account might properly have been carried over to next year, as no profit on this lease has been taken into account this year, but the directors thought it well to write off the whole amount. During the year outstanding bonds against leases have been reduced by \$694,500, and the final payments under the following leases have matured and were duly met by the respective railway companies and conveyances of the rolling stock included in the leases duly executed by this Company: lease Nov. 12, 1888, to the C.P.R. Co. Lease Sept. 27, 1893, to the Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. Lease Feb. 6, 1894, to the Duluth, South Shore & Atlantic Ry. Co. All other payments maturing during the year have been promptly met. The profit on the year's business, after charging up directors' fees, expense account and the discount and commission on bonds sold, is \$18,775.23; out of which a dividend of 12% per annum on the paid-up capital stock, amounting to \$14,400, has been paid, leaving \$4,375.23 carried forward to profit and loss account, which now stands at \$98,604.72.

ASSETS.

Obligations on leases	\$1,415,481 15
Amount paid by Company on account of series "S" lease	699,290 00
Debentures held by Company and accrued interest	136,751 03
Cash in bank	7,359 61
	<u>\$2,258,881 79</u>

LIABILITIES.

Capital stock subscribed	\$600,000 00
do. paid up	\$ 120,000 00
Debentures outstanding	1,447,000 00
Interest accrued on same	20,277 07
Debentures sold and outstanding against series "S" lease	223,000 00
Advances against debentures	350,000 00
Balance at credit of profit and loss	98,604 72
	<u>\$2,258,881 79</u>

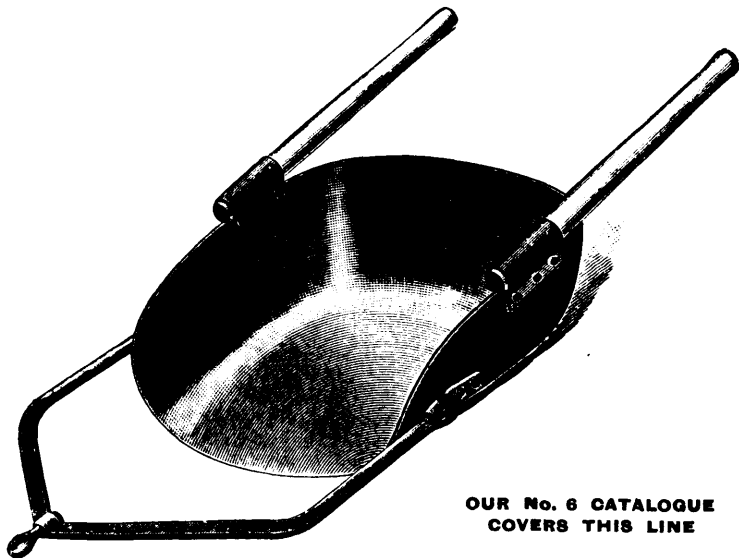
PROFIT AND LOSS YEAR ENDED FEB. 15, 1904.

Interest paid and accrued on debentures and advances	\$ 86,621 14
Discount and commission on debentures sold series "S"	16,100 04
Expense account	1,436 31
Directors' fees last year	1,300 00
Dividend account	14,400 00
Balance carried forward	98,604 72
	<u>\$218,462 21</u>
Balance at credit of profit and loss account, Feb. 15, 1903	\$ 94,229 49
Rents received and accrued on leases and interest on debentures held by the Company	124,232 72
	<u>\$ 218,462 21</u>

MEMORANDUM RE ROLLING STOCK.

Original cost of Rolling Stock held under existing leases	\$3,660,682 53
Amount paid in on account by railway companies in addition to interest	2,218,793 80
	<u>\$1,441,888 73</u>
Total amount of the Company's debentures outstanding	\$1,447,000 00

SCRAPERS



OUR No. 6 CATALOGUE
COVERS THIS LINE

A Full Range of Wheel and Drag Scrapers, Railroad
and Rooter Ploughs, etc., CARRIED IN STOCK

W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

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MONTREAL.

TORONTO BOLT AND FORGING CO.

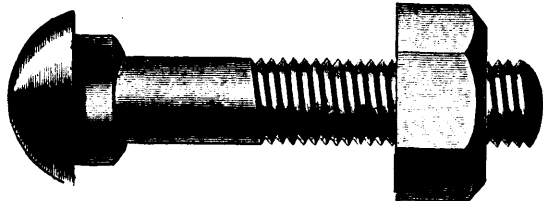
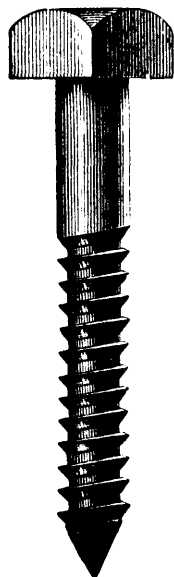
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LIMITED

BOLTS AND NUTS

OF ALL KINDS, INCLUDING

Track Bolts
Track Spikes
Log Screws
Boiler and
Bridge Rivets



TORONTO

CANADA

C.P.R. LANDS.

THE CANADIAN PACIFIC RAILWAY COMPANY have 12,000,000 acres of choice farming lands for sale in Manitoba, Assiniboia, Saskatchewan and Alberta. Manitoba lands and Assiniboia lands east of third meridian, \$4.00 to \$10.00 per acre according to quality and location. Lands in South-Western Assiniboia and Southern Alberta, \$3.50 to \$8.00 per acre. Ranchings lands generally \$3.50 to \$4.00 per acre. Northern Alberta and Saskatchewan lands generally \$6.00 to \$8.00 per acre. Maps showing the lands in detail will be sent free on application.

TERMS OF PAYMENT.

An actual settler may purchase 640 acres, or less, on the 10 payment plan, by which the aggregate amount of principal and interest is divided into a cash instalment to be paid at the time of purchase and nine equal deferred instalments annually thereafter, as follows:

- 160 acres at \$4.00 per acre, 1st instalment \$95.85 and 9 equal instalments of \$80.
- 160 acres at \$4.50 per acre, 1st instalment \$107.85 and 9 equal instalments of \$90.
- 160 acres at \$5.00 per acre, 1st instalment \$119.85 and 9 equal instalments of \$100.
- 160 acres at \$5.50 per acre, 1st instalment \$131.80 and 9 equal instalments of \$110.
- 160 acres at \$6.00 per acre, 1st instalment \$143.80 and 9 equal instalments of \$120.00.
- 160 acres at \$6.50 per acre, 1st instalment \$155.80 and 9 equal instalments of \$130.00.
- 160 acres at \$7.00 per acre, 1st instalment \$167.80 and 9 equal instalments of \$140.00.

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of 6 per cent. per annum.

DISCOUNT FOR CASH.

If land is paid for in full at time of purchase, a reduction from price will be allowed equal to ten per cent. on five-sixths of the purchase money. Interest at six per cent. will be charged on overdue instalments.

F. T. GRIFFIN,
Land Commissioner C.P.R. Co., Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company has 800,000 acres of selected lands in Manitoba and Assiniboia which offer excellent opportunities to settlers and investors who desire to secure good lands in well settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.



The Ticket Agent and General Public are reminded that all tickets reading over this line, Chicago to as far South as DuQuoin and all other points south of DuQuoin, are honored at option of passenger

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Send your friends where a diversified route and to visit World's Fair is permissible without extra charge and inconvenience. This applies in either direction.

On Wednesday, via New Orleans,
Through Tourist Sleeper to California.

On Wednesday, via Omaha,
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Homeseekers' rates twice a month to certain points at reduced rates. The Eight Track Route to St. Louis Fair. Five Stations to start from in Chicago. Ask your agent about it or write.

G. B. WYLLIE,

Canadian Passenger Agent.

210 ELLICOTT SQUARE, BUFFALO, N.Y.

W. H. C. Mussen & Co., railway, miners' and contractors' supplies, Montreal, have removed their offices to 299 St. James St., retaining 763 to 765 Craig St. as warehouses.

The directors and officers were re-elected for the current year as follows; their addresses being Toronto, unless otherwise stated:—
President, W. Hendrie, Hamilton, Ont.; Vice-President, E. B. Osler; **Managing Director, H. C. Hammond;** other directors, T. G. Brough, A. B. Lee, W. D. Matthews, H. Pellatt, D. R. Wilkie; **Secretary, R. A. Smith.**

C.P.R. Earnings, Expenses, Etc.

Gross earnings, working expenses, net profits, increases or decreases over 1902-03, from July 1, 1903:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July 1, 1903	\$3,997,343.75	\$2,678,816.63	\$1,318,527.12	\$142,815.86+
Aug. 4, 1903	1,757,153.74	2,624,051.24	1,434,102.50	71,204.05+
Sept. 3, 1903	1,907,001.72	2,734,735.91	1,202,265.81	208,488.69-
Oct. 4, 1903	2,063,263.88	2,834,236.87	1,654,027.01	37,892.38+
Nov. 4, 1903	2,266,928.29	2,664,928.29	1,477,981.18	80,259.06-
Dec. 4, 1903	2,664,815.39	2,683,670.13	1,581,145.26	91,296.58-
Jan. 2, 1904	2,896,599.34	2,538,947.31	357,652.03	559,118.74-
Feb. 2, 1904	2,541,862.15	2,459,321.54	82,540.81	660,199.88-
Mar. 3, 1904	2,186,81.81	2,681,332.33	850,854.28	407,710.18-
	\$33,877,136.25	\$23,918,040.25	\$9,959,096.00	\$1,755,163.04+

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for Feb., \$171,758.43; net earnings, \$30,008.23, against \$184,989.89 gross and \$55,999.20 net for Feb., 1903. Net earnings for eight months ended Feb. 29, \$1,097,966 against \$654,568.74 for the same period 1902-03. Approximate earnings for Mar., \$205,043, against \$226,352 for Mar., 1903.

MINERAL RANGE RY.—Approximate earnings for Mar., \$48,801, against \$49,602 for Mar., 1903.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for Feb., \$389,207.02; net earnings, \$103,156.15, against \$438,137.31 gross and \$167,492.79 net for Feb., 1903. Net earnings for eight months ended Feb. 29, \$2,411,707.82 against \$2,454,764.37 for the same period 1902-03. Approximate earnings for Mar., \$474,106 against \$544,590 for Mar., 1903.

Canadian Pacific Railway Land Sales.

	Acres.		Amount.	
	1903-04	1902-03	1903-04	1902-03
July	267,647.32	155,344.93	\$1,020,404.70	\$562,876.50
Aug.	263,339.45	130,723.83	1,271,529.81	473,064.85
Sept.	60,441.12	145,535.83	268,757.99	542,811.11
Oct.	15,950.07	270,616.23	2,36,611.59	952,645.35
Nov.	22,563.95	146,687.83	107,365.21	598,788.99
Dec.	30,146.00	577,382.61	125,676.00	1,683,289.45
Jan.	116,840.78	102,581.29	386,649.88	428,611.21
Feb.	14,729.69	183,554.82	73,428.94	749,235.13
Mar.	12,992.06	184,139.22	59,660.03	782,968.76
	804,650.44	1,896,566.59	\$3,550,084.15	\$6,743,291.35

Grand Trunk Ry. Earnings, Expenses, &c.

The following statement of earnings, supplied from the Montreal office, includes the G.T. of Canada, the G.T. Western, and the Detroit, Grand Haven & Milwaukee Rys.

	1904.	1903.	Increase.	Decrease.
Jan.	\$2,253,578	\$2,634,090	.....	\$380,512
Feb.	1,649,525	2,432,661	.....	783,136
Mar.	2,649,779	2,967,408	.....	317,629
	\$6,552,882	\$8,034,269	.....	\$1,481,387

The following figures have been issued from the London, Eng., office:

GRAND TRUNK RY. CO.

Revenue for Feb.:

	1904.	1903.	Increase.	Decrease.
Gross receipts	£260,900	£409,200	.....	£148,300
Working expenses	285,700	316,500	.....	30,800
Net profit (Dr.)	£24,800	£92,700	.....	£117,500

Aggregate from Jan. 1 to Feb. 29:

	1904.	1903.	Increase.	Decrease.
Gross receipts	£616,200	£837,500	.....	£221,300
Working expenses	602,700	636,000	.....	33,300
Net profit	£13,500	£201,500	.....	£188,000

GRAND TRUNK WESTERN RY. CO.

Revenue for Feb.:

	1904.	1903.	Increase.	Decrease.
Gross receipts	£62,200	£70,800	.....	£8,600
Working expenses	68,900	70,600	.....	1,700
Net profit (Dr.)	£6,700	£200	.....	£6,900

Aggregate from Jan. 1 to Feb. 29:

	1904.	1903.	Increase.	Decrease.
Gross receipts	£145,700	£164,200	.....	£18,500
Working expenses	145,900	153,100	.....	7,200
Net profit (Dr.)	£200	£11,100	.....	£11,300

DETROIT, GRAND HAVEN & MILWAUKEE RY. CO.

Revenue for Feb.:

	1904.	1903.	Increase.	Decrease.
Gross receipts	£15,800	£10,700	.....	£3,900
Working expenses	16,800	14,700	2,100	.....
Net profit (Dr.)	£1,000	£5,000	.....	£6,000

Aggregate from Jan. 1 to Feb. 29:

	1904.	1903.	Increase.	Decrease.
Gross receipts	£39,900	£39,200	£ 700	.....
Working expenses	33,400	29,400	4,000	.....
Net profit	£6,500	£9,800	.....	£3,300

There were 25 working days in 1904 compared with 24 working days in 1903.

TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from Jan. 1 to Mar. 31:

	1904.	1903.	Increase.	Decrease.
Grand Trunk	£1,047,854	£1,327,811	.....	£279,957
G. T. Western	244,087	262,318	.....	18,231
D. G. H. & M.	54,500	60,747	.....	6,247
Total	£1,346,441	£1,650,876	.....	£304,435

TRANSPORTATION SERVICES.

Algoma Central and Hudson Bay Ry.—W. B. Rosevar, who was granted extended leave of absence, has not returned, and his position has not been filled. The duties of General Traffic Manager, heretofore discharged by W. B. Rosevar, are being discharged by T. J. Kennedy, with the title of General Superintendent and Traffic Manager. W. C. Barr, Superintendent of Steamship Lines, will have charge of the Company's steamers for the season.

Bay of Quinte Ry., Thousand Islands Ry., Oshawa Ry., and Deseronto Navigation Co.—G. W. Wright has been appointed Auditor. Office, Deseronto, Ont. Heretofore the duties of Auditor have been combined with those of the Secretary-Treasurer, which position is held by C. B. Millener.

Board of Railway Commissioners for Canada.—J. E. Duval, heretofore Car Service Agent Canada Atlantic Ry., has been appointed to the staff of the Board as Chief Inspector. He will investigate railway accidents, and will examine the physical condition of railways as to protective appliances, car distribution, etc.

Canada Atlantic Ry.—J. E. Duval, Car Service Agent, has resigned, effective May 1, to enter the service of the Board of Railway Commissioners. A successor has not been appointed.

Canadian Pacific Railway Company.—E. H. McHenry, Chief Engineer, has resigned, one press report stating that it was on account of ill health, and another that it was for the purpose of joining the staff of the G. T. Pacific Ry. Both of these statements lack confirmation. Press reports state that W. F. Stevenson has been appointed Eastern Freight Agent, and F. W. Dudley Eastern Passenger Agent, at New York.

Press reports state that Capt. J. T. Walsh, R.N.R., formerly Superintendent of the C.P.R. Atlantic steamship service at Liverpool, will act as Marine Superintendent for the Company at Montreal for the current navigation season, succeeding Capt. C. Troop transferred. W. N. Dietrich has been appointed Electrical Engineer, succeeding C. H. Hines resigned. The position of Electrical Engineer was a new one created in Nov., 1903. He reports to the Superintendent of Motive Power, Eastern lines, when on lines east of Fort William, and to the Assistant to 2nd Vice-President when on lines west of Fort William. He has general supervision over all electrical matters, including power and lighting circuits, generators, motors, arc and incandescent lamps, and other electric machinery and apparatus as directed. He will prepare standard and special plans and estimates as required, and it will be his duty to supervise the construc-

tion, operation and maintenance of electric installations and circuits in order to insure compliance with plans, rules and specifications pertaining to same. In the execution of new work, general and special repairs and maintenance of electric plants, divisional employees will act under his instructions as directed and limited by the general superintendent of their respective divisions.

T. W. Dow, General Air Brake Inspector, has resigned to enter the service of the Erie Rd. John Corbett has been appointed General Foreign Freight Agent, in charge of rail and steamship foreign freight traffic via Atlantic seaboard. Office, Board of Trade Building, Montreal.

A. E. Cook has been appointed Export Freight Agent, in charge of export freight traffic via Atlantic seaboard. Office, Board of Trade Building, Montreal.

W. T. Marlow has been appointed Import Freight Agent in charge of import freight traffic via Atlantic seaboard. Office, Board of Trade Building, Montreal.

E. N. Todd has been appointed Assistant Export and Import Freight Agent in special charge of traffic Ontario division lines west of Smith's Falls. Office, Union Station, Toronto.

L. R. Johnson and G. Hall, formerly Assistant Superintendents Rolling Stock, are now designated Assistant Superintendents of Motive Power Eastern lines. Offices, Montreal.

D. T. Kyle, heretofore chief clerk to the Master Mechanic Eastern Division at Montreal, has been appointed chief clerk to the Superintendent of Motive Power lines east of Fort William.

V. A. Harshaw has been appointed Trainmaster at London, Ont., succeeding D. R. Bell, who has been appointed passenger train conductor on the Toronto and Owen Sound run.

C. B. Brown, resident engineer lines west and north of Toronto, Ontario Division, has had his headquarters removed from London, Ont., to Toronto.

The Central Division, which heretofore terminated at Moose Jaw, Assa., has been extended on the main line to Swift Current, Assa., 112.3 miles further. The Swift Current terminals remain attached to the Western Division. The branch from North Portal to Pasqua, Assa., 160.3 miles, has also been added to the Central Division. This division has been re-divided into four districts, instead of five as heretofore, Souris and Regina ceasing to be division headquarters. The new arrangement is as follows:

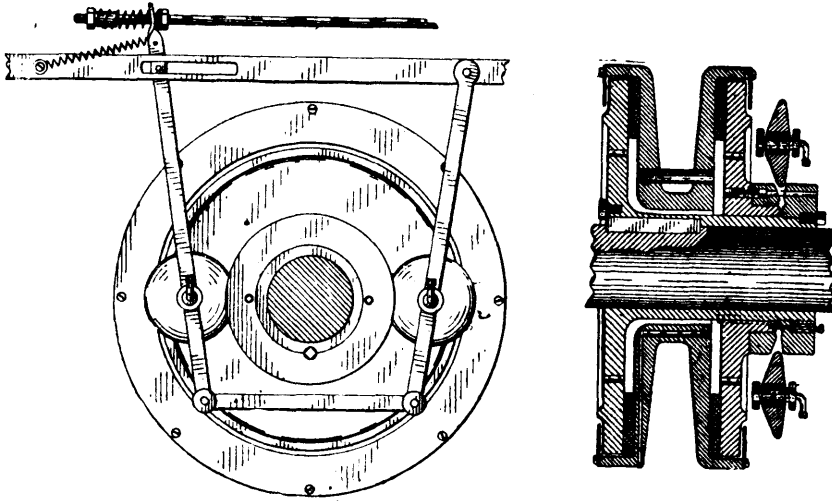
District 1—Fort William, Ignace and Rat Portage sections; Lac du Bonnet branch. Headquarters, Fort William. A. Price remains as Superintendent.

District 2—Winnipeg terminals; Brandon, LaRiviere, Napinka and Souris sections; Emerson, Gretna, Mowbray, Lyleton, Winnipeg Beach, Teulon, Carman and Brookdale branches. Headquarters, Winnipeg. J. T. Arundel, heretofore Superintendent old district 2, has been appointed Superintendent. O. O. Winter has been appointed Assistant Superintendent in direct charge Winnipeg terminals.

District 3—Broadview, Estevan, Minnedosa and Yorkton sections; Arcola, Lenore, Minota, Pheasant Hills, Rapid City, Sheho and Russell branches, including Brandon, Broadview, Souris and Napinka terminals. Headquarters, Brandon. F. Dillinger, heretofore Superintendent old district 5 at Regina, has been appointed Superintendent; J. J. Scully, heretofore chief clerk to the Second Vice-President, has been appointed Assistant Superintendent in direct charge of transportation.

District 4—Moose Jaw, Swift Current and Portal sections; Prince Albert branch, including Estevan terminal, but excluding Swift Current terminal. Headquarters, Moose Jaw.

THE MOMENTUM BRAKE COMPANY LIMITED

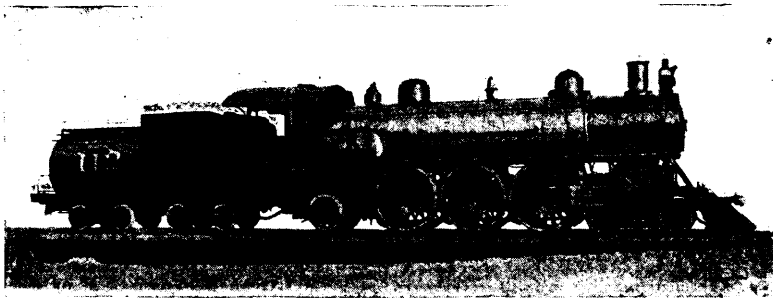


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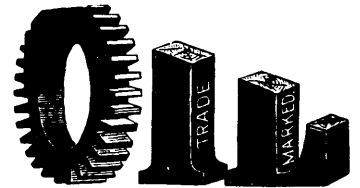
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Mica Boiler Covering Co., Limited
86-92 Ann Street, Montreal, Can.

J. Brownlee, heretofore Superintendent old district 4 at Brandon, has been appointed Superintendent.

The dispatching staffs on the Central Division have been consolidated, the Rat Portage and Fort William offices being put together under the supervisions of day and night chief dispatchers, and the Winnipeg and Brandon offices are also under similar supervision. The dispatching offices at Rat Portage, Ont., Souris, Man., and Regina, Assa., have been abolished. A. Hatton, heretofore Chief Train Dispatcher, old district 1, has been appointed Chief Dispatcher, district 1; office Fort William, Ont. J. D. Barnes, heretofore Chief Train Dispatcher old district 2, has been appointed Chief Dispatcher, and W. J. Uren, heretofore Chief Train Dispatcher, Rat Portage, Ont., has been appointed Night Chief Dispatcher, district 2; office Winnipeg. R. Peard, heretofore Superintendent of old district 3 at Souris, Man., has been appointed Day Chief Dispatcher at Brandon, Man. C. D. Fisher, heretofore Chief Train Dispatcher, old district 4, has been appointed Night Chief Dispatcher at Brandon. E. L. Chudleigh, heretofore Chief Train Dispatcher, old district 1, Western Division, has been appointed Chief Dispatcher, district 4; office, Moosejaw, Assa.

A. Millison, heretofore locomotive foreman at Moose Jaw, Assa., has been appointed general foreman at Fort William, Ont.

F. T. Patterson, heretofore locomotive foreman at Kamloops, B.C., has been appointed acting locomotive foreman at Rat Portage, Ont.

J. Manson, formerly Superintendent at Toronto, has been appointed chief clerk to the Second Vice-President at Winnipeg.

W. Pitts, heretofore locomotive foreman at Rat Portage, Ont., has been appointed acting locomotive foreman at Moose Jaw, Assa.

A. Belbeck, heretofore Trainmaster at Portage la Prairie, Man., has been appointed Trainmaster 4th district; office, Moose Jaw, Assa.

The Western Division, the eastern terminus of which has been changed from Moose Jaw to Swift Current, Assa., has been divided into two districts instead of three as formerly. The new districts are as follows:

District 1—Medicine Hat, Calgary and Laggan sections (including Swift Current terminal), Macleod and Edmonton branches; J. Niblock, Superintendent. Office, Calgary.

District 2—Lethbridge, Cranbrook and Sirdar sections (not including Dunmore Jct.) and North Star branch; J. G. Taylor, Superintendent. Office, Cranbrook, B.C.

R. Anthony, heretofore general foreman at Fort William, Ont., has been appointed general foreman at Revelstoke, B.C.

J. Scott, heretofore general foreman at Revelstoke, B.C., has been appointed locomotive foreman at Kamloops, B.C.

C.P.R. Transfer Ferry Co.—J. Dubrule, jr., heretofore Assistant Manager, has been appointed Manager, succeeding G. T. Howard, deceased. Office, Prescott, Ont.

Erie Rd.—T. W. Dow, heretofore General Air Brake Inspector C.P.R., has been appointed General Air Brake Inspector Erie Rd. Office, Meadville, Pa.

T. H. Hopkirk, heretofore chief clerk in the office of the Superintendent of Rolling Stock C.P.R., has been appointed chief clerk to the Mechanical Superintendent Erie Rd. at Meadville, Pa.

Grand Trunk Ry.—F. C. Salter has been appointed European Traffic Agent. Temporary office, 22 Water st., Liverpool, Eng.

Intercolonial Ry.—G. R. Joughins, heretofore Mechanical Superintendent Southern California Ry. and the Atchison, Topeka and Santa Fe Coast lines at Los Angeles, has been appointed Superintendent of Motive Power I.C.R., and took charge of the Loco-

motive and Car Departments on April 21. From 1896 to the end of 1901 Mr. Joughins was Mechanical Superintendent of the I.C.R.

J. E. A. Robillard, formerly Superintendent C.P.R. at Montreal, has been appointed Travelling Freight and Passenger Agent I.C.R., succeeding O. Chevrier, deceased. Office, Montreal

Kettle Valley Lines.—H. W. Warrington is Superintendent and G. W. Fairweather is General Freight and Passenger Agent. Offices, Republic, Wash.

Lindsay, Bobcaygeon and Pontypool Ry.—A. H. N. Bruce, heretofore Assistant Engineer, has been appointed Engineer in Charge.

Montreal and Lake Superior Line.—W. Askin, heretofore Assistant Manager Northwest Transportation Co. (Northern Navigation Co.) at Sarnia, Ont., has been appointed Commercial Agent and Superintendent M. & L.S. line. Office, Montreal.

Jas. McLerie, heretofore Contracting Freight Agent C.P.R., Hamilton, Ont., has been appointed Northwest Agent M. and L. S. line. Office, Winnipeg.

Northern Navigation Co.—The circular appointing C. H. Nicholson, Traffic Manager, with office at Sarnia, Ont., states that all matters pertaining to passenger, freight and baggage claims will be dealt with by him.

H. A. Young, heretofore purser steamer United Empire, has been appointed Travelling Passenger and Freight Agent. Office, Sarnia, Ont.

Jno. Bell, heretofore freight foreman Canadian Northern Ry. at Port Arthur, and formerly assistant freight foreman C.P.R. Fort William, has been appointed agent N.N. Co. at Port Arthur and Fort William. Office, Port Arthur, Ont.

Pere Marquette Rd.—T. Marshall, heretofore Assistant General Freight Agent of the Lake Erie and Detroit River Ry., has been appointed General Agent P.M. Rd., at Walkerton, Ont., in charge of freight traffic in Canada.

Quebec Ry., Light and Power Co.—H. B. Smith, heretofore Inspector of the Company's railway line, has been appointed General Inspector, and is succeeded as Inspector by A. Cormier.

Quebec Southern Ry.—G. C. Dessaulles has issued a circular stating that having been appointed Receiver of the Quebec Southern Ry. and the South Shore Ry. by the Exchequer Court of Canada, he has taken possession of the property of the companies and will operate the same under the authority of the Court. Arrangements are being made for the re-opening of the roads, and resumption of interchange of traffic with connecting lines within two or three days. Hereafter all settlements for traffic or other balances will be made by the Receiver or under his instructions.

He has also issued a circular announcing the following appointments: M. M. Thomson, Auditor; C. S. Papps, Car Accountant. Offices, 26 St. Sacramento St., Montreal. Correspondence relating to traffic should be addressed to the General Manager.

C. B. Hibbard, General Manager, has issued a circular announcing the following appointments: E. C. Lalonde, Superintendent Shore Division. Office, Sorel, Que. R. A. Trudeau, Superintendent Southern Division. Office, St. Hyacinthe, Que. F. D. Anthony, Chief Engineer. Office, Sorel, Que. G. H. Taylor, Mechanical Foreman. Office, Sorel, Que.

Reid Newfoundland Co.—A. S. Busby, heretofore in the I.C.R. service at Moncton, N.B., has been appointed secretary and chief clerk to the General Passenger Agent R.N. Co., H. A. Morine.

Sydney and Glace Bay Ry.—Press reports state that A. N. McLennan has been appointed Manager.

Turbine Steamship Co.—G. D. Ellis, heretofore Travelling Passenger Agent Northern Navigation Co., Sarnia, Ont., has been appointed Manager Turbine Steamship Co. Office, Hamilton.

White Pass and Yukon Route.—I. W. Dudley has been appointed city passenger and ticket agent at Dawson City, Yukon. Effective with the opening of navigation.

MAINLY ABOUT PEOPLE.

G. M. Bosworth, 4th Vice-President C.P.R., has been in Atlantic City, N.J., on account of ill-health.

N. Mills, President of the Port Huron and Sarnia Ferry Co., died at Marysville, Mich., recently, aged 81.

Sir Thos. Shaughnessy, President C.P.R., Lady and Miss Shaughnessy, have returned to Montreal after a trip to Europe.

H. J. Cambie, Consulting Engineer C.P.R., Vancouver, recently returned from a holiday to California and the Hawaiian Islands.

J. B. Hay, G.T.R. cattle agent at the western market, Toronto, was elected alderman for ward 5, Toronto, April 16, by 307 majority.

J. W. Leonard, ex-Assistant Manager C.P.R. Western Lines, and Mrs. Leonard have returned to Toronto from the Southern States.

A. McInnis, one of the contractors on the Halifax and Southwestern Ry., is seriously ill at the Victoria General Hospital, Halifax, N.S.

J. J. Long, a director of the Northern Navigation Co. of Ontario, who is on a European trip, was a visitor to the Vatican at Rome recently.

Hon. C. S. Hyman, M.P., has been appointed chairman of the House of Commons Committee on Railways, Canals and Telegraph lines.

W. M. Blaiklock, who died at Denver, Col., recently, was brother of M. S. Blaiklock, Superintendent Eastern Division G.T.R. at Montreal.

H. Swinford, General Agent Northern Pacific Ry. at Winnipeg, Man., and Mrs. Swinford, recently returned from a trip to New Orleans and Havana.

Mrs. M. H. Brown, wife of the General Freight Agent of the Ontario Division, C.P.R., at Toronto, has gone to Aiken, S.C., with her children for several weeks.

Melville Bertram, of the Bertram Engine Works, Toronto, was married, April 7, to Miss R. H. Cameron, daughter of L. K. Cameron, King's Printer for Ontario.

H. J. Beemer, who has been engaged in railway contracting work for many years in Canada, is leaving in May for Arizona, where he will engage in gold mining.

H. Calderwood, Manager Collingwood Shipbuilding Co., will be married during the summer to Miss Justina Harrison, of Toronto, who is now visiting in Germany.

B. Lambkin, son of J. B. Lambkin, Assistant General Passenger Agent I.C.R., Halifax, N.S., has gone to Japan to endeavor to enlist for service with the Japanese army.

Sir Wm. Van Horne, Chairman of the C.P.R. Board, returned from Cuba, where he had been on a visit of inspection with a number of his co-directors of the Cuba Company.

P. A. Peterson, C.E., ex-Chief Engineer of the C.P.R., and now in charge of surveys of the Guelph Junction Ry.'s extension to Goderich, is removing from Montreal to Goderich, Ont.

J. Charlton, M.P., President Tillsonburg, Lake Erie and Pacific Ry., returned to his

DOMINION WIRE MF'G. Co.

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HEAD OFFICE, MONTREAL
BRANCH, TORONTO

IRON, STEEL, BRASS AND COPPER WIRE

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FOR FENCING PURPOSES.

PURE COPPER WIRE

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Telegraph, Telephone, Trolley AND Transmission Lines.

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Bright and Galvanized Fence Staples.**

WRITE FOR CATALOGUE



DEPARTMENT OF AGRICULTURE AND
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MANITOBA

—NOTICE TO FARM LABOURERS—

There are now daily arriving in this province numbers of young men from Eastern Canada and Great Britain who desire employment on Farms. Many of these are experienced farm hands and others are anxious to learn.

ALL SUCH ARE ADVISED

on arrival in Winnipeg to call upon the undersigned when all possible assistance will be given WITHOUT CHARGE in securing employment at farm work. A register is kept of farmers wanting men and of men wanting employment. This is a GOVERNMENT AGENCY and no charge of any kind is made for its services.

J. J. GOLDEN,

Provincial Government Immigration Agent
617 MAIN ST., - - WINNIPEG

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Forms the Direct Line from Toronto, Hamilton, London and all points in Canada for the above cities.

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"Black Diamond Express"

(Handsomest train in the world.)

The Great double-track scenic highway, stone ballasted, protected by automatic electric block signals. Through Pullman Parlor and Sleeping Car Service. Dining Car Service à la carte. Everything first class. Call on Grand Trunk Ticket Agents for tickets and further information, or address

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Canadian Passenger Agent, 33 Yonge Street, Toronto.

A. A. HEARD, CHAS. S. LEE,

Ass't Gen. Pass. Ag't, New York. Gen. Pass. Ag't, New York.

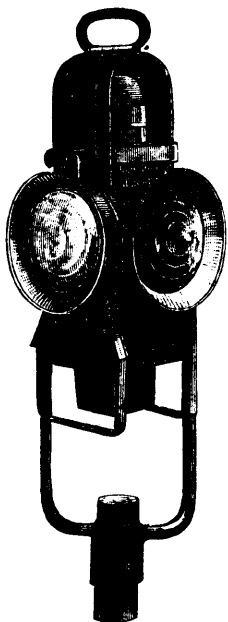
G. R. CHESBROUGH,

West'n Pass. Ag't, Buffalo, N. Y.

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Made of
annealed iron,
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copper and
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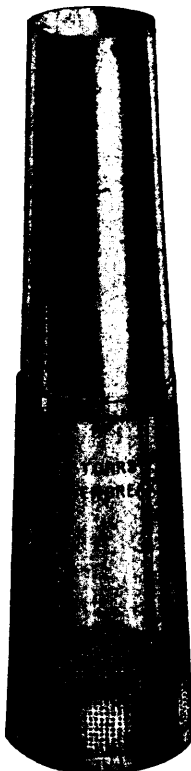
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never leaks

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Contractors for and Dealers in

Electrical Apparatus and Supplies

Experimental and Model Work,
Fine Machinery, Special Tools,
Patterns, Gear-Cutting, Special-
ties, Repairs, Etc.

ESTIMATES PROMPTLY FURNISHED.

home, Lynedoch, Ont., April 8, from Clifton Springs, N.Y., considerably improved in health.

Jas. A. Macdonell, railway contractor, Fernie, B.C., was married at Christ Church Cathedral, Ottawa, April 12, to Miss M. Cameron, daughter of the late John Cameron, of Toronto.

W. H. D. Miller, transportation officer of the Canadian Manufacturers' Association, will be located in Ottawa during the remainder of the current session of the Dominion Parliament.

C. J. Smith, General Manager Richelieu and Ontario Navigation Co., was entertained at dinner Mar. 31 at Ottawa, on leaving the Canada Atlantic Ry. service to take up his new duties at Montreal.

Miss Ethel Barnfield, daughter of B. Barnfield, Manager of the Canada Ry. News Co.'s restaurant, Bonaventure station, Montreal, was married in Montreal April 14 to the Rev. J. Becan, of Mississippi.

F. J. Holloway, recently appointed C.P.R. roadmaster at Woodstock, Ont., was presented with an armchair and entertained at dinner by the local staff on the occasion of his removal from London, Ont.

Jas. Woolner was recently presented with an office desk, chair, and other articles by the business men of Preston, on resigning the position of G.T.R. agent there, to engage in manufacturing at Berlin, Ont.

J. W. Pyke, of Montreal, has been elected Vice-President of the Imperial Coal and Coke Co. (Ltd.), recently formed at Montreal, with a capital of \$4,500,000, to develop coal mining lands north of Michel, B.C.

F. Frappier, formerly a painter at the C.P.R. Hochelaga shops, has been sentenced to two years' imprisonment for tampering with pay lists with intention to defraud, and with stealing from the Company.

J. H. Wiles, C.P.R. agent at Fairville, N.B., has been committed for trial on a charge of attempting to defraud the Company by falsifying pay sheets, and of forging the name of C. C. Clark to a pay check.

D. C. Coleman was recently presented with a suit case by a number of the residents of North Bay, Ont., on the occasion of his removal to Winnipeg as chief clerk to the General Superintendent Central Division, C.P.R.

J. F. Lash, of the Bell Telephone Co., who died in Toronto recently, was father of N. M. Lash, in the Bell Telephone Co.'s offices, Montreal, and brother of Z. A. Lash, K.C., solicitor to the Canadian Northern Ry.

A. W. Horsey, chief draughtsman C.P.R. mechanical department, who has been in Glasgow, Scotland, and Chemnitz, Germany, superintending the construction of locomotives for the C.P.R., has returned to Montreal.

F. B. Polson, of the Polson Iron Works, Toronto, has been in England for some time, visiting the chief shipyards there with a view of obtaining information respecting them for use in laying out the additional yard space at his Company's Toronto Works.

Z. Allard, wire superintendent of the C.P.R. Telegraph Department, Quebec, died there, April 14, from cold caught at a fire of the house where he was boarding. He formerly lived at the C.P.R. telegraph office, Quebec, which was burned out within the last three months.

D. B. Hanna, 3rd Vice-President Canadian Northern Ry., is a provisional director of the Canadian Oil Co. (Ltd.), which has recently been incorporated in Ontario with a capital of \$1,000,000. Mr. Hanna has also been elected a director of the Manufacturers' Life Insurance Co.

V. A. Harshaw, who has been appointed Trainmaster C.P.R. at London, Ont., entered

railway service in 1883, since which he has been consecutively: 1883 to 1885, section-man; 1885 to 1889, brakeman; 1889 to 1895, freight conductor; 1895 to 1904, passenger conductor.

E. S. Bremner, heretofore C.P.R. Trainmaster at Moose Jaw, Assa., who is required as a witness at Regina in a case where a man named Wilcox is charged with stealing a mail package containing \$10,000, has disappeared, and the court officials were not able to serve the summons on him when his evidence was required.

Hon. S. N. Parent, Premier of Quebec, who has been mentioned as a probable chairman of the Commission for the construction of the projected National Transcontinental Ry. from Winnipeg to Quebec, recently stated that he was not a candidate for the office, but would not say whether he would accept or decline if he were offered the position.

J. F. Stevens, formerly Chief Engineer Great Northern Ry., U.S., and at one time engaged in engineering work on the C.P.R., and Duluth, South Shore and Atlantic Ry., has been promoted to the 2nd Vice-Presidency Chicago, Rock Island and Pacific Rd., of which Company he has been 4th Vice-President and Chief Engineer since Mar., 1903.

J. E. Duval, who has been appointed Chief Inspector for the Board of Railway Commissioners, was born in 1862, and entered railway service in 1876, with the G.T.R. at Detroit, Mich. In 1886 he joined the Canada Atlantic Ry. as agent at Coteau, Ont.; was subsequently appointed Superintendent of the Telegraph System and Chief Train Dispatcher; and from 1900 to April 31, 1904, he was Car Service Agent of the Company.

Geo. Dawson, of St. Catharines, Ont., of Dawson & Riley, contractors for the erection of the power plant for the Canadian Niagara Power Co., at Niagara Falls, Ont., died suddenly at Niagara Falls, April 21, while superintending the work. He had been associated with H. C. Symms, of Toronto, in carrying out a number of large contracts, including the M.C.R. cantilever bridge across the Niagara gorge, the Northern Pacific Junction Ry. and the Chignecto Marine Transport Ry.

John Corbett, who has been appointed General Foreign Freight Agent C.P.R., Montreal, was born in Lanarkshire, Scotland, July 19, 1863, and entered railway service in 1877 with the Caledonian Ry. Coming to Canada, he entered the service of the G.T.R. in 1882, since which his record has been: Nov., 1882, to Dec., 1883, audit department G.T.R., at Montreal; Dec., 1883, to May, 1885, in office of Blue Line, at Montreal; May, 1885, to Mar., 1904, in foreign freight department C.P.R., Montreal.

G. D. Ellis, who has been appointed Manager Turbine Steamship Co. at Hamilton, Ont., was born at Barrie, Ont., Dec. 1, 1867, and entered transportation service in 1882 with the Vickers Express Co., continuing with the Canadian Express Co. when it took over the Vickers business. He subsequently became connected with the North Shore Navigation Co., remaining with its successor, the Northern Navigation Co., latterly as Travelling Freight and Passenger Agent at Sarnia, until his present appointment.

A. W. Carpenter, Egham, Surrey, Eng., proprietor of the Charing Cross Bank, London, Eng., and the promoter in England of the New Canadian Co., which proposes to construct the Atlantic, Quebec and Western Ry., and to finance the Canadian Transit Co. (Ltd.), is a plaintiff in an action brought in the King's Bench Division, London, Eng., to secure the return of a promissory note for £1,000 given to H. Higgins in connection with some transactions in the stock of the Petroleum Oil Trust (Ltd.), Gaspé, Que., one of the companies of which he is a promoter.

W. G. Roche, who has been appointed Contracting Freight Agent Canadian Pacific Dispatch, Detroit, Mich., was born Nov. 3, 1877, at Montreal, and entered railway service May, 1894, since which he has been consecutively to May, 1895, office boy National Dispatch Fast Freight Line, Detroit, Mich.; May, 1895, to May, 1899, billing clerk G.T.R. local freight office, Detroit; May, 1899, to Mar., 1900, voucher clerk National Dispatch Line, Buffalo, N.Y.; Mar., 1900, to Sept., 1901, clerk local agents' office Pere Marquette Rd., Detroit; Sept., 1901, to Oct., 1902, chief voucher clerk General Freight Agents' office, same road; Oct., 1902, to April, 1904, claim investigator same road.

F. C. Salter, who has been appointed European Traffic Agent of the G.T.R. at Liverpool, Eng., was born Aug. 31, 1863, and entered railway service 1883 as telegraph operator and baggageman Northern Ry. of Canada, since which he has been consecutively freight and passenger clerk same road at Toronto; freight and passenger agent at Toronto; stenographer to general agent same road at Buffalo, N.Y.; relief freight and passenger agent same road; soliciting agent Commercial Express Line at Buffalo; New York State Agent same line same place; travelling freight agent Northern Pacific Ry. at Buffalo, and latterly general agent, freight department, same road at New York.

H. A. Young, who has been appointed Travelling Freight and Passenger Agent Northern Navigation Co. of Ontario, was born at Brooklyn, N.Y., Sept. 1, 1864, and was brought to Canada in 1866. He entered transportation service in 1883, since which his record has been: 1883, assistant clerk str. Chicora, Niagara Navigation Co.; 1884 and 1885, purser str. Celtic of Hamilton, Ont.; 1886, with a mercantile firm in U.S.; 1887 and 1888, purser str. Ocean of St. Catharines; 1889, clerk on Pacific Mail S.S. Co.'s San Blas sailing from San Francisco to Panama; 1890, purser str. Cuba of Chicago; 1891, purser str. Ocean of St. Catharines; 1892 to 1903, purser str. United Empire, Northwest Transportation Co. (Northern Navigation Co.), Sarnia.

Jas. McLerie, who has been appointed Northwest Agent Montreal and Lake Superior Line at Winnipeg, was born at Kilbarchan, Renfrew, Scotland, Nov. 6, 1850, and entered railway service Mar., 1867, since which he has been consecutively to 1869, car number taker, Great Western Ry., Hamilton, Ont.; 1869 to 1872, yard clerk same road, London, Ont.; 1872 to 1873, clerk same road, Hamilton; 1873 to 1877, cashier same road, Ingersoll, Ont.; 1877 to 1878, agent same road, Stratford, Ont.; 1879 to 1880, agent same road, Tillsonburg, Ont.; 1880 to 1882, special freight agent Manitoba business with the Traffic Manager same road, Hamilton; 1882 to 1895, local freight agent G.T.R., Hamilton; 1895 to 1897, contracting freight agent, Toronto, Hamilton and Buffalo Ry. at Hamilton; 1897 to 1904, contracting agent C.P.R. at Hamilton.

G. P. Conard, writing the Official Equipment Register in reference to deaths among the members and attendants at the annual gatherings of the International Association of Car Accountants and Car Service Officers, says: "Among these who have in recent years regularly attended the gatherings of this Association, there have been none of the ladies more beloved than Mrs. W. H. Rosevear. Those of our number who were the guests of the Canadian railways in June, 1903, have good reason to remember her kindly and genial companionship on that occasion. We one and all wish to extend our heartfelt sympathy to our beloved President in his loss. Mrs. Rosevear's death was quite unexpected, following what at first appeared to be but a slight illness in the form of grippe. She leaves a record of a beautiful and useful

life, the influence of which will be felt for many years."

R. D. Pinneo, who has been appointed Assistant General Freight and Passenger Agent White Pass and Yukon Route at Skagway, Alaska, was born at Princeton, Iowa, Feb. 9, 1873; and entered railway service 1889, since which his record has been: Dec., 1889, to May, 1890, office boy and clerk Chicago, Milwaukee and St. Paul Rd. at Cordova, Ill.; May, 1890, to Sept., 1891, relieving agent same road; Sept., 1891, to June, 1894, in various capacities Northern Pacific Ry.; June, 1894, to July, 1895, out of railway service; July, 1895, to 1898, with the Great Northern Ry. in various capacities at Superior, West Superior and Duluth, Mich.; 1898 to Mar., 1900, Cashier and Paymaster Pacific Coast Steamship Co., Seattle, Wash.; Mar., 1900, to April, 1901, chief clerk traffic department White Pass and Yukon Route, Skagway, Alaska; April, 1891, to Jan., 1904, cashier and accountant River Division White Pass and Yukon Route at Whitehorse, Yukon Territory.

Thos. Downie, who was recently appointed C.P.R. Trainmaster at Revelstoke, B.C., was killed by a snowslide in Albert Canyon, B.C., April 11. At the time of the accident he was engaged in superintending a gang of men who were clearing a snowslide which had blocked the line. Another sudden slide caught Mr. Downie, and K. Dodd, of the engineer's office at Revelstoke, and completely buried them. The bodies were subsequently recovered, and that of Mr. Downie was removed to Toronto, where the funeral took place April 21. Mr. Downie was born in Ireland April 30, 1859, and entered railway service in 1873, his record being: July, 1873, to April, 1885, apprentice operator and train dispatcher Northern Ry. of Canada at Toronto; Aug., 1885, to

May, 1886, train dispatcher C.P.R. successively at Chapleau, Heron Bay and Schrieber; May, 1886, to Nov. 30, 1903, Chief Train Dispatcher successively at Donald and Revelstoke, B.C.; Dec., 1903, appointed Trainmaster at Revelstoke. He was a brother of W. Downie, General Superintendent Atlantic Division, C.P.R.

Canadian Freight Association.

At the annual meeting in Montreal, April 7, the following officers and committees were elected for the current year: President, C. Howe, Michigan Central Rd., Buffalo, N.Y.; 1st Vice-President, W. R. MacInnes, C.P.R., Montreal; 2nd Vice-President, G. Collins, Central Ontario Ry., Trenton; Sec. Treas., J. Earls; Executive Committee, W. B. Bulling, C.P.R., Toronto; J. Pullen, G.T.R., Montreal; T. Henry, Richelieu and Ontario Navigation Co., Montreal.

Classification Committee—W. B. Bulling, S. P. Howard, F. J. Watson, C. E. Dewey, J. Hardwell, T. Marshall, C. Howe, C. A. Jaques, W. Phillips, E. R. Bremner.

Freight Inspection Committee—G. Collins, F. Conway, F. F. Backus, J. Hardwell, M. H. Brown, J. J. Mossman, J. P. Gay, W. N. Warburton, A. Cowan.

Car Service Committee—J. B. Morford, M. C. Sturtevant, G. S. Cantlie, E. Fisher, J. F. Chapman, W. Woollatt, E. F. Seixas, G. Tombs.

The next regular general meeting will be held at Muskoka, Ont.

The Locomotive and Machine Co., of Montreal has removed its principal offices from the Street Railway Chambers to the Imperial Bank Building, Victoria Square, Montreal.

Fire Losses in Toronto.

The disastrous fire which ravaged a large portion of Toronto's wholesale district on the night of April 19-20, destroyed, among many other buildings, the office buildings and warehouses of the Gutta Percha and Rubber Manufacturing Co. of Toronto, Front St. West, and of W. Jessop & Sons, steel merchants, Bay St. The Gutta Percha and Rubber Mfg. Co. is occupying temporary offices at 15 Wellington St. East. Its factories at Parkdale are running night and day to replenish stock and keep up with orders. W. Jessop & Sons have located temporarily at 38

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station in the City of New York, the Grand Central Station of the New York Central.

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King St. East. The yards and stables of Hendrie & Co., cartage agents to the G.T.R., were somewhat damaged. The Toronto Ry. Co.'s line on Front St. West, which was welded into a continuous rail in 1903, has been so damaged that it will have to be taken up and relaid. The C.P.R. and G.T.R. telegraph lines east of the Union station were destroyed, and the operating was temporarily done in the case of the C.P.R. by an indirect route, and its commercial line, and in the case of the G.T.R. by the G.N.W. Telegraph Co., until repairs could be made. The Bell Telephone Co. was also a considerable sufferer by the fire. For some time the steamboats tied up at the wharves were in danger, but those nearest the

fire were towed out into the bay, and no damage was done to them.

The Dominion Transport Co.'s stables on Lorne St. were damaged by fire the following day to the extent of about \$6,000, the loss being principally by fodder.

The residence of J. J. Gartshore, dealer in railway supplies, etc., at North Toronto, was destroyed by fire, started by the explosion of an acetylene gas machine April 22. Mr. Gartshore's offices, Front St. West, had a narrow escape from being burned in the fire on April 19-20.

The Canadian Northern Transfer Co., of which S. Crosthwaite is Manager, has taken over the cartage business of the Canadian Northern Ry. The headquarters of the Company are at Winnipeg. Heretofore the C.N.R. cartage in Winnipeg has been handled by the Shedden Forwarding Co., of which J. Wraggit is local manager. Mr. Wraggit recently stated in an interview that a contract was made with the Northern Pacific Ry. to do its cartage business in Winnipeg for six years, which period does not expire for another year. The Canadian Northern Ry. took over the Northern Pacific Ry. Co.'s Manitoba lines in 1901, and it is claimed that D. B. Hanna, Third Vice-President C.N.Ry., verbally gave Mr. Wraggit to understand that the arrangement would be continued. Mr. Hanna denies this.

W. H. C. Mackay, City Ticket Agent C.P.R., St. John, N.B., and First Vice-President Canadian Ticket Agents' Association, is vigorously pushing the interests of the Association in the maritime provinces. He recently issued a very comprehensive circular to the coupon ticket agents throughout that territory, which should result in a material increase in the membership of the Association.



THE DOMINION MARINE ASSOCIATION AT OTTAWA, MARCH 29.

From left to right, front row—1. E. A. Hall, L'Orignal; 2. R. O. Mackay, Hamilton; 3. H. C. Hammond, Toronto; 4. J. A. Cuttle, Montreal; 5. C. F. Gildersleeve, Kingston; 6. F. King, Secretary-Treasurer; 7. J. Gaskin, Kingston; 8. J. H. Hall, Ottawa; 9. T. Donnelly, Kingston. Second row—1. A. A. Wright, Toronto; 2. E. Callaghan, Hamilton; 3. W. E. Bishop, Hamilton; 4. D. J. McIntosh, St. Catharines; 5. L. L. Henderson, Kingston; 6. H. W. Richardson, Kingston; 7. G. P. Murphy, Ottawa; 8. D. Noonan, Kingston; 9. R. T. Holcomb, Ottawa. Back row—1. W. T. C. Boyd, Bobcaygeon; 2. G. F. Marsh, Huntsville; 3. H. H. Gildersleeve, Collingwood; 4. H. S. Folger, Kingston; 5. T. Conlon, Thorold; 6. J. B. Fairgrieve, Hamilton; 7. J. H. G. Hagarty, Toronto; 8. B. W. Folger, Toronto; 9. F. Elliott, Montreal.

Position of Station Name Signs

H. W. D. Armstrong, C. E., writes us: "Will you kindly tell your readers why the names of railway stations are marked on the buildings? Is it for the benefit of engine men so that they are placed in very large letters on the ends of the building away up on the roof? Is the name placed for the benefit of freight conductors who, sitting away up in the cupola of their van can see them at a height of 14 ft. above the track? Is it for the benefit of the town residents who want to find the place, or is it intended for the travelling public who might know where they are at? If the latter, kindly suggest in your valuable paper that the proper position for these names is on a level with the centre of passenger car windows, so that people on both sides of the car may see the place they are passing."

We entirely agree with Mr. Armstrong as to the proper position for station name signs in the front of stations facing the track, which should undoubtedly be so placed that they can be seen by passengers on both sides of the car. But in addition there should also be signs on both ends of stations so that persons in a car not opposite the sign on the front of the station can look out and ascertain the name without any difficulty. We shall be glad to hear from other readers on this subject.

The Canada Coals and Ry. Co., which operates the Joggins Coal Mine, and 12 miles of railway from Maccan station, on the Intercolonial Ry., to Joggins coal mine, has closed down its mine and railway. The Company proposes to go into liquidation.

Members of the Canadian Ticket Agents' Association who intend going to St. Louis, Mo., this month, are recommended to take U. S. currency with them.

Grain Elevator Notes.

The elevator at Midland, Ont., was destroyed by fire April 24.

The 150,000 bush. elevator at St. Boniface, Man., for the Crown Grain Co. is reported to be completed.

The Northern Elevator Co., it is reported, will erect a flour mill at Winnipeg during the year, with a capacity of 2,500 barrels a day.

The addition to the elevator at Portage la Prairie, Man., owned by Metcalfe and Son, containing 10,000 bush. of oats, burst as a result of the pressure of the grain April 7.

The F. B. Stevens Elevator Co.'s grain elevator at Fletcher, Ont., was burned to the ground recently. At the time of the fire 10,000 bush. of grain were in the elevator. The grain was insured, but the building was not.

A cargo of grain taken to Collingwood, Ont., by the str. Newmount at the close of navigation in 1903, was transferred to the elevator there the first week in April, the steamer not having been able to get alongside when she arrived.

J. Nehin, who has been appointed Manager of the new grain elevator by the Montreal Harbor Commission, is a native of Buffalo, N.Y., and commenced business life in 1866 as grain shoveller in a Buffalo elevator, being appointed weighman at the Exchange elevator in 1873; foreman of the International elevator in 1887; Superintendent of the Kellogg elevator in 1890, and Superintendent of the Export elevator in 1897. He resigned this position to take charge of the Montreal elevator.

The Keewatin Flour Mills Co. (Ltd.), recently incorporated under the Dominion Companies' Act with a capital of \$2,000,000 to establish a flour mill at Keewatin, Ont., proposes to erect in connection therewith a number of elevators throughout Manitoba and the Northwest Territories. The provisional

directors are: J. Mather, A. W. Fraser, R. M. Cox, G. Burn, Hon. E. H. Bronson, J. Coates, Ottawa; D. L. Mather, Rat Portage, Ont.; Hon. J. D. McGregor, New Glasgow, N.S.; R. L. Borden, M.P., Halifax.

The stock of grain at the elevators at Fort William and Port Arthur, Ont., at the end of March was reported to be 4,713,599 bush., against 6,191,064 in 1903, and 5,073,065 in 1902. At the C.P.R. elevators at Fort William there were 3,079,472 bush. of wheat, 30,639 of oats and 15,098 of barley; at the Canadian Northern Ry. elevator at Port Arthur there were 1,244,998 bush. of wheat, 2,461 of oats, 20,015 of barley and 7,401 of flaxseed; and at King's cleaning elevator at Port Arthur there were 371,129 bush. of wheat, 47,805 of oats, 364 of barley and 109,240 of flaxseed. The total stocks of wheat in store at the head of the lakes and at inland points was 10,579,000 bush., against 18,655,000 at the end of Mar., 1903.



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Canada	- - - -	May 21
Vancouver	- - - -	May 28
Kensington	- - - -	June 4
Dominion	- - - -	June 11
Southwark	- - - -	June 18
Canada	- - - -	June 25

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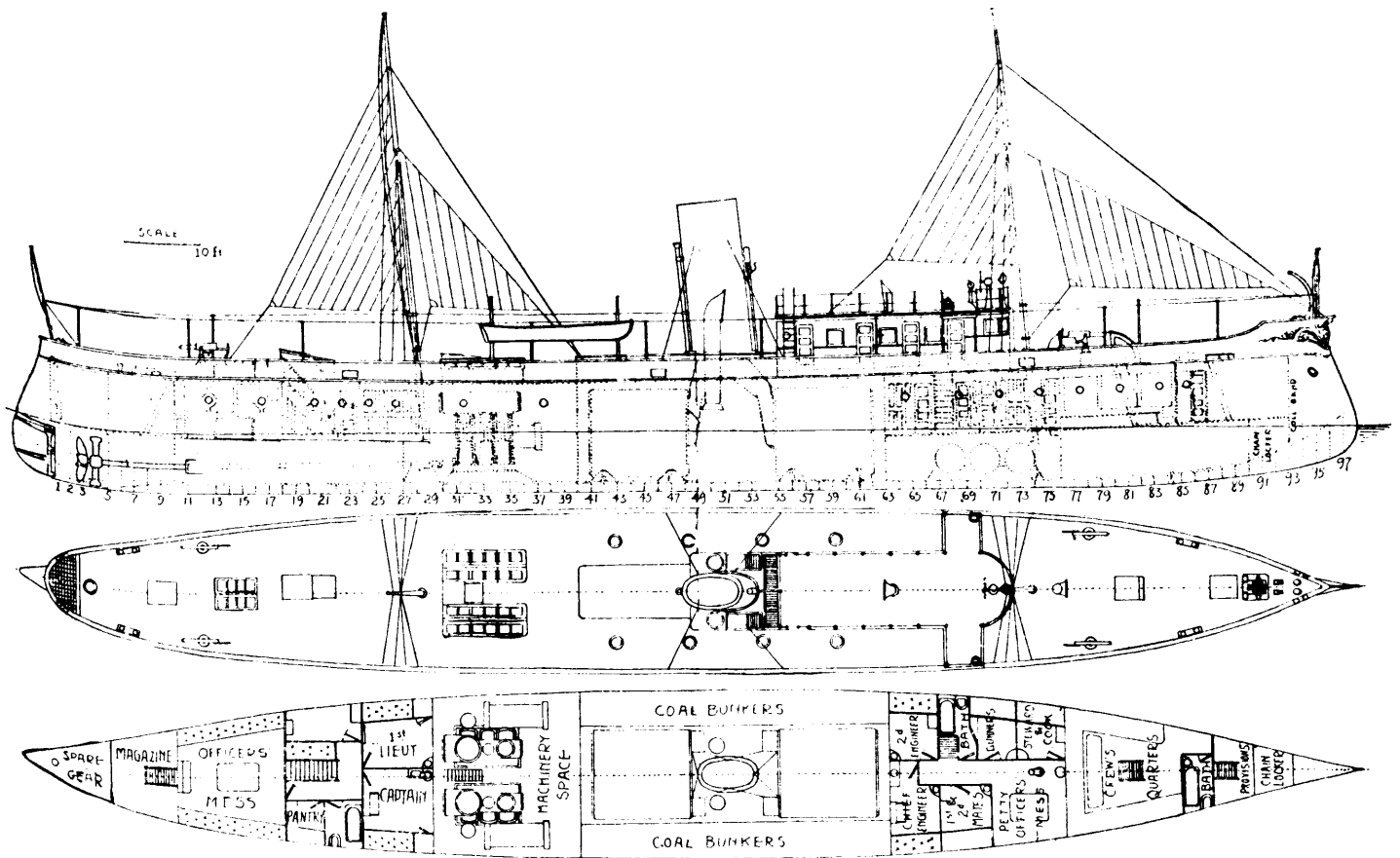
The keel of the fisheries protection cruiser for the Great Lakes, which is being built at the Polson Iron Works, Toronto, for the Dominion Government, has been laid on the blocks from which the lightship Anticosti was launched April 9. The hull is being built of steel and has the following dimensions:—

Length between perpendiculars.....	169 ft.
Length on waterline.....	176 ft.
Length on deck.....	169 ft.
Length over all.....	176 ft.
Beam.....	22 ft.
Depth, molded, top of keel to top of beam.....	14 ft.
Draft.....	8 ft.
Displacement, fresh water.....	514 tons.

The hull is divided into eight watertight compartments by seven bulkheads, thus mak-

cutting off at .75. There is a patent air pump on each engine 13" diameter x 11" stroke; also two vertical independent duplex pumps, with connections to bilge, etc., and an independent water service pump. Two steel boilers of the cylindrical or Scotch type will furnish steam. These boilers are each 11' 6"x12' 8" long, tested for a working steam pressure of 200 lbs. The total heating surface will be 3,470 sq. ft., and total grate surface 114 sq. ft. There are three furnaces in each boiler, of the corrugated suspension type, each 35" diameter, inside of corrugations. Electric lights are to be used throughout, and the vessel will be equipped with a very powerful searchlight. The fuel capacity will be 75 tons of coal, in bunkers situated amidships. The new cruiser will have a speed of 16 knots an hour. Her armament will consist of four 1-pounders. The steamer was designed by

Trent Valley Nav. Co.; G. F. Marsh, Huntsville & Lake of Bays Nav. Co., Huntsville; L. Henderson, Montreal Transportation Co., Kingston; G. B. Greene, Upper Ottawa Improvement Co.; J. A. Cuttle, Montreal Transportation Co.; R. O. Mackay, Hamilton & Fort William Nav. Co.; H. S. Folger, St. Lawrence River Steamboat Co.; A. A. Wright, Toronto; G. P. Murphy, Ottawa Transportation Co.; F. Elliott, Ottawa River Navigation Co.; W. E. Bishop, E. Callaghan, Hamilton Steamboat Co.; J. H. Hall, Ottawa Forwarding Co.; E. E. Hall, L'Original; D. J. McIntosh, Niagara, St. Catharines and Toronto Nav. Co.; R. T. Holcomb, str. Hebron, Ottawa; D. Noonan, Rideau Lakes Nav. Co.; T. Donnelly, Kingston; J. Overton, North-West Nav. Co.; J. Gaskin, Kingston; R. C. Carter, the Rathbun Co.; C. J. Smith, Richelieu & Ontario Nav. Co.; A. P. Cockburn,



INBOARD AND OUTBOARD PROFILE AND DECK PLANS, DOMINION CRUISER FOR THE GREAT LAKES.

ing her practically unsinkable. Frames are spaced 21", centres being made up of angles and reverse frames; the spacing of deck beams is 21" centres, and are of angles 4" by 2 1/2" by 6-20". The keel is of flat plate type, 31" by 12-30" by 9-20". The stern post is of hammered iron 6 1/2" by 3"; the stem is also of hammered iron 6 1/2" by 1 3/4"; and the sheer stake is of steel 33 in. by 11-20 lbs. to 8-20 lbs. There is a steel main deck of plates 3-16" thick, and the wood decks are 2 1/2" by 4 1/2".

The vessel will be driven by twin screws of cast iron, 6' in diameter, and 10' pitch, each having four blades. There will be two triple expansion engines, with cylinders 13 1/2", 22" and 36" diameter by 21" stroke, which will give the screws 210 revolutions a minute. The indicated horse power, with forced draft, two fans, will be 1,800. The high pressure cylinder of each engine has piston valve, and the intermediate and low pressure cylinders have balanced double ported slide valves, all

W. E. Redway, M.I.N.A., the naval architect to the builders.

We are advised that the contract for the construction of division A of the main irrigation canal in Alberta, described on pg. 114 of our April issue, has been let to Nickson & Co., Vancouver, B.C.

Dominion Marine Association.

The first annual meeting was held in Ottawa Mar. 29, the President, C. F. Gildersleeve, in the chair. Among the others present were F. King, Secretary-Treasurer; H. A. Calvin, the Calvin Co.; T. Conlon, Thorold; J. H. G. Hagerty, St. Lawrence & Chicago Steam Navigation Co.; H. W. Richardson, Kingston; J. B. Fairgrieve, S.S. Arabian; H. C. Hammond, H. H. Gildersleeve, Northern Navigation Co. of Ontario; B. W. Folger, Niagara Navigation Co.; W. T. C. Boyd,

J. S. Playfair, Muskoka Lakes Nav. & Hotel Co.

The report of the executive committee revealed the work which had been accomplished during the year, and which has been referred to in these columns from time to time. The membership is 48, representing 67,078 net registered tons of steam vessels and 34,187 net registered tons of sailing vessels and barges, including the leading freight and passenger transportation lines navigating the inland waters. It recommended that the rates of assessment for 1904-5 be half of those fixed for the first year. The report was adopted.

The Secretary-Treasurer's report showed receipts, \$2,364.65; disbursements, \$1,090.28, with liabilities of about \$125.

A report of a special committee on the rules of the road was adopted.

The following were appointed a special committee to confer with the Chairman of the Board of Steamboat Inspectors regarding the proposed amendments of the steamboat in-

spection rules, viz: T. Donnelly, A. A. Wright, A. P. Cockburn, T. Conlon, H. W. Richardson, J. H. Hall, G. F. Marsh, W. T. C. Boyd and J. Overton, with power to add to their number.

A. A. Wright brought up the question of shortages and surpluses in the weight of grain

at elevators, and the matter was referred to the executive committee for action.

The following matters were also referred to the executive committee: The injustice of the rule which compels vessels to pay for damages to locks, bridges, etc., without investigation or right of appeal from the decision of the

canal officials, also the arbitrary method in which fines are imposed upon vessels, often without reasons assigned. A proposal for the use of electricity on the lock gates of the Lachine canal.

A motion that the Government should be asked to keep the canals open all day on Sun-

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days was discussed and lost upon a vote being taken.

The following executive committee was elected: C. F. Gildersleeve, H. C. Hammond, J. H. Hall, J. A. Cuttle, H. W. Richardson, R. C. Carter, R. O. Mackay, A. A. Wright, D. Murphy, S. Crangle, Thos. Donnelly and John Gaskin.

The committee subsequently elected C. F. Gildersleeve, President, and J. A. Cuttle and H. C. Hammond, first and second Vice-Presidents respectively. The Secretary-Treasurer was declared permanently elected.

The special committee appointed to meet the Board of Steamboat Inspectors, attended a conference, and the Department's proposed amendments so far as they related to the qualifications of engineers were outlined to them. With certain exceptions these amendments were considered satisfactory and met the approval of the committee. With regard to these exceptions the committee subsequently waited upon the Minister of Marine, who received the committee's views with gratifying attention, and asked for a memorandum of their proposals. This was accordingly submitted, and it has been promised careful consideration. On the day following a sub-committee of the Association completed the examination of the amendments to the rules, making suggestions where they were considered proper. Many of the amendments are merely formal, and in no case were they open to serious objection, being generally designed to improve the working out of the rules.

Notices to Mariners.

The following notices to mariners have been issued by the Department of Marine:

No. 17. Mar. 25.—Ontario—29. Detroit River, Elliott Point, change in position of range lights. 30. St. Clair River, buoyage. 33. Detroit River, Ecorse, front range light-house. 34. River St. Mary, Sault Ste. Marie, Vidal shoals, channel range lights to be established. 35. Lake Superior, Crisp's Point, light and fog signal to be established.

No. 18. Mar. 30.—Quebec—36. Chaleur Bay, New Richmond, Duthie Point, lighthouse established. 37. River St. Lawrence, below Quebec, traverse of St. Roch, changes in gas buoys.

No. 19. Mar. 31.—Nova Scotia—38. Bay of Fundy, Basin of Mines, Wolfville, new position of lighthouse.

No. 20. April 2.—Ontario—42. Lake Erie, Kingsville, change in color of back range light. 43. River St. Mary, Canadian Sault canal, change in color of lights on lower extremities.

No. 21. April 2.—Nova Scotia—44. Gut of Canso, information respecting tides.

The following notices have been issued by the U.S. Hydrographic Department:

No. 12. Mar. 19.—Detroit River—381. Amherstburg reach, Elliott Point, range lights to be moved.

No. 14. April 2.—St. Lawrence River—473—Rock Island light station, N.Y., intended change in color of light. 474. Superior shoal, N.Y., gas buoy established, corrected bearings.

No. 15. April 9.—St. Mary's River—513. Changes in buoyage.

Maritime Provinces and Newfoundland.

The str. Glencoe, of the Reid-Newfoundland Co.'s west coast service, is undergoing repairs at the Company's dry dock at St. John's.

The Dominion Government str. Lansdowne is being fitted with new boilers, etc., at St. John, N.B.

A company has been formed at Windsor, N.S., to purchase the str. Avon, and retain her on her run on the river and coast. Capt. Trefry is the principal promoter.

The steamer which the Insular Steamship Co., of Westport, N.S., sold in 1902, is having a new deckhouse built, and on going into service this season is to be renamed the Mikado.

J. D. Bradshaw, for many years a leading shipbuilder of New Brunswick, died at St. Martin's recently, aged 84. He built a number of sailing vessels for Vaughan & Co., of Liverpool, Eng.

The Reid-Newfoundland Co.'s str. Bruce has been thoroughly overhauled at the Company's dry dock at St. John's, and has resumed her run between Sydney, N.S., and Point aux Basques, Nfld.

The annual meeting of the Richmond Steamship Co. was held at Sydney, N.S., recently, when a satisfactory report was presented for the season of 1903. It was decided to change the route of the Vega for the coming season so as to make four trips a week between Grand Narrows and St. Peter's, and two between Mulgrave and St. Peter's. C. H. Harrington was elected President, and J. A. Young Secretary-Treasurer.

The new service which the Bowring Bros. will inaugurate in Newfoundland will be given by the Mary Hough and the Prospero, pending the building of two steamers, for which contracts are reported placed in England. The Mary Hough is a Liverpool steamer, hitherto engaged in the coasting freight and passenger trade between London and Liverpool, and has the following dimensions: length, 225 ft.; breadth, 29 ft.; depth, 15 ft.; tonnage: gross, 869 tons; register, 531 tons. Her engines are of 139 nominal horse power, and she is fitted with electric light. She will be placed on the west coast service. The Prospero is a British built steamer, is registered at Christiania, Norway; her dimensions are: length, 179 ft.; breadth, 27 ft.; depth, 14 ft.; tonnage: gross, 678 tons; register, 414 tons. The details of the contract with Bowring Bros. were recently placed before the Newfoundland Legislature. The contract provides for one steamer to make 19 trips between St. John's and Griquet, at \$1,750 a trip, and the other steamer to make 26 trips between St. John's and Bonne Bay at \$1,500 a trip, and will extend for 10 years. The total cost of the service will be \$72,250.

Province of Quebec Shipping.

The Dominion str. Aberdeen is being fitted with new boilers at Quebec, in addition to being given a thorough overhaul.

U. P. Boucher, engineer in charge of placing buoys on the ship channel between Montreal and Quebec, has also been appointed special agent of the Department of Marine in Montreal.

The construction of a dry dock at Montreal at a cost of \$2,000,000 is being again brought before the notice of the Dominion Government. A site is suggested between Windmill Point and the Guard pier.

The Richelieu and Ontario Navigation Co.'s plans for the season include the making of four trips a week each way between Quebec and the Saguenay River, instead of two, as has hitherto been the case.

The North American Transportation Co. proposes to place its steamer Restigouche, formerly the Rathlin, of Glasgow, Scotland, on a run between Montreal, Quebec, and St. John's, Nfld., calling at Charlottetown, P.E.I. The round trip will be made in two weeks.

La Compagnie Generale du port de Chicoutimi is applying at the current session of the Quebec Legislature for an act of incorporation to carry on a general transportation and navigation business within the county of Chicoutimi, as well as to engage in other enterprises.

The report of the Department of Marine for 1903 shows that investigations were made into ten casualties on the St. Lawrence route. Of these the masters were held responsible for four, the pilots for three, and the remaining three were declared to be due to the perils of navigation. Two additional casualties took place, the investigations into which were made in England.

Ontario and the Great Lakes.

The fleet of the Algoma Central Steamship Line will be in charge of Capt. W. C. Barr during the coming season.

Capt. Hickley, of Kingston, who has been in the Richelieu and Ontario Navigation Co.'s service on the Prescott-Montreal run, has retired from active service.

The contract for the extension of the Dominion Government dock at Sault Ste. Marie, Ont., has been let to the Estate of the late John Battle, Thorold, Ont. The estimated cost is \$100,000.

Capt. McCaw, of North Bay, is building a steamer 125 ft. 6 in. long, 25 ft. beam, and a draft of 5 ft., to be fitted with engines of 35 horse power for trading on Lake Nipissing and the French River.

The tug Charles Jones was launched at Owen Sound recently for C. Jones. The dimensions are: length, 50 ft.; breadth, 12 ft.; depth, 6 ft. A high pressure engine capable of making nine miles an hour has been fitted.

The Northern Navigation Co.'s str. Britanic is under repair and will not be in service this year. Her machinery was badly damaged during 1903, and the repairs will not be completed in time to engage in the trade this season.

The str. Turbinia, to run between Toronto and Hamilton for the Turbine Steamship Co., was launched at Hebburn-on-Tyne, Eng., Mar. 28. J. Moodie, President of the Company, recently went to England to come out on the new steamer.

The Kingston Board of Trade has petitioned the Dominion Government to construct a branch of the Rideau Canal into the township of Bedford, so as to open up some mineral lands, and also for the re-opening and deepening of the Wolfe Island canal.

A movement is being made in Picton, Cobourg and other points with a view of forming a joint stock company to purchase the str. Argyle from A. W. Hepburn, of Picton. Press reports state that Mr. Hepburn desires to retire from the business in favor of his sons.

The trustees of the Collingwood General and Marine Hospital are making application at the current session of the Dominion Parliament for authority to borrow money on the mortgage of its real property with a view of improving its buildings and adding to its equipment.

A by-law of the townships of Medora and Wood fixed the assessment of the hotel property of the Muskoka Lakes Navigation and Hotel Co. at Lake Rosseau at \$20,000 for 10 years from Jan., 1901. This by-law was confirmed by an act passed at the recent session of the Ontario Legislature.

The estimated cost of the canal which the U.S. Government is being asked to construct from Lake Erie, round the rapids of the Niagara River, to Tonawanda, N.Y., is \$3,473,239. A deputation of shipping men recently went to Washington to press the claims of the proposal on the river and harbor committee of Congress.

We are advised that the Merchants' Line, managed by G. E. Jaques & Co., Montreal, which operates the Melbourne and Cuba, between Montreal and Toledo, Ohio, and intermediate ports, will have built one or more screw steamers for the route. The plans,

however, are not sufficiently matured for any definite information to be given.

The Dominion Government has decided to use electricity for the opening and closing of the lakes on the Welland Canal and to light the canal along its whole length by the same means. A contract for the supply of the equipment has been let to the Canadian Westinghouse Co. Heretofore electricity has been utilized only for lighting at the locks.

The Oakville Navigation Co., owning the steamer White Star, which was burned in 1903, has decided to go out of business, and its affairs are being wound up in voluntary liquidation. The Company was a local one, comprising business men and fruit growers of

Oakville and vicinity, and did a good business. It is expected that an arrangement will be made by which the Hamilton steamers will call at Oakville during the season.

The Montreal, Ottawa and Georgian Bay Canal Co., which was originally incorporated in 1894 to construct a navigable ship channel between Montreal and Georgian Bay, using the Ottawa River, Lake Nipissing and the

French River where possible, is applying at the current session of the Dominion Parliament for an act granting a further extension of time to 1906 for the commencement, and until May 1, 1912, for the completion of the works.

The steamer, which the Huntsville, Lake of Bays and Lake Simcoe Navigation Co. proposes building for its Lake of Bays service,

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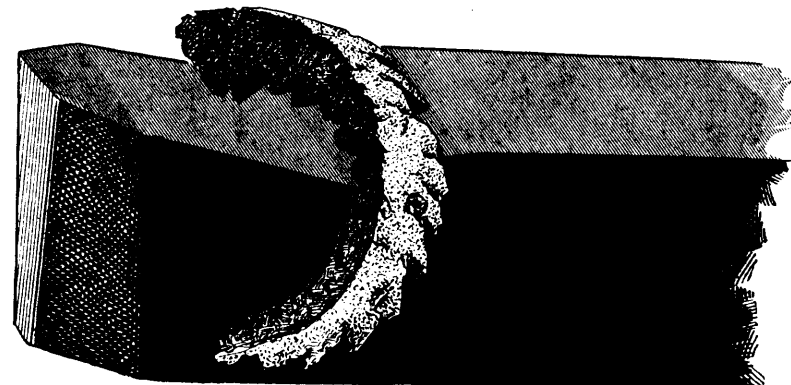
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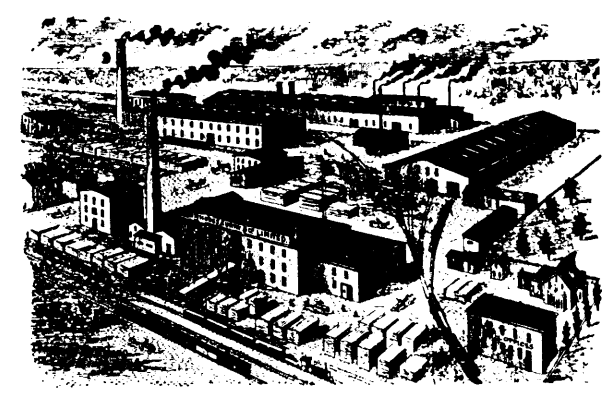
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will be 120 ft. long by 23 ft. beam. The frame timbers are being prepared at Collingwood, and will be set up on the Lake of Bays, where the planking will be completed by the Company. A fore and aft compound engine will be installed, capable of giving a speed of 14 miles an hour. The cost of the steamer completed is estimated at \$20,000.

The St. Clair and Erie Ship Canal Co., which was originally incorporated by the Dominion Parliament in 1899 to construct a ship canal from Lake St. Clair to Lake Ontario, across the counties of Essex and Kent, or either of them, is applying at the current session of the Dominion Parliament for two years' additional time for the commencement, and five years' additional time for the completion of its works. D. Tisdale, M.P., Simcoe, Ont.; H. C. Boulton, Toronto; D. F. Henry, Detroit, Mich.; C. A. Youmans, Neillsville, Wis., and H. A. Olney, Saltash, Cornwall, Eng., are the incorporators and provisional directors.

Returns laid before the Dominion Parliament recently show that during the last season of navigation 548,486 bush. of wheat were received at Quebec from Port Arthur and Upper Lake points by steamer, and 313,199 bush. by rail; and that 1,002,358 bush. were received at Montreal from Upper Lake points without transhipment. The shipments of grain to Buffalo, N.Y., from Port Arthur totalled 2,376,099 bush., and from Fort William, Ont., 5,527,162 bush. The grain handled at the following Canadian ports during the year was: Collingwood, 16,050,000 bush.; Depot Harbor, 14,765,466; Midland, 13,545,958; Kingston, 7,791,654; Meaford, 4,004,716; Goderich, 3,289,195; Owen Sound, 3,248,089.

There was launched from the yard of the Polson Iron Works, Toronto, April 9, the hull of the second of the two lightships ordered by the Dominion Government. The vessel was named Anticosti, as she left the ways, by Miss Polson. Col. W. P. Anderson, Chief Engineer of the Department of Marine, represented the Government at the launch. The Anticosti is in all respects a duplicate of the Lurcher, which was completed in 1903 and placed on the Lurcher shoal off Yarmouth, N.S., a detailed description of which was in our issue for Feb., 1903. The Anticosti is expected to be completed early in June, when she will be placed in position off Anticosti Island in the Gulf of St. Lawrence. These steamers are the first of the kind placed in service in Canada.

The Canadian Shipbuilding Co. is laying out its shipbuilding yard and erecting buildings for its engine and boiler shops on a site of 106 acres acquired on the Upper Niagara river between Bridgeburg and Black Creek, in Bertie tp., Welland county. In order to secure the requisite space for the launching of modern vessels of the largest size it was found necessary to divert the chain reserve, or modern highway which runs along the margin of the river round the shipyard proper. An application to do this was made to the Commissioners of the Queen Victoria Niagara Falls Park. The Company also desired the water lot, the property of the Crown, in front of its lands, in order to deepen the approaches to the docks and launching basins. As the Commissioners deemed it advisable to facilitate, in every way, the establishment of an industry likely to be of lasting benefit to the Province, and the municipal authorities did not object to the change, an agreement was entered into providing for the diversion of the road and the granting of the water lot in question, the Company to provide a roadway, 80 ft. wide, across its property in lieu of the present roadway, and to pay \$500 a year for the privilege. The area of the water lot acquired by the Company is 16 4-5 acres. A statement respecting the negotiations for the land, and a copy of the agreement is publish-

ed in the report for 1903 of the Commissioners for Queen Victoria Niagara Falls Park, recently issued by the Ontario Government.

The following appointments to steamers have been announced for the season of navigation, 1904:

ALGOMA CENTRAL STEAMSHIP LINE.

King Edward—W. Bemrose, master; S. Beatty, engineer.
Minnie M.—A. Batten, master; J. Grimes, engineer.
Paliki—Garvey, master; Jas. Greig, engineer.
Leafield—K. Jordan, master; A. Foote, engineer.
Theano—G. Pearsall, master; J. L. Smith, engineer.
Monkshaven—P. McIntyre, master; P. Ryan, engineer.
Barlum (barge)—E. Cadotte, master.

CANADIAN LAKE AND OCEAN NAVIGATION CO.

Turret Cape—E. L. Stephen, master.
Turret Chief—J. McPhee, master.
Turret Court—J. Black, master.
Turret Crown—J. Dicks, master; W. Robinson, engineer.
H. M. Pellatt—G. Bryan, master; J. Byers, engineer.
J. H. Plummer—Mackay, master; K. Chalmers, engineer.
A. E. Ames—R. Chestnut, master; S. Gillespie, engineer.

MONTREAL TRANSPORTATION CO.

Rosemount—J. Wood, master; R. Taylor, engineer.
Westmount—A. Milligan, master; J. Young, engineer.
Fairmount—P. C. Telfer, master; W. Newbold, engineer.

NORTHERN NAVIGATION CO.

Huronian—R. D. Foote, master; H. Brisbane, engineer; J. H. Ronan, purser.
Monarch—E. Robertson, master; T. Crossley, engineer; A. Caras, purser.
Empire—J. McNab, master; F. Cleland, engineer; C. B. Pardee, purser.
Majestic—A. Campbell, master; W. Whippes, engineer; G. Ince, purser.
City of Collingwood—G. H. Playter, master; C. Robertson, engineer; S. Hewitt, purser.
Germanic—W. G. Cox, master; J. Aston, engineer; H. D. Arnold, purser.
City of Midland—A. M. Wright, master; S. Burgess, engineer; J. Bartlett, purser.
City of Toronto—W. B. Kitchen, master; H. Myles, engineer; B. Batten, purser.

RICHELIEU AND ONTARIO NAVIGATION CO.

Kingston—H. Esford, master; A. R. Milne, engineer.
Toronto—E. A. Booth, jr., master; W. A. Black, engineer.
Bohemian—A. Dunlop, master; G. Gendron, engineer.
Columbian—C. P. Hinckley, master; J. Conlin, engineer.
Hamilton—J. P. Stevenson, master; H. Demartigny, engineer.
Spartan—J. McGrath, master; R. G. Marshall, engineer.
Corsican—D. Mills, master; W. S. Parker, engineer.
Algerian—J. Foubert, master; C. Gendron, engineer.
Quebec—L. O. Boucher, master; F. Gendron, engineer.
Canada—L. St. Louis, master; J. Hamelin, engineer.
Carolina—A. Fortin, master; N. Beaudoin, engineer.
Virginia—J. Dougal, master; M. Latullip, engineer.
Saguenay—C. Lapierre, master; G. Gagnon, engineer.
Three Rivers—C. Gouin, master; J. Matte, engineer.
Berthier—J. Jean, master; E. Dennis, engineer.
Beaupre—J. B. Mongeau, master; E. Dennis, engineer.
Chambly—G. Pault, master; E. Gendron, engineer.
Terrebonne—F. X. Lavolette, master; N. Beaucage, engineer.

OTHER APPOINTMENTS.

Iroquois—McMaugh, master.
Newmount (Farrar Transportation Co.)—F. A. Bassett, master; J. W. Aston, engineer.
Strathcona—A. Irving, master; J. Smeaton, engineer.
Donnacona—Maudsley, master; C. Duguid, engineer.
Victoria (Rockport Navigation Co.)—J. A. Carnegie, master and manager.
W. D. Matthews—J. Ewart, master; E. J. Odell, engineer.
Wexford—W. J. Bassett, master; D. McLeod, engineer.

Manitoba and Northwest Territories.

Replying to a question in the House of Commons recently, the Minister of Public Works stated that \$75,000 had been paid to contractors for the improvements to the St. Andrew's Rapids, near Winnipeg. The Government had under consideration the question of proceeding further with the work.

The Hudson's Bay Co. is having built at Prince Albert, Sask., a stern-wheel river steamer of the following dimensions:—length, 100 ft.; breadth, 23 ft., 7 in.; draft, 20 ins. She will be fitted with engines 9 by 45 in., and a boiler carrying 190 lbs. steam pressure. The steamer will have a cargo capacity of about 60 tons, and in favorable stages of the water barges will be towed. The steamer will have a maximum of power on a minimum draft, so that the two great difficulties of the

rapids and the numerous sand bars of the Saskatchewan river may be overcome. The many settlements that have recently sprung up along the river necessitate an increase in the means of communication. The H. B. Co. inaugurated steam navigation on the river a number of years ago, but owing to want of success it was abandoned. The outlook at the present time is much more favorable.

The report of the Department of Marine shows that during the year ended June 30, 1903, there were added to the vessels plying on the navigable waters in Manitoba and Northwest Territories the following steamers:

For Red River service—Stern wheel steamer Alexandra, built of wood at Winnipeg, Man.; 4.2 horse-power engines; tonnage—gross, 163.57 tons; net, 37.53 tons; licensed to carry 250 passengers.

For Lake Winnipeg trade—Screw str. Roddy, built of wood at Selkirk, Man.; 0.53 horse-power engines; tonnage—gross, 14.10 tons; register, 9.59 tons. Screw str. Firm, built of wood at Winnipeg, Man.; 1.5 horse-power engines; tonnage—gross, 12.61 tons; register, 6.00 tons. Both these are fish tugs.

For Pelican Lake service—Screw str. Pioneer, built of wood on the lake; 3.00 horse-power engines; tonnage—gross, 16.44 tons; register, 8.44 tons. Licensed to carry passengers.

For Peace River service—Screw str. St. Charles, built of wood on the river; 6.00 horse-power engines; tonnage—gross, 28.79 tons; register, 19.50 tons.

For Mackenzie and Slave River trade—Screw str. Caraboo, built of wood at Fort Smith; 6.00 horse-power engines; tonnage—gross, 28.65 tons; register, 19.49 tons. Screw str. Eva, composite construction, built at Athabasca Landing; 8.00 horse-power engines; tonnage—gross, 49.28 tons; register, 27.90 tons.

For Slave and Athabasca River trade—Screw str. Primrose, built of wood at Fort Chippewyan; 1.2 horse-power engines; tonnage—gross, 8.40 tons; register, 5.72 tons.

B.C. and Pacific Coast Shipping.

The Yale Lumber Co. is having a tug built at Nakusp, B.C., the machinery for which will be supplied by a Vancouver firm.

The Admiralty Court for B.C. has awarded the str. Vermont \$4,400 for salvage services rendered to the sailing ship Abby Palmer.

The str. Mermaid, owned by the New Vancouver Coal Mining and Land Co. of Nanaimo, B.C., ran on a rock in Jarvis Inlet, Mar. 25, and sank in deep water.

The Revelstoke Board of Trade is urging on the Dominion Government the importance of deepening and otherwise improving the channel of the river between there and Arrowhead, B.C.

The Dominion estimates for the current year contain \$70,000 for the construction of a steamer for the William Head quarantine station, Victoria. The str. Earl is at present in use, but is not well suited for the service.

The C.P.R. Pacific Coast str. Queen City broke her main shaft in Quatsino Sound on a recent trip. The passengers were taken to Victoria on the Dominion str. Quadra, and the Queen City was subsequently towed to Victoria for repair.

The Thompson River Improvement Co. is applying at the current session of the Dominion Parliament for an act of incorporation, with power, among other things, to carry on a general navigation business on the Thompson river and its tributaries. D. Murphy, Ashcroft, B.C., is solicitor for the applicants.

Two transfer barges 125 ft. long by 36 ft. beam have been completed for the Harbor

The POLSON IRON WORKS

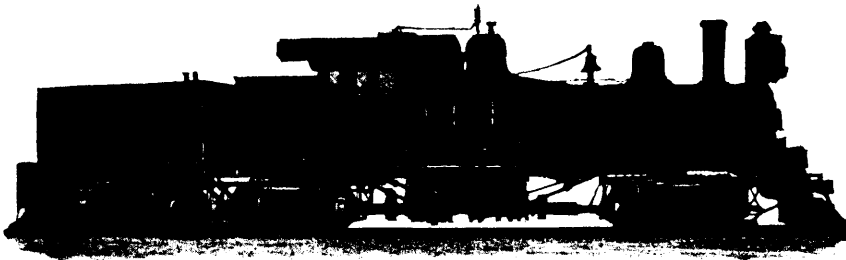
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Grand Trunk Elevators, No. 2 and No. 3, Portland, Me.	2,500,000	"
Export Elevator, Buffalo, N.Y.	1,000,000	"
J. R. Booth Elevator, Depot Harbor, Ontario	1,000,000	"
Southern Pacific Terminal Co.'s Elevator, Galveston, Texas	1,000,000	"
Erie R. R. Transfer & Clipping House, Chicago, Ill.	100 cars in 10 hrs.	"
Manchester Ship Canal Co.'s Elevator, Manchester, Eng.	1,500,000	"
Burlington Elevator Co., Peoria, Ill.	500,000	"
Canada Atlantic Railway Elevator, Goteau Landing, Que.	500,000	"
Northern Grain Co., Manitowoc, Wis.	1,350,000	"
Union Elevator, East St. Louis, Ill.	1,100,000	"
Montreal Warehousing Co.'s Belt Conveyor System		

We make a specialty of furnishing **PLANS AND SPECIFICATIONS.**

Lumber Co., Nakusp, B.C. A tug for the same Company is under construction at Nakusp, the machinery for which is being built by the Polson Iron Works, Toronto. The steamer is expected to be completed in June.

The Muskoka Lakes Navigation and Hotel Co. (Ltd.) has given a renewal chattel mortgage to the Canada Permanent Mortgage Corporation for \$84,720.

The Deputy Minister of Marine, as Chairman of the Lighthouse Board, has informed the Publisher of THE RAILWAY AND SHIPPING WORLD that the latter's letter of March 14, suggesting that the inland marine interests should be represented on the board, which was published in our last issue, will be placed before the board for its consideration at its next meeting.

The Order-in-Council providing for the establishment of the Lighthouse Board of Canada, sets forth that the Board has been appointed to enquire into, and report to the Minister of Marine, from time to time, upon all questions relating to the selection of lighthouse sites, the construction and maintenance of lighthouses, fog alarms, and all other matters assigned to the Minister of Marine by the act relating to Lighthouses, Buoys, Beacons and Sable Island. W. C. Gordon, heretofore a clerk in the offices of the Department of Marine, has been appointed Secretary to the Board.

The Canadian Ocean and Inland Line, which was promoted by W. Petersen, of Newcastle-on-Tyne, Eng., and which operated two steamers between Antwerp, London and Montreal in 1903, will again run its steamers between the same points. T. Harling, of Montreal, is the agent of the Company at that port. This year he will also act as agent for Transport Canadien, a Company formed for the purpose of operating steamers between Antwerp, Bordeaux and Montreal, and with which some of the same interests represented in the Canadian Ocean and Inland line are associated. A fortnightly service will be inaugurated, and connection will be given at Montreal with steamers to points on the Upper Lakes.

An amendment to the act relating to marine engineers is under consideration at the current session of the Dominion Parliament. It provides for the removing of the exemption permitting the employment of non-certificated engineers on tugs, dredges, floating elevators and other vessels up to 150 tons, and for compelling the owners of all such vessels to employ duly certificated engineers. The only exception which it is proposed to retain in the act will permit the employment of non-certificated engineers on private yachts. It is also proposed to create a fourth class of certificated engineers, who will be permitted to take charge of vessels when a higher class of engineers are not available. This would allow the employment of this class of engineers on vessels trading on the minor inland waters. At present the Minister of Marine has power to grant temporary certificates to applicants under the recommendation of the Inspectors of Boilers and Machinery for the several districts.

Among the Express Companies.

The Canadian Ex. Co. has extended its service on the Bay of Quinte Ry., to cover the recently opened extension from Tweed to Bannockburn, Ont.

The Dominion Ex. Co.'s offices at Masson, Annville and Rockland, Que., have been renamed Buckingham Jct., La Perade and Lochaber respectively.

The Dominion Ex. Co. has appointed J. Knox, heretofore acting route agent at Winnipeg, as route agent at Winnipeg. He is suc-

ceeded as assistant route agent by C. N. Spooner.

The Canadian Ex. Co. has opened offices at Allans, Bridgewater and Queensboro, Ont.; Charlemagne, L'Assomption and L'Epiphanie, Que.; Cumberland Bay, N.B., and Pomquet, N.S.

Special forms for permits and manifests covering shipments for the Louisiana Purchase Exposition at St. Louis, Mo., have been issued by the U.S. Treasury Department and can be obtained on application. They are printed on red paper and are marked with the word "Expedite."

The enforcement of the regulations by the U.S. Customs authorities in regard to express packages consigned from Canadian points to the U.S., has resulted in the holding up of a large number of consignments at the border offices. The regulation is an old one, but has not hitherto been strictly enforced. It is required that the ultimate consignee shall furnish the authorities with an affidavit of value before the goods are allowed to pass the border. This sometimes takes several days, meanwhile the goods are held up.

Telegraph and Cable Matters.

The Western Union Telegraph Co. has declared a dividend of 1¼% for the quarter ended Mar. 31, carrying forward a surplus of \$14,607,028.47.

The Halifax and Southwestern Ry. has given a contract for constructing 100 miles of telegraph lines between Halifax and Mahone, and between Bridgewater and Liverpool, N.S.

The charter of the Anglo-American Telegraph Co., which expired April 15, gave the Company a monopoly of the cable communication for commercial purposes between Newfoundland and Great Britain, Prince Edward Island and the mainland of New Brunswick.

E. E. Rand, of Vancouver, who was reported to have secured an option on the rights to operate the Marconi system of wireless telegraphy, states that his option has expired. He further says that expensive lawsuits are bound to grow out of any attempted establishment of the system.

The C.P.R. Telegraph Department has opened offices at Lardo, Gerrard, Glacier, Proctor, Troup Jct., and St. Leon, B.C.; Bowsman, Eden, Marchand, Ogilvie, Woodridge, Mowbray, Man.; Bear's Pass, Dalton, Kama, Metagama, Mattawin, North Lake, and Otter, Ont., and Maniwaki, Que.

The North American Telegraph Co. is applying at the current session of the Dominion Parliament for an act authorizing the change of its head office from Kingston, Ont., to Winnipeg, Man., an increase in its capital from \$1,000,000 to \$10,000,000, and power to extend its lines to Manitoba and the Northwest Territories.

A cable message was recently transmitted from Australia over the British Pacific cable to Vancouver Island, the C.P.R. Telegraph line and the Commercial Cable Co.'s cable to Great Britain in the record time of 2½ minutes. The message contained information of the result of a cricket match between the English and Australian elevens.

There was expended on the postal telegraph service of Newfoundland during the financial year of 1903, the sum of \$41,000, of which \$14,000 was for the building of new lines, and \$27,000 for running expenses. The income for the year was \$13,000. The Government is asking the Legislature to vote \$29,760 for expenses for the current year.

At the annual meeting of the Marconi Wireless Telegraph Co. held in London, Eng., Mar. 30, it was reported that the receipts had

exceeded the expenditure by \$50,085, and that an agreement had been made with the British post office which would place the Company on a level with the cable companies in regard to the receipt and despatch of messages. No definite statement was made as to when it was expected to have the stations opened for the transmission of messages across the Atlantic.

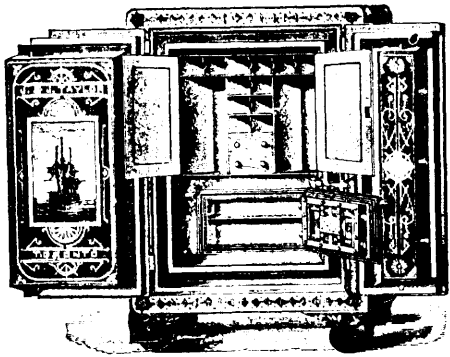
The report of the Dominion Department of Public Works for the year ended June 30, 1903, shows that there are 6,244¼ miles of telegraph lines under the control of the department, with 259 offices. The number of messages transmitted during the year was 96,500. The expenditure on construction and improvements was \$135,154.33; on repairs, \$11,193.19, and on staff and maintenance, \$412,745.06, making a total of \$559,092.58. The receipts of the different lines were \$132,422.17, in addition to which signal service, messages, meteorological service messages, reports and fisheries' bulletins are handled free of tolls.

The extension of the Government telegraph line from Edmonton to Athabasca Landing, Alta., 98 miles, will be undertaken as early as practicable, the work being done by the Government linemen, with such assistance as may be found necessary, under the supervision of J. S. Macdonald, District Superintendent, Qu'Appelle, Assa. The new line will be carried along the existing roadway from Edmonton to Athabasca Landing. The poles for the line are being got out along the line of route by local contractors, and the other material is on hand at Edmonton. The line will be strung with no. 8 galvanized iron wire, with no. 9 tie wire, on white porcelain insulators, fixed on oak brackets, wire nails being used.

In the act respecting municipal taxation considered at the recent session of the Ontario Legislature, it was proposed to assess telegraph and telephone companies a percentage of the amount of gross receipts in cities, towns and villages, and for \$200 a mile for one wire, and \$7.50 a mile for every additional wire, and to free the companies from all other taxes. Such taxes were to be a lien on the property of the Company's lands in the different municipalities; and the Companies were directed to file statements of earnings and mileage in each city, town and village by Feb. 1 in each year. During the discussion a separate clause was adopted providing for the assessment of telegraph companies apart from telephone companies as follows:—A business tax, to be based on 60% of the gross receipts in each municipality, and an assessment of \$60 a mile for each mile of single wire and \$5 a mile for each additional wire.

The C.P.R. Telegraph Department has arranged to carry out the following construction work during the year: New wires on existing lines of poles—a copper wire from Montreal to Quebec; an iron wire from Toronto to Detroit, Mich.; an iron wire from Toronto to Peterboro, Ont.; an iron wire from Hamilton to Winona, Ont.; a 210 lb. copper wire from Montreal to North Bay, Ont., and from Fort William, Ont., to Winnipeg, Man.; thus completing a fourth duplex circuit between Montreal and Winnipeg, part of which was completed in 1903; a 210 lb. copper wire from Winnipeg to Regina, Assa.; an iron wire from Fort William to Ignace, Ont. Extensions of pole lines and wires—From Yorkton, Assa., westward for 40 miles; on the Pheasant Hills branch, 81 miles; on the Kirkella branch, 10 miles; from Arcola to Regina, Assa., 113 miles; from Wetaskiwin, Alta., easterly 25 miles, and from Lacombe, Alta., easterly 25 miles. In addition to the above there will also be between 600 and 700 miles of pole lines rebuilt, and the ordinary general repairs.

C. H. Gibbons, of Vancouver, and D. V. Mott, of Fernie, B.C., have been granted a



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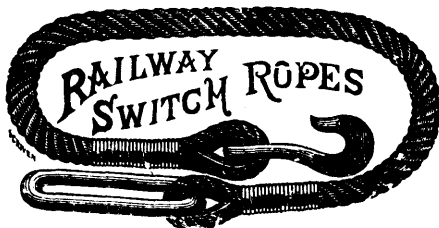
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lease of the Government telegraph lines on Vancouver Island, in trust for a company to be known as the British Pacific Telegraph Co. Application for the incorporation of a Company with this title has been made to the Dominion Government. The proposed capital of the Company is \$25,000, and its chief office will be in Victoria, B.C. The lease of the lines is for 21 years, but the Government may terminate it at any time upon compensating the Company. Under the terms of the lease the Company agrees to maintain the lines in an efficient state, to give the Government free transmission for its messages, and to make an annual payment by way of rental. According to the report of the General Superintendent of Telegraphs for the year ended June 30, 1903, the total length of the Government telegraph lines on Vancouver Island was 382 1/4 miles, with 20 offices. The expenditure during the year was \$6,463.49 for construction and improvements, \$2,381.96 for repairs, and \$11,398.74 for salaries and maintenance, a total of \$20,244.19; whilst the total income during the same period was \$2,968.88. Following are particulars of the several lines:

The Victoria-Cape Beale line, 118 miles long, was constructed in 1891, and extends from Victoria to Cape Beale along the south and west coast of the island, with offices at Sooke, Otter Point, Jordan River, Port San Juan, Carmanah lighthouse and Cape Beale. The superintendence of this line has been in the hands of the Resident Engineer at Victoria since Oct., 1901, when the arrangement theretofore in operation with the C.P.R. Telegraphs was terminated. The salary list is \$3,660 a year, and the expenditure for 1902-3 was \$2,381.96 for repairs, and \$4,607.21 for salaries and maintenance, while the total receipts were \$424.09. The average yearly number of messages handled is 800.

The Nanaimo-Comox line, 81 miles long, was constructed in 1893, and extends from Nanaimo to Comox along the eastern coast, and has offices at Nanaimo, Wellington, Parksville, Union Bay, Union Mines, Cumberland, Courtney and Comox. The repairs of this line have been done jointly with the C.P.R. Telegraphs since Dec. 1, 1902. The salary list is \$2,766 a year, and the expenditure for 1902-3 was \$3,817, the receipts being \$2,430.46.

The Parksville, Alberni and Cape Beale line, 86 1/2 miles long, extends from Parksville on the Nanaimo-Comox line to Alberni, to which point it was completed in 1895, thence to Cape Beale, which point was reached in 1899. There are only two offices on the line. The salary list is \$480, and the total expenditure for salaries and maintenance for 1902-3 was \$1,118, while the total receipts were \$13.16. The average yearly number of messages handled over this line and the Nanaimo-Comox line is 8,000.

The Alberni-Clayoquot line, 96 3/4 miles in length, extends from Alberni to Clayoquot, crossing Franklin Creek by a half mile of cable, and giving a private cable connection with Stubbs Island, from Clayoquot. The line was completed in 1902, and offices were opened at New Alberni, Ucluelet and Clayoquot. There was expended on construction and improvements during 1902-3 \$6,463.49, and \$1,856.53 on staff and maintenance, whilst the receipts amounted to \$91.17. The average yearly number of messages handled is 550.

General Telephone Matters.

The Bell Telephone Co.'s exchange at Smith's Falls, Ont., was burned out Mar. 27. The Vernon and Nelson Telephone Co. is applying to change its name to the B.C. Telephone Co. The Bell Telephone Co. has completed a new copper metallic line from Simcoe to Port Rowan, Ont.

The Bell Telephone Co. has been approached by a deputation of residents along the Gatineau Valley who desire a telephone connection with Ottawa.

The East Grey Telephone Co. is being formed at Kimberley, Ont., for the purpose of constructing a local telephone line between Thornbury and Markdale, and also to give a connection to Kolapore, Redwing, Duncan and Heathcote.

Local telephone lines are projected in British Columbia from Armstrong to Penticton, and from Kelowna to Vernon. A company is being promoted at Vernon to construct one or both of these lines, and M. K. Rogers, of the Nickel Plate Mine, Hedley, proposes to construct a line from Hedley to Penticton if the other lines are constructed.

The International Telephone Co., press reports state, has completed arrangements whereby Victoria and other points on Vancouver Island are to be given a connection with points in Washington Territory and Oregon. It is proposed to lay a cable across the strait from the U.S. mainland to Vancouver Island. Jas. Forman, of Heisterman & Co., Victoria, B.C., had charge of the negotiations in that city.

Replying to the Ottawa city council's decision to grant an exclusive franchise for five years on certain terms, the Bell Telephone Co. submitted an amended offer by which house telephones would be supplied at \$20 each on four party lines, and at \$25 each on exclusive lines, and offered to pay \$1,500, being the amount it would have paid had its previous franchise not expired a year ago. The Canadian Telegraph and Telephone Co. has submitted a revised offer to supply house telephones at \$18.

Representatives of the Bell Telephone Co. and of the other electrical companies in Montreal recently had a conference with the special committee of the Montreal city council which has in charge the conduit proposal. The Bell Telephone Co. has an extensive conduit system in the city at present, and President Sise was anxious to find out how the city would deal with it. The city council had opposed the construction of conduits previously and the Company had to obtain an order of the Privy Council to authorize it. The chairman of the committee gave an assurance that compensation would be granted in case existing conduits were taken up by the city, and that all extensions and improvements necessary would be made by the city.

In connection with the proposal to provide a memorial at Brantford, Ont., to Prof. Graham Bell, inventor of the telephone, a suggestion has been made that a piece of ground known as the Willows be purchased and cleared for use as a public park and playground. The park would be named the Telephone Park, and a monument could be erected when there were sufficient funds on hand. W. F. Cockshutt, chairman of the committee having the matter in charge at Brantford, recently received a letter from Mr. Bell in which he said that although much of the perfecting was done in the United States, the invention of the telephone took original shape while he was living at Tutela Heights, close to Brantford.

The long distance telephone line between Halifax and Sydney, N.S., which has been under construction for the last two years, by the Nova Scotia Telephone Co., Halifax, and the Eastern Telephone Co., Sydney, which was completed and placed in operation Mar. 15, is 292 miles in length. It follows the main road from Halifax, via Truro, New Glasgow, Antigonish, and Auld's Cove to Cape Porcupine. A submarine cable about a mile in length makes the connection with the Cape Breton shore of the Strait of Canso at Port Hastings. The line is then carried along the

main road via West Bay, Orangedale and Iona to Grand Narrows, including a submarine cable 3/4 miles in length, thence parallel with the Intercolonial Ry. to Leitch's Creek, from whence it goes direct to Sydney. At Auld's Cove there is a branch of about four miles in length connecting with Mulgrave; at Port Hastings there is a branch line to Port Hawkesbury. Connection is made at Antigonish with the Antigonish and Sherbrooke Telephone Co.; at Port Hawkesbury with lines running to St. Peter's and Arichat; at Orangedale with Marble Mountain, Whycocomagh and Baddeck; and at Sydney with North Sydney, Sydney Mines, Glace Bay and Louisburg. There were used in the construction of the line 13,000 cedar poles, and 102,000 lbs. of copper wire. Porcelain insulators have been used as being less liable to break than those made of glass. The line was constructed from Halifax to the Strait of Canso by the Nova Scotia Telephone Co., and from Sydney to the Strait of Canso by the Eastern Telephone Co., the cable connecting the two lines being laid at the joint cost of the two companies. The cost of the line is placed at about \$90,000. The rate is \$1.25 for a three-minute conversation between 8 a.m. and 6 p.m., and 65c. for three minutes' conversation between 6 p.m. and 8 a.m.

Telephone Rates in the U.S.

In connection with the discussion of telephone rates, etc., in Toronto, the following schedule of rates which are being charged by the Bell Telephone Co. of the U.S. in cities about the same size as Toronto, will be of interest. These rates are obtained from an authoritative source, and are for unlimited service, metallic circuit lines and solid back transmitters:

	Popula- tion.	Busi- ness.	Resi- dence.
Rochester	163,000	\$ 60 00	\$18 00
St. Paul	163,000	84 00	48 00
Kansas City	163,000	96 00	42 00
Indianapolis	170,000	72 00	48 00
Providence	176,000	96 00	78 00
Minneapolis	202,000	84 00	48 00
Louisville	204,000	96 00	42 00
Jersey City	266,000	150 00	75 00
Newark	247,000	150 00	75 00
Washington	279,000	125 00	72 00
Milwaukee	285,000	96 00	60 00
Detroit	285,000	80 00	66 00
New Orleans	287,000	120 00	60 00

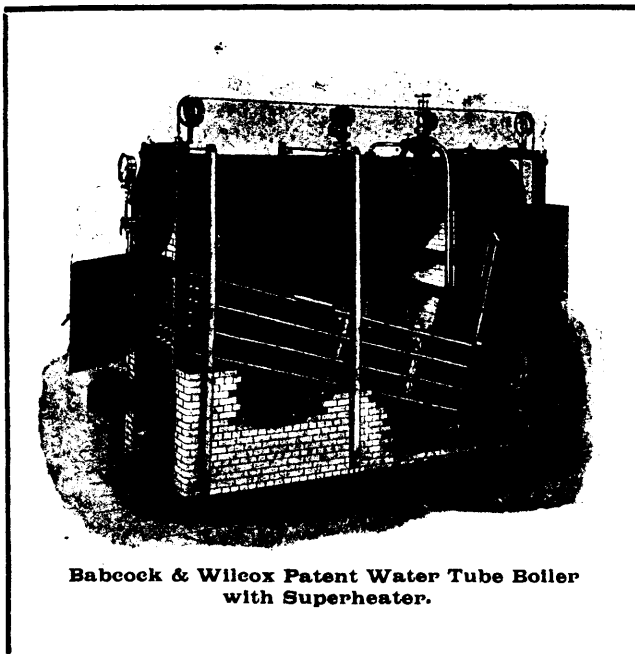
The rate usually fixed in the ordinances of independent telephone companies in the U.S. has been \$48 and \$30. The tendency has been to increase these rates on the ground that they are unprofitable. The last important franchise granted to an independent company in the U.S. was at Kansas City, the rate being fixed at \$60 for business and \$48 for residence. Kansas City district includes the two cities of that name in Kansas and Missouri.

PURCHASING AGENTS' GUIDE.

(Continued from third page of Cover.)

Printing		
The Hunter, Rose Co.	Toronto.	
The Mail Job Printing Company	Toronto.	
Pumps		
Rice Lewis & Son	Toronto.	
Rail Benders, Roller		
Montreal Steel Works	Montreal.	
Railway Supplies		
The Hiram L. Piper Co.	Montreal.	
The N. L. Piper Railway Supply Co.	Toronto.	
Rails (Low)		
James Cooper	Montreal.	
Drummond, McCall & Co.	Montreal.	
J. J. Gartshore	Toronto.	
W. H. C. Mussen & Co.	Montreal.	
Rails (for relaying)		
James Cooper	Montreal.	
J. J. Gartshore	Toronto.	
T. A. Morrison & Co.	Montreal.	
W. H. C. Mussen & Co.	Montreal.	
Rice Lewis & Son	Toronto.	
Jas. W. Pyke & Co.	Montreal.	

Reamers W. Abbott..... Montreal.	Steam Traps The James Morrison Brass Mfg. Co..... Toronto.	Trucks (Electric Car) Baldwin Locomotive Works..... Philadelphia, Pa. Montreal Steel Works..... Montreal.
Rivets, Boiler and Bridge Toronto Bolt and Forging Co..... Toronto.	Steel W. Abbott..... Montreal. James Cooper..... Montreal. B. J. Coghlin & Co..... Montreal. Wm. Jessop & Sons..... Sheffield, Eng. Rice Lewis & Son..... Toronto.	Turnbuckles Montreal Steel Works..... Montreal.
Roof Trusses Dominion Bridge Co..... Montreal.	Steel Buildings Dominion Bridge Co..... Montreal.	Turntables Dominion Bridge Co..... Montreal.
Rope Rice Lewis & Son..... Toronto. The Hudson's Bay Company.....	Steel for Springs James Hutton & Co..... Montreal.	Valves, Iron and Brass The James Morrison Brass Mfg. Co..... Toronto.
Rubber Tiling, Interlocking The Gutta Percha & Rubber Mfg. Co. of Toronto.	Steel Plate Jas. W. Pyke & Co..... Montreal.	Valves, Rubber The Gutta Percha & Rubber Mfg. Co. of Toronto.
Safes J. & J. Taylor..... Toronto.	Steel Tyres B. J. Coghlin & Co..... Montreal. James Hutton & Co..... Montreal. Jas. W. Pyke & Co..... Montreal.	Varnishes McCaskill, Dougall & Co..... Montreal.
Safety Valves The James Morrison Brass Mfg. Co..... Toronto.	Stop Cocks, Iron and Brass The James Morrison Brass Mfg. Co..... Toronto.	Vessels Polson Iron Works..... Toronto.
Screws, Coach and Log Toronto Bolt and Forging Co..... Toronto.	Structural Metal Work Dominion Bridge Co..... Montreal. Locomotive and Machine Co. of Montreal. Jas. W. Pyke & Co..... Montreal.	Waste B. J. Coghlin & Co..... Montreal. Rice Lewis & Son..... Toronto. N. L. Piper Ry. Supply Co..... Toronto. The Queen City Oil Co..... Toronto.
Semaphore Arms Acton Burrows Co..... Toronto.	Superheaters Babcock & Wilcox (Ltd.)..... Montreal.	Water Softeners Babcock & Wilcox (Ltd.)..... Montreal.
Semaphores The Hiram L. Piper Co..... Montreal. The N. L. Piper Railway Supply Co..... Toronto.	Switches Montreal Steel Works..... Montreal.	Wheelbarrows James Cooper..... Montreal. Rice Lewis & Son..... Toronto.
Shaking Grates Babcock & Wilcox (Ltd.)..... Montreal.	Switch Lamps The Hiram L. Piper Co..... Montreal. The N. L. Piper Railway Supply Co..... Toronto.	Windmills Ontario Wind Engine and Pump Co..... Toronto.
Shipbuilders' Tools and Supplies Rice Lewis & Son..... Toronto.	Switch Locks The Hiram L. Piper Co..... Montreal.	Window Blinds The Hudson's Bay Company.....
Ship Lamps The Hiram L. Piper Co..... Montreal. The Holland Portable Light Works..... Montreal. The N. L. Piper Railway Supply Co..... Toronto.	Switch Ropes The B. Greening Co..... Hamilton, Ont.	Wines and Liquors The Hudson's Bay Company.....
Ships Canadian Shipbuilding Co..... Toronto. Polson Iron Works..... Toronto.	Switch Targets Acton Burrows Co..... Toronto.	Wire and Wire Rope Dominion Wire Rope Co..... Montreal. The B. Greening Co..... Hamilton, Ont. Rice Lewis & Son..... Toronto. W. H. C. Mussen & Co..... Montreal. The Wire and Cable Co..... Montreal.
Shipbuilders and Engineers Canadian Shipbuilding Co..... Toronto.	Tanks and Tank Fixtures Ontario Wind Engine and Pump Co..... Toronto.	Wire, Brass and Steel Dominion Wire Manufacturing Co..... Montreal.
Shovels James Cooper..... Montreal. The Hudson's Bay Company..... Rice Lewis & Son..... Toronto.	Tarpaulins and Waterproof Covers Sonne Awning, Tent and Tarpaulin Co..... Montreal.	Wire Cloth The B. Greening Co..... Hamilton, Ont.
Side Bearings Simplex Railway Appliance Co..... Montreal.	Telegraph and Telephone Office Signs Acton Burrows Co..... Toronto.	Wire, Copper Dominion Wire Manufacturing Co..... Montreal. E. F. Phillips Electrical Works, Ltd..... Montreal. The Wire and Cable Co..... Montreal.
Signal House Numbers Acton Burrows Co..... Toronto.	Tents Sonne Awning, Tent & Tarpaulin Co..... Montreal.	Wire, Electric Dominion Wire Manufacturing Co..... Montreal. E. F. Phillips Electrical Works, Ltd..... Montreal. The Wire and Cable Co..... Montreal.
Signals The Hiram L. Piper Co..... Montreal. N. L. Piper Railway Supply Co..... Toronto.	Tie Plates B. J. Coghlin & Co..... Montreal.	Wire Goods Dominion Wire Manufacturing Co..... Montreal.
Signs Acton Burrows Co..... Toronto.	Tobacco and Cigars The Hudson's Bay Company.....	Wire, Insulated Copper E. F. Phillips Electrical Works, Ltd..... Montreal. The Wire and Cable Co..... Montreal.
Snow Ploughs Rhodes, Curry & Co..... Amherst, N.S.	Toilet Paper The Hudson's Bay Company.....	Wire, Telegraph and Telephone Dominion Wire Manufacturing Co..... Montreal. E. F. Phillips Electrical Works, Ltd..... Montreal. The Wire and Cable Co..... Montreal.
Spikes, Railway and Ship Toronto Bolt and Forging Co..... Toronto.	Track Jacks James Cooper..... Montreal. Montreal Steel Works..... Montreal. W. H. C. Mussen & Co..... Montreal. A. O. Norton..... Coaticook, Que.	Wire, Transmission and Trolley Dominion Wire Manufacturing Co..... Montreal. The Wire and Cable Co..... Montreal.
Springs B. J. Coghlin & Co..... Montreal. Montreal Steel Works..... Montreal.	Track Tools Canada Switch and Spring Co..... Montreal. James Cooper..... Montreal. Rice Lewis & Son..... Toronto. Montreal Steel Works..... Montreal. W. H. C. Mussen & Co..... Montreal. The Hiram L. Piper Co..... Montreal.	Wood Screws Dominion Wire Manufacturing Co..... Montreal.
Station Name Signs Acton Burrows Co..... Toronto.	Tramway Equipment James Cooper..... Montreal. W. H. C. Mussen & Co..... Montreal. J. J. Gartshore..... Toronto.	Wrought Steel Piping Babcock & Wilcox (Ltd.)..... Montreal.
Steamboats Canadian Shipbuilding Co..... Toronto. Polson Iron Works..... Toronto.		Yachts Polson Iron Works..... Toronto.
Steamboat Signs Acton Burrows Co..... Toronto.		
Steam Couplers Safety Car Heating and Lighting Co..... New York.		
Steam Shovels James Cooper..... Montreal. W. H. C. Mussen & Co..... Montreal.		



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Aerated Waters E. L. Drewry, Winnipeg.	Crossing Gates The N. L. Piper Railway Supply Co., Toronto.	Lamps & Lanterns The Holland Portable Light Works, Montreal. The Hudson's Bay Company, Toronto. Rice Lewis & Son, Toronto. The Hiram L. Piper Co., Montreal. N. L. Piper Railway Supply Co., Toronto.
Air Brakes & Fittings Canadian Westinghouse Co., Hamilton, Ont.	Crowbars Toronto Bolt and Forging Co., Toronto	Launches Polson Iron Works, Toronto.
Ales E. L. Drewry, Winnipeg.	Curtains The Hudson's Bay Company, Toronto.	Life Insurance Travelers' Insurance Co., Montreal.
Anchors Rice Lewis & Son, Toronto.	Cuts Acton Burrows Co., Toronto.	Lights, Contractors and Wrecking James Cooper, Montreal. The Holland Portable Light Works, Montreal. W. H. C. Mussen & Co., Montreal.
Awning Sonne Awning, Tent & Tarpaulin Co., Montreal.	Derricks James Cooper, Montreal.	Lights, Dock The Holland Portable Light Works, Montreal.
Axles James Hutton & Co., Montreal. Jas. W. Pyke & Co., Montreal. Rhodes, Curry & Co., Amherst, N.S.	Door Signs Acton Burrows Co., Toronto.	Lights, Portable The Holland Portable Light Works, Montreal.
Babbitt Rice Lewis & Son, Toronto.	Drills W. Abbott, Montreal.	Linoleum and Floor Coverings The Hudson's Bay Company, Toronto.
Beltting, Rubber The Gutta Percha & Rubber Mfg. Co. of Toronto.	Dry Goods The Hudson's Bay Company, Toronto.	Locomotive Brass Work The James Morrison Brass Mfg. Co., Toronto.
Blankets & Bedding The Hudson's Bay Company, Toronto.	Economizers Babcock & Wilcox (Ltd.), Montreal.	Locomotives (Compressed Air) American Locomotive Co., New York, N.Y. Baldwin Locomotive Works, Philadelphia, Pa. Locomotive and Machine Co. of Montreal
Block & Tackle Dominion Wire Rope Co., Montreal. Rice Lewis & Son, Toronto.	Electric Car Route Signs Acton Burrows Co., Toronto.	Locomotives (Electric) American Locomotive Co., New York, N.Y. Baldwin Locomotive Works, Philadelphia, Pa. Locomotive and Machine Co. of Montreal
Boat Fittings & Hardware Rice Lewis & Son, Toronto. Sonne Awning, Tent & Tarpaulin Co., Montreal.	Electric Cranes Dominion Bridge Co., Montreal. W. H. C. Mussen & Co., Montreal.	Locomotives (Logging) Lima Locomotive and Mach. Co., Lima, Ohio.
Boiler Covering Mica Boiler Covering Co., Montreal.	Elevator Belts, Rubber The Gutta Percha & Rubber Mfg. Co. of Toronto.	Locomotives (Rack) American Locomotive Co., New York, N.Y. Baldwin Locomotive Works, Philadelphia, Pa. Locomotive and Machine Co. of Montreal
Boilers Polson Iron Works, Toronto.	Enameled Iron Signs Acton Burrows Co., Toronto.	Locomotives (Steam) American Locomotive Co., New York, N.Y. Baldwin Locomotive Works, Philadelphia, Pa. Canadian Locomotive Co., Kingston, Ont. James Cooper, Montreal. Lima Locomotive and Machine Co., Lima, Ohio. Locomotive and Machine Co. of Montreal The Saxon Engine Works, Chemnitz, Germany.
Boilers, Stationary Babcock & Wilcox (Ltd.), Montreal.	Engineers' Supplies The Gutta Percha & Rubber Mfg. Co. of Toronto. The James Morrison Brass Mfg. Co., Toronto.	Machine Tools W. Abbott, Montreal. The Saxon Engine Works, Chemnitz, Germany.
Boiler Tubes B. J. Coghlin & Co., Montreal. Jas. W. Pyke & Co., Montreal.	Engines, Stationary & Marine Polson Iron Works, Toronto.	Manganese Steel Castings Montreal Steel Works, Montreal.
Bolsters Simplex Railway Appliance Co., Montreal.	Engraving Acton Burrows Co., Toronto. Toronto Engraving Co., Toronto.	Marine Boilers Babcock & Wilcox (Ltd.), Montreal.
Bolts, Bridge Toronto Bolt and Forging Co., Toronto	Express Office Signs Acton Burrows Co., Toronto.	Matches The Hudson's Bay Company, Toronto.
Bolts, Carriage and Machine Toronto Bolt and Forging Co., Toronto	Expanded Metal Expanded Metal and Fireproofing Co., Toronto.	Mats and Matting The Gutta Percha & Rubber Mfg. Co. of Toronto.
Bolts, Track Toronto Bolt and Forging Co., Toronto	Feedwater Heaters Babcock & Wilcox (Ltd.), Montreal.	Mechanical Draft Fans Babcock & Wilcox (Ltd.), Montreal.
Brake Beams Simplex Railway Appliance Co., Montreal.	Fencing Canadian Steel and Wire Co., Hamilton, Ont. Dominion Wire Manufacturing Co., Montreal. Page Wire Fence Co., Walkerville, Ont.	Milepost Numbers Acton Burrows Co., Toronto.
Brass and Copper Cloth The B. Greening Co., Hamilton, Ont.	Flags Rice Lewis & Son, Toronto. The Hudson's Bay Company, Toronto.	Milling Cutters W. Abbott, Montreal.
Brass Castings St. Thomas Brass Co., St. Thomas, Ont.	Flour The Hudson's Bay Company, Toronto.	Mohair The Hudson's Bay Company, Toronto.
Bridge Numbers Acton Burrows Co., Toronto.	Foghorns Rice Lewis & Son, Toronto.	Nails, Wire Dominion Wire Manufacturing Co., Montreal.
Bridges Dominion Bridge Co., Montreal.	Gas and Electric Fixtures The James Morrison Brass Mfg. Co., Toronto.	Numbers Acton Burrows Co., Toronto.
Booy Lighting Safety Car Heating and Lighting Co., New York	Gates Page Wire Fence Co., Walkerville, Ont.	Nuts, Square and Hexagon Toronto Bolt and Forging Co., Toronto
Cables, Electric and Feeder E. F. Phillips Electrical Works, Ltd., Montreal. The Wire and Cable Co., Montreal.	Gauges, Steam and Vacuum, etc. The James Morrison Brass Mfg. Co., Toronto.	Oakum Rice Lewis & Son, Toronto. The Hudson's Bay Company, Toronto.
Car Heating Safety Car Heating and Lighting Co., New York	General Supplies The Hudson's Bay Company, Toronto.	Olla Galena-Signal Oil Co., Franklin, Pa., & Toronto. The Queen City Oil Company, Toronto.
Car Jacks James Cooper, Montreal. W. H. C. Mussen & Co., Montreal.	Grain Elevators John S. Metcalfe Co., Chicago, Ill.	Office Signs Acton Burrows Co., Toronto.
Car Lighting Safety Car Heating and Lighting Co., New York	Groceries The Hudson's Bay Company, Toronto.	Packing The N. L. Piper Railway Supply Co., Toronto.
Carpets The Hudson's Bay Company, Toronto.	Hardware Rice Lewis & Son, Toronto. The Hudson's Bay Company, Toronto.	Packing, High Pressure Sheet The Gutta Percha & Rubber Mfg. Co. of Toronto.
Cars Rhodes, Curry & Co., Amherst, N.S.	Headlights The Hiram L. Piper Co., Montreal. N. L. Piper Railway Supply Co., Toronto.	Packing, Piston The Gutta Percha & Rubber Mfg. Co. of Toronto.
Car Wheels Jas. W. Pyke & Co., Montreal. Rhodes, Curry & Co., Amherst, N.S.	Hose Rice Lewis & Son, Toronto.	Pinch Bars The Hiram L. Piper Co., Montreal. The N. L. Piper Railway Supply Co., Toronto.
Castings (Steel) Montreal Steel Works, Montreal. Rhodes, Curry & Co., Amherst, N.S.	Hose, Air Brake and Steam The Gutta Percha & Rubber Mfg. Co. of Toronto.	Pipe Covering The James Morrison Brass Mfg. Co., Toronto. Mica Boiler Covering Co., Montreal.
Cement Machinery Jas. W. Pyke & Co., Montreal.	Hose, Fire The Gutta Percha & Rubber Mfg. Co. of Toronto.	Plushes The Hudson's Bay Company, Toronto.
Chains Rice Lewis & Son, Toronto.	Hose, Suction The Gutta Percha & Rubber Mfg. Co. of Toronto.	Porter E. L. Drewry, Winnipeg.
Coal Haulage Ropes The B. Greening Co., Hamilton, Ont.	Illustrations Acton Burrows Co., Toronto.	Portable Boilers Babcock & Wilcox (Ltd.), Montreal.
Concrete Mixers and Rock Crushers W. H. C. Mussen & Co., Montreal	Injectors The James Morrison Brass Mfg. Co., Toronto.	
Contractors' Plant James Cooper, Montreal. T. A. Morrison & Co., Montreal. W. H. C. Mussen & Co., Montreal.	Interlocking Signals Montreal Steel Works, Montreal.	
Conveyor Belts, Rubber The Gutta Percha & Rubber Mfg. Co. of Toronto.	Iron Rice Lewis & Son, Toronto.	
Cotter Pins Dominion Wire Manufacturing Co., Montreal.	Iron Signs Acton Burrows Co., Toronto.	
Cross Arms, Top Pins & Side Blocks The Firstbrook Box Co., Toronto.	Japans McCaskill, Dougall & Co., Montreal.	
	Journal Bearings Jas. W. Pyke & Co., Montreal. St. Thomas Brass Co., St. Thomas, Ont.	

(Continued on pages 179 and 180.)

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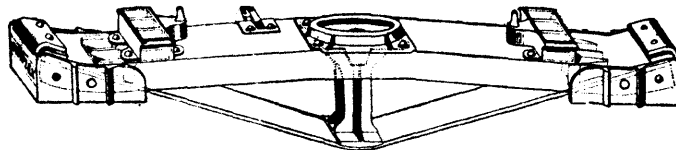
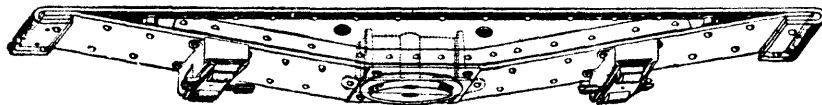
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