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A PURELY CANADIAN COMPANY.**

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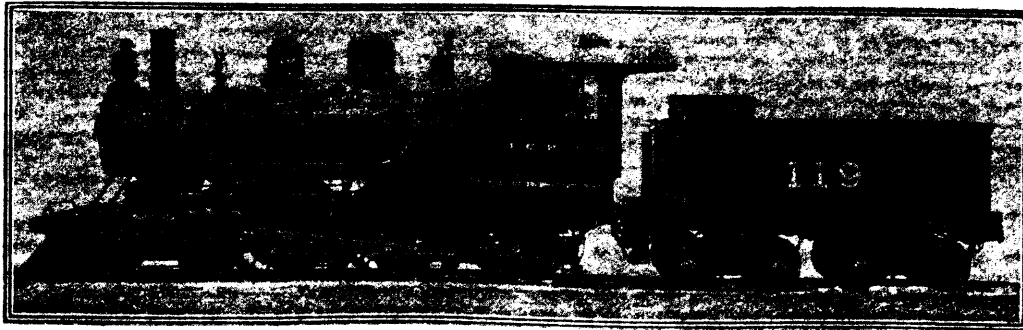
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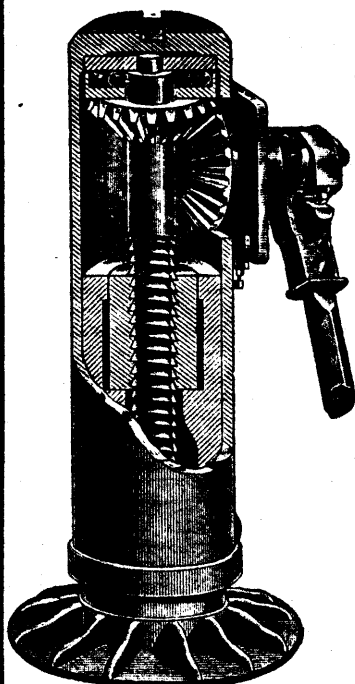
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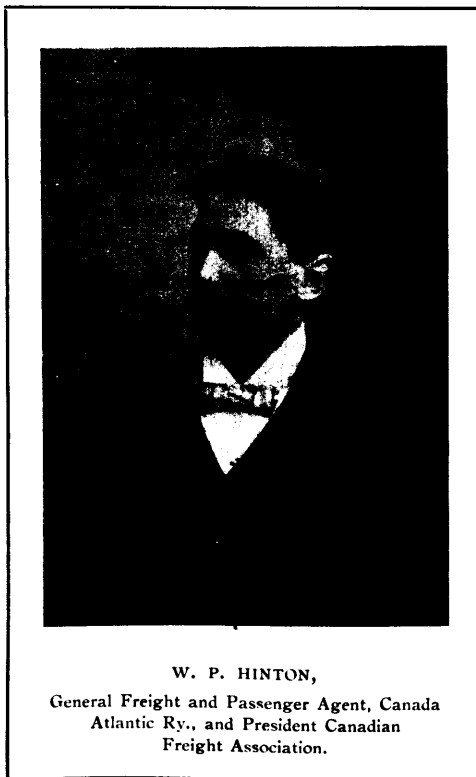
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G.T.R. GUARANTEED STOCK.

The full text of the speech of Sir C. Rivers Wilson, President, in explanation of the reasons for the issue of the additional amount of guaranteed stock, authorized at the general meeting of shareholders in London, Aug. 24, has been published.

The President said the meeting had been called in pursuance of a section in the act which gave powers to the directors on behalf of the company from time to time to create and issue, in addition to the amount of £5,220,000 of 4% guaranteed stock at present existing, a further amount, amounting in the aggregate to £10,000,000. The stock so issued would be applied for the general purposes of the company. It would rank *pari passu* with the existing 4% guaranteed stock, and the holders of it would be entitled to all the rights and privileges at present enjoyed by the holders of that security. By the deed of union of 1882 a fusion was effected between the Grand Trunk Ry. of Canada and the Great Western of Canada. The fusion of these two companies was in its inception what might be called an administrative union; it did not amalgamate and combine the stocks of the two companies, which remained distinct. It was provided that the net receipts of the united undertaking, after providing interest on the debenture stock and other preference securities, should be divided in the following proportions, viz., 70% was to be attributed to the holders of the preference and ordinary stocks of the old Grand Trunk, and 30% to the holders of the preference and ordinary stocks of the Great Western, with this qualification, however, that if the amounts so provided were insufficient to pay 3% to the holders of the ordinary stock of the Great Western Ry., the balance of the 30% was to be made up out of the 70% attributed to the Grand Trunk, and to be paid before their preferences. Certain other privileges were accorded to these two securities of the Great Western. In the case of the Great Western preference stock, which was a cumulative stock, and in the case of the ordinary stocks, it was provided that, in the event of the amount earned being more than sufficient to pay 3%, that should belong to the ordinary stocks. This arrangement and other arrangements arising out of the act of union of 1882 were found to be of a rather complicated nature, and a certain amount of dissatisfaction was experienced by the holders of these securities. This dissatisfaction found its expression at the meeting held in March, 1883; and at that time there was a certain agitation going on as to the advisability of dividing the ordinary shares of English railways into preferred ordinary and deferred ordinary. Partly on account of this question being very much in discussion at the time, and partly owing to the dissatisfaction which arose out of the arrangements under

the act of union, resolutions were passed in March, 1883, which resulted in the Grand Trunk Ry. Act of 1884. The act of 1884 might be taken as a complement to the deed of union of 1882, because, whereas under the arrangement of 1882 the fusion of the two companies was really an administrative fusion, under the act of 1884 the stocks of the two companies were to all intents and purposes combined and amalgamated. The act of 1884 provided for the creation of a new stock, to be called the guaranteed 4% stock; and it was enacted that the holders of the Great Western 5% preference—that stock



amounting at that time to £506,000—should receive of this new 4% guaranteed stock £125 for each £100 of their holding, thereby securing them in their income of 5%. It was also arranged that they should receive £20 in ordinary stock in respect of their holding to compensate them for the cumulative privileges they would lose. The holders of Great Western ordinary stock were to receive £75 for each £100 of their holding, and, inasmuch as they would lose the contingent privilege, they had allocated to them ordinary stock of the same amount as their own holdings. The total of the preference and ordinary Great

Western stocks, so dealt with and exchanged for the new 4% guaranteed stock, amounted to £6,651,000, and were now represented by the £5,220,000 guaranteed 4% stock. The proprietors would wish to know the reasons which had led the board to obtain from the Dominion of Canada this act. The reasons were very simple. He had stated them at the last general meeting, and they met with the approval of the shareholders present. Up to the present time it had been the practice of the company to raise money for general purposes in 4% debenture stock, and the reason was obvious, especially during the past few years, owing to the much more advantageous position which that security had held in the market as compared with the junior securities. Since the present board took office, they had issued, altogether, 4% debenture stock amounting to £3,858,000, but no less than £1,723,000 of this issue represented an exchange for terminal bonds and other securities bearing a much higher rate of interest—6% and 5%. There only remained, therefore, an expenditure incurred for the general purposes of the company, since the present board took office, of £2,135,000, which was a small amount, and rather indicated a conservative, economical, and discreet management of the finances, when it was remembered that during that period they had almost reconstructed and re-equipped the whole system. The total amount of 4% debenture stock at present in existence was £15,134,731, the annual charge for which amounted to £605,389. It appeared to the directors that, in view of the greatly increased credit of the company, it was no longer desirable to go on creating new capital and more fixed charges in front of the guaranteed and preference stock. It was evident that an abandonment of that system must be very much to the advantage of the 4% debenture stock itself, and it would also very much strengthen all junior securities, both the guaranteed and the preference stocks. The amount the board asked latitude to issue was considerable—being an increase from £5,220,000 to £10,000,000. But they had been in the habit of taking these general powers from time to time from the Parliament of the Dominion of Canada, with a view to using them, as necessity might arise, for the improvement of the road and the general purposes of the company. Therefore, they must not run away with the idea that because they had these large powers there was any idea of putting them into operation, except in the manner they had done in the past with the 4% debenture stock. He then moved: "That the Grand Trunk Railway Act, 1903, be and is hereby assented to and accepted, and the directors of the company are hereby authorized to create and issue the 4% guaranteed stock under the powers conferred by the said act."

The motion was seconded by Jos. Price, Vice-President, and carried.

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The Western World, Established 1890.

AN ILLUSTRATED PERIODICAL DEVOTED TO STEAM AND ELECTRIC RAILWAY, SHIPPING, EXPRESS, TELEGRAPH AND TELEPHONE INTERESTS.

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The Canadian Roadmasters' Association.
The Canadian Ticket Agents' Association.
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TORONTO, CANADA, OCTOBER, 1903.

Canadian Excursion Agreement Meeting.

CHAIRMAN, J. H. Walsh, Sherbrooke, Que.
SECRETARY, care of Passenger Department, C.P.R. Montreal.

Canadian Freight Association.

PRESIDENT, W. P. Hinton, Ottawa, Ont.; 1st VICE-PRES., C. Howe, Buffalo, N.Y.; and VICE-PRES., W. R. MacInnes, Montreal; SEC.-TREAS., J. Earls, Toronto.

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Canadian Pacific Railway Club.

PRESIDENT, W. J. Brown; SECRETARY, pro tem, W. J. Miller; TREASURER, J. D. Scott.
REGULAR MEETINGS, 1st Monday each month, in club rooms, Toronto Junction.

Canadian Railway Club.

PRESIDENT, E. A. Williams, Montreal; 1st VICE-PRES., T. A. McHattie, Montreal; and VICE-PRES., S. King, Moncton, N.B. EXECUTIVE COMMITTEE, W. E. Fowler, Acton Burrows, F. H. Hopkirk, J. Powell, F. Sutherland, SECRETARY, W. H. Rosevear, Jr., Montreal; TREASURER, S. F. Underwood, Montreal.
MEETINGS at Windsor Hotel, Montreal, 1st Tuesday of each month, 8 p.m., except in June, July and Aug.

Canadian Roadmasters' Association.

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MEETINGS AT 877 Dorchester St., Montreal, every alternate Thursday, 8 p.m.

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NEXT ANNUAL MEETING at Sydney, N.S., Oct. 12, 1903.

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Engineers' Club of Toronto.

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Rooms, 96 King St. West, Toronto.

Great Lakes and St. Lawrence River Rate Committee.

CHAIRMAN, Thos. Henry, Montreal.
SECRETARY, G. C. Wells, Montreal.
NEXT MEETING, Toronto, Ont., in 1904.

National Association Marine Engineers of Canada.

PRESIDENT, T. J. S. Milne, Kingston, Ont.; VICE-PRESIDENT, A. L. de Martigny, Sorel, 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, O. L. Marchand; Victoria, B.C., B. S. Oddy; Vancouver, B.C., T. M. Heard; Lewis, E. Belanger; Sorel, A. L. de Martigny; Owen Sound, J. M. Wilson.
NEXT ANNUAL MEETING of the Grand Council in Kingston, Ont., Jan. 4, 1904.

Niagara Frontier Summer Rate Committee.

CHAIRMAN, D. J. Flanders, Boston, Mass.
SECRETARY, G. C. Wells, Montreal.

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THE RAILWAY AND SHIPPING WORLD,
Toronto.

The Imperial Limited, the tri-weekly fast trans-continental C. P. R. express was run until Sept. 30 this year. In 1902 the special summer service was discontinued on Sept. 19.

The Montreal Transportation Co.'s saw mills and machine shop near Catarqui bridge, Kingston, Ont., were destroyed by fire Sept. 21. The loss is estimated at \$10,000, which is partly covered by insurance.

The operators of the observation cars on the Montreal Street Ry. who were charged by the cabmen with selling tickets on the sidewalk without a permit from the city council, have secured a favorable decision from the courts.

The Montreal Street Ry. Mutual Benefit Association has been officially authorized by the Quebec Government under an order-in-council dated Sept. 14. The purpose and rules of the association were published on pg. 303 of our Sept. issue.

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The Canadian Northern Ry. has established a parcel checking system at its Winnipeg station in connection with the local trains, for the convenience of travellers who wish to remain over in the city. The service is under the charge of W. Pratt, jr., Superintendent of Dining and Sleeping cars and news service.

The Eugene F. Phillips Electrical Works (Ltd.), has been licensed to do business in Ontario, under the provisions of the act respecting Extra Provincial companies. The company may manufacture and deal in telegraph, telephone and other wires, electrical supplies, etc.; using therefor a capital not exceeding \$30,000. J. P. Thomson, of Toronto, has been appointed its attorney.

In view of the recent decision of the Judicial Committee of the Privy Council in respect of the Ontario Lord's Day Act, a deputation waited on the Dominion Government asking for legislation to ensure a better observance of Sunday throughout the Dominion. The deputation referred particularly to the increasing travel on Sunday and the applications by electric railways for parliamentary authority to run cars on that day. Sir Wilfrid Laurier promised that the Government would give consideration to the matter.

C.P.R. ANNUAL REPORT.

Following is the 22nd annual report, addressed to the shareholders:—

The accounts of the company for the year ended June 30, 1903, show the following results:—

Gross earnings	\$4,957,373
Working expenses	28,120,527
Net earnings	\$15,836,845
Interest on deposits and loans	\$ 614,932
Interest due from the Duluth, South Shore & Atlantic Ry. Co. on Consolidated bonds held by the company, \$604,280—less advanced by the company, \$142,280	462,000
Interest from Minneapolis, St. Paul and Sault Ste. Marie Ry. Co. on bonds held by the company	1,597,220
Interest from Mineral Range Rd. Co. on bonds held by the company	50,160
	<u>1,286,812</u>
	\$17,123,658
Deduct fixed charges	7,052,197
Surplus	\$10,071,460
Deduct amount applied against cost of steamships	150,000
	<u>\$9,921,460</u>
From this there has been charged a half-yearly dividend on Preference Stock of 2% paid April 1, 1903	\$650,000
And a half-yearly dividend on Ordinary Stock of 2½%, paid April 1, 1903	2,112,500
	<u>2,762,500</u>
	\$ 7,158,960
From this there has been declared a second ½-yearly dividend on Preference Stock of 2%, payable October 1, 1903	\$ 650,000
And a second ½-yearly dividend on Ordinary Stock of 3%, payable October 1, 1903	2,515,000

The working expenses for the year amounted to 63.97% of the gross earnings, and the net earnings to 36.03%, as compared with 62.44 and 37.56%, respectively, in 1902.

Your directors deemed it desirable to acquire for your company control of the Kingston & Pembroke Ry., extending from Renfrew, on your main line, to Kingston, on Lake Ontario, a distance of 104 miles. It has been arranged that this be done at a cost of \$848,744, and you will be asked to approve the expenditure—22,602 shares of the preferred stock, and 35,182 shares of the common stock, constituting about 83 per cent. of the whole capital of the Kingston & Pembroke Ry. Co. will be deposited with your treasury securities. The line is now being operated under working arrangements with that company, pending the execution of a formal lease which will be submitted for your approval.

For several years past your company has been operating the Calgary & Edmonton Ry., for account of the owners, receiving in return the benefit of all the traffic in either direction between points on the Calgary & Edmonton line, and points reached by your system. The country along the line has been settled with considerable rapidity, and the contributed traffic has grown to large proportions. Under these circumstances, your directors thought it wise to prevent the possibility of the railway passing into unfriendly hands, and, therefore, they entered into an agreement to lease the line, extending from Macleod to Edmonton, in Alberta, a distance of 296 miles, for a period of ninety-nine years, guaranteeing by way of rental 4% per annum on the Calgary and Edmonton Ry. Co.'s consolidated debenture stock, amounting to £1,121,700. To insure the complete control of the property and its franchises, your directors contracted to purchase for your company all of the capital stock of the Calgary and Edmonton Ry. Co., for the sum of \$500,000. You will be asked to formally sanction their action and to approve the lease.

An agreement has been made with the Lindsay, Bobcaygeon and Pontypool Ry. Co. for the lease, on its completion of that company's line from Burketon, on the main line

of your Ontario and Quebec section, to Lindsay and Bobcaygeon, a distance of about 40 miles. The rental to be paid is 40% of the gross earnings, but not less than \$20,000 per annum, with the option to your company of acquiring the full ownership of the property at any time within twelve years, by undertaking to pay an increased rental not exceeding in all \$28,000 per annum. The agreement will be submitted for your approval.

The residue of the issue of preference stock previously authorized by you for the purposes of the company, amounting to £273,082, was created and sold during the year. 4% consolidated debenture stock to the amount of £764,350 was also created and sold, and the proceeds were used to cover the cost of the Pacific coast steamships, and for the acquisition of the bonds of other companies whose lines constitute a portion of your system, the interest on which had, with your authority, been guaranteed by your company.

The land sales for the year amounted to 2,639,617 acres for the price of \$9,695,673, being an average of \$3.67 per acre.

During the year the guarantee of your company as to interest was endorsed on consolidated bonds of the Minneapolis, St. Paul and Sault Ste. Marie Ry. Co. to the amount of \$2,454,000, representing the cost of 122 7-10th miles of additional railway constructed by that company.

To meet the pressing requirements of settlers, many of whom came into the country during the past two years, your directors authorized the construction of a railway between Regina, on the main line, and Arcola, the present terminus of the Pipestone branch, a distance of about 113 miles; and an arrangement has been made whereby the Manitoba and North-Western Ry. will be extended an additional distance of 33 miles. You will be asked to approve the construction of these lines and to authorize the creation and sale of sufficient 4% consolidated debenture stock for the purpose.

The original \$25,000,000 of 5% land grant bonds having been satisfied, the mortgage securing them has been cancelled. There remain outstanding \$15,000,000 land bonds bearing interest at the rate of 3½% per annum guaranteed by the Dominion Government. The proceeds of the sales of lands covered by the mortgage securing these bonds will be deposited with the Dominion Government in accordance with the terms of the statute; \$500,000 has been thus deposited during the past year, and the amount due on deferred payments will go far toward liquidating the whole amount in the next few years, when the residue of your lands will be relieved of the mortgage and the bonds will become a Government obligation; in the meantime the Government pays interest on the deposits at the rate of 3½%.

Under the authority of the resolution passed at the last annual meeting, your directors purchased from the Elder-Dempster Co. fifteen steamships, constituting that company's Canadian-Atlantic fleet, the purchase price of the vessels and of the goodwill of the sellers being £1,417,500 sterling. This amount has been temporarily advanced from your surplus earnings pending the issue and sale of 4% consolidated debenture stock to a like amount, which you will be asked to authorize at this meeting. An unfortunate accident resulted in the loss of one of the freight steamers. The amount required in excess of the insurance to replace the vessel will, of course, be charged against revenue.

Of the proceeds of the sale of \$19,500,000 ordinary shares, there had been expended to the end of the fiscal year \$17,228,953, and there were orders outstanding for cars and locomotives undelivered amounting to \$4,221,865. Since then additional orders have been placed to the amount of \$1,351,000, and it is

proposed to continue the policy of increasing the rolling stock equipment as rapidly as circumstances will permit, until the company is well ahead of its immediate requirements. When these contracts have been filled, the proceeds of the issue of common shares, as well as the amount of \$3,000,000 appropriated from surplus earnings, will have been absorbed. The cost of cars and locomotives purchased during the last couple of years has been substantially increased, because of the necessity for getting so many of them outside of Canada, and paying the Canadian duty on their importation. In the near future, when your own shops have been completed, it is expected that you will be able to build yourselves most of the cars and locomotives required, thus saving the manufacturers' profit and the duty. Your directors will ask authority to expend \$5,000,000 during the next year on various classes of equipment in addition to all orders that have been placed up to this time.

Many of the new works on which capital has been expended are being carried out on a more comprehensive scale than was originally contemplated, and the increase of nearly 50% within three years in the tonnage moved annually has made it imperative that you should, for the convenience of the public and your own financial advantage, provide forthwith many additional facilities, calculated to assist in promoting promptness and economy in the handling of your traffic, that under ordinary conditions might have been spread over a number of years. Notwithstanding your large outlay in the past for lands, tracks, buildings and other works at your more important terminals like St. John, Montreal, Toronto, Ottawa and Winnipeg, the facilities at most of these points are quite inadequate for present demands, and as a result there is frequent congestion, resulting in inconvenience and expense to everybody concerned. With a view to remedying these conditions, and in order that the work of bringing your property to a high standard of efficiency may be continued without cessation, you will be asked to authorize the directors to expend capital for these general purposes to an amount not exceeding \$4,500,000.

CONDENSED BALANCE SHEET, JUNE 30, 1903.

Cost of railway and equipment	\$242,769,210	
Ocean, lake and river steamships	\$ 5,803,444	
Less amount applied in reduction of cost	1,968,824	
		<u>3,835,199</u>
Pacific coast steamships		956,150
Atlantic steamships		6,979,783
Acquired securities held (cost) ..		43,470,868
Hotels, buildings and properties held in trust for the company ..		2,266,634
Deferred payments on lands and town site sales		13,914,480
Advances:—		
To Montreal & Atlantic Ry., secured by \$500,000 first mortgage bonds		424,144
To Duluth, South Shore & Atlantic Ry., car trusts, etc.		236,213
Advances to new lines under construction		2,412,903
Material and supplies on hand ..		5,498,788
Station and traffic balances, accounts receivable		4,918,698
Miscellaneous securities and advances		1,606,902
Imperial and Dominion Government:—		
Accounts due for mail transportation		236,687
Cash in hand	19,145,168	
Less amount temporarily advanced for purchase Atlantic steamships pending issue of securities	6,972,556	12,172,612
		<u>\$341,699,276</u>

In addition to the above assets, the company owns 12,081,776 acres of land in Manitoba and the Territories (average sales past year \$3.67 an acre), and 3,759,418 acres in British Columbia

Capital stock	\$84,500,000
4% preference stock	32,500,000
4% consolidated debenture stock ..	67,252,252

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.

Mortgage Bonds—	
First mortgage bonds, 5%	\$34,998,633
Canada Central Ry., 6%	973,333
Due Province of Quebec on Q.M.O. & O. & North Shore Ry.	7,000,000
Algoma Branch, 1st mortgage	3,650,000
North Shore Ry., 1st mortgage	616,119
Land grant bonds—	
Guaranteed 3½% land bonds	15,000,000
Less amount paid Dominion Government towards redemption	500,000
Current accounts, pay rolls and traffic balances	14,500,000
Interest on funded debt and rental of leased lines—	
Coupons due July 1, 1903, and including coupons overdue, not presented	1,487,015
Accrued to date, not due	285,055
Equipment replacement fund	1,772,070
Cash subsidies from Dominion and Provincial Government and municipalities	588,543
Land grant—	
Sales of land and town sites	37,119,561
Surplus	18,846,175
	<u>\$341,699,276</u>

FIXED CHARGES FOR YEAR ENDED JUNE 30, 1903.

1st Mortgage Bonds 5% due July 1, 1915	\$1,749,931 66
Province of Quebec, 4 1-20%	283,500 00
North Shore Ry. 1st Mortgage 5% Bonds due April 20, 1904	267 66
Canada Central Ry. 2nd Mortgage 6% Bonds due Nov. 1, 1910	58,400 00
St. Lawrence & Ottawa Ry. 4% 1st Mortgage Bonds due June 15, 1910	38,933 34
Man. & South-Western Colonization Ry. 1st Mortgage 5% Bonds due June 1, 1934	127,200 00
Toronto, Grey and Bruce Ry. Rental	140,000 00
Ontario and Quebec Ry. Debenture Stock 5%	975,129 56
Ontario and Quebec Ry. (Ordinary Stock) 6%	120,000 00
Atlantic & North-West Ry. 1st Mortgage Bonds (less Government proportion) due Jan. 1, 1937	136,333 34
Algoma Branch 5% First Mortgage Bonds due July 1, 1937	182,500 00
Rental, Farnham to Brigham Jct.	1,400 00
Rental, Mattawamkeag to Vanceboro	23,800 00
Rental, New Brunswick Railway system	372,829 74
Rental of terminals at Toronto	32,957 89
Rental of terminals at Hamilton	32,791 39
Rental, Hamilton Junction to Toronto	40,027 86
Rental, St. Stephen and Milltown Ry.	2,050 00
Interest on Montreal and Western Ry. purchase	20,098 73
Interest on equipment leases	93,486 06

4% DEBENTURE STOCK.

Issue for general purposes	£ 3,933,748
Issue for China and Japan steamers	720,000
Issue for Souris branch	1,004,000
Issue to retire Canada Central Ry. 1st Mortgage Bonds	250,000
Issue for branch lines	581,250
Issue for Pacific coast steamers	225,000
Issue for acquiring mortgage bonds of roads of which principal or interest is guaranteed by C.P.Ry.	7,104,958
	<u>£13,818,956</u>
	<u>\$2,620,560 04</u>
	<u>\$7,052,197 27</u>

EARNINGS FOR THE YEAR ENDED JUNE 30, 1903.

Passengers	\$11,001,973 71
Freight	28,502,081 76
Mails	657,905 26
Express	909,098 02
Parlor and Sleeping Cars	637,642 05
Telegraph, Grain Elevators and Miscellaneous, including profit on Pacific steamships	2,248,672 24
Total	<u>\$43,957,373 04</u>

STATEMENT OF WORKING EXPENSES FOR THE YEAR ENDED JUNE 30, 1903.

Conducting transportation	\$ 6,434,321 57
Maintenance of way and structures	6,723,241 17
Motive power	8,989,111 77
Maintenance of cars	2,487,976 69
Parlor and sleeping car expenses	144,349 83
Expenses of lake and river steamers	479,773 06
General expenses	2,323,315 02
Commercial telegraph	547,438 15
Total	<u>\$28,120,527 26</u>

DESCRIPTION OF FREIGHT CARRIED — YEAR ENDED JUNE 30.

	1902	1903
Fleur, brls.	4,921,993	5,110,757
Grain, bush.	52,719,706	63,822,710
Live stock, head	993,742	1,103,686
Lumber, ft.	1,933,569,377	1,190,378,217
Firewood, cords	204,963	268,401
Manufactured articles, tons	2,288,234	2,665,260
All other articles, tons	2,571,136	2,042,736

FREIGHT TRAFFIC — YEAR ENDED JUNE 30.

	1902	1903
Tons carried	8,769,934	10,180,847
Tons carried one mile	3,247,922.167	3,862,242.993
Earnings per ton per mile	0.75 cts.	0.74 cts.

PASSENGER TRAFFIC — YEAR ENDED JUNE 30.

	1902	1903
Passengers carried	4,796,746	5,524,198
Passengers carried one mile	534,777.135	635,855.533
Earnings per passenger per mile	1.75 cts.	1.73 cts.

TRAFFIC TRAIN EARNINGS—YEAR ENDED JUNE 30, 1903.

	Mileage.	Earnings.	Earnings per Traffic Train Mile.
Passenger	9,699,801	\$12,874,480 00	\$1.33
Freight	14,744,064	27,671,887 20	1.88
Total	23,053,979	\$40,546,367 20	\$1.76

The above earnings of traffic trains include earnings from mails, express and sleeping cars, but do not include ocean, lake and river steamers, telegraph, elevators, rents, etc., the net earnings from which amounted to \$2,392,794.63.

EXPENSES PER TRAFFIC TRAIN MILE—YEAR ENDED JUNE 30, 1903.

	Expenses.	Expenses per Traffic Train Mile.
Maintenance of way and structures	\$ 6,723,241 17	0.292
Motive power	8,989,111 77	0.390
Maintenance of cars	2,487,976 69	0.108
Traffic and general expenses	8,901,986 42	0.386
	<u>\$27,102,316 05</u>	1.176

Mileage included in C.P.R. traffic returns	7,748.4
Mileage in other lines worked	872.9
Mileage under construction	364.0
	<u>8,985.3</u>

Mileage of Minneapolis, St. Paul & Sault Ste. Marie Ry.	1,469.5
Mileage of Duluth, South Shore & Atlantic Ry.	565.0
	<u>2,034.5</u>
	<u>11,019.8</u>

Minneapolis, St. Paul and Sault Ste. Marie Railway.

Following are extracts from the report for the year ended June 30, presented at the annual meeting in Minneapolis, Sept. 15:

	1903.	1902.
Gross earnings from all sources	\$7,293,743.26	\$6,257,591.47
Operating expenses	3,719,922.63	2,941,627.40
Net earnings	3,573,820.63	3,315,964.07
Fixed charges, taxes, etc.	1,009,323.20	1,729,462.59
Surplus	1,664,497.43	1,586,501.48

The increase in gross earnings was \$1,036,151.79 or about 16.5%, while the net earnings increased but \$257,856.56 or about 7.8%. Several causes contributed to the increased expenses and decreased net results; the abnormal conditions affecting the fuel supply resulting in inferior coal at higher prices; the material increase in the cost of other supplies and the demands for increased compensation from every class of labor; also the increased cost of more substantial buildings and more modern engines to replace those worn out or obsolete; the cost of replacing temporary wooden bridges with permanent steel structures and the fact that many minor items for improvements formerly carried to capital account, but now charged direct to operating expenses, were active factors in the increased cost of operations.

The operating expenses were 51.4% of the gross earnings compared with 47.3% the preceding year; notwithstanding the increase the percentage compares very favorably with the average for the past four or five years.

The standard of the company's equipment has been fully maintained and strengthened by the addition of the following equipment: 12 locomotives; 8 sleeping cars, including four tourist sleepers; 7 first-class passenger cars; 5 baggage cars; 1 dining car; 300 box cars, 200 flat cars; 50 refrigerator cars; a wrecking crane of the most modern type, besides a steam shovel and various smaller equipment.

The mileage was increased by the completion of a line from Braddock to Bismarck, N.D., about 41 miles. The additional line under construction this year, including an extension of the Birchwood line and a branch line running north from Glenwood, Minn., will add about one-tenth to the present mileage.

The entire Wisconsin and Peninsular Division from Minneapolis to Sault Ste. Marie has been relaid with heavy rails and 80 lb. rails are being laid from Minneapolis to Hoffman, Minn., about 145 miles.

During the year the company acquired property for terminal facilities at St. Paul, at a cost of about \$321,000, and additional grounds at Minneapolis at a cost of \$55,000. When these shall have been fully improved it will have independent terminals as favorably located as any in the Twin Cities.

The grain crop tributary to the company's road was somewhat better than the previous year and at this writing a crop of at least equal quantity and quality is practically assured for this year; the promise of higher prices, however, should reflect favorably on the coming year's earnings by the increased purchasing power of the producers.

The immigration and settlement along the line of both east and west divisions continues satisfactory and cannot but result in greater stability of revenue.

The mileage owned and operated is 1,430.15 and 23.13 miles of spur lines, total 1,453.28 miles. In addition the company has trackage facilities over 18.52 miles of terminal property in Minneapolis, St. Paul and Sault Ste. Marie.

EARNINGS AND EXPENSES.

Passenger	\$1,524,378.01
Freight	5,254,735.41
Express, mail and miscellaneous	458,150.86
	<u>\$7,237,264.28</u>

Maintenance of way and structures	\$ 800,791.71
Maintenance of equipment	661,058.37
Conducting transportation	2,998,027.42
General expenses	160,045.13
	<u>3,719,922.63</u>

Net earnings from operation

REVENUE FROM OTHER SOURCES.

Interest, discount and exchange	\$ 54,248.98
Interest on bonds and stock owned	2,230.00
	<u>56,478.98</u>
Total income	<u>\$3,573,820.63</u>

OTHER PAYMENTS.

Interest on bonds	\$1,428,114.60
Taxes	394,938.64
Rental of terminals	84,066.34
Interest on equipment notes	2,203.62
	<u>1,909,323.20</u>

Surplus earnings

Deduct amount appropriated for additions and betterments

Net surplus for year

The expenditure account for construction of new lines and equipment contains these items: Rice Lake line—extensions of same, \$48,693.19; Polk county line, \$23,964.88; Missouri river division extensions, \$321,220.64; Rapid river branch—extension from Trenary, \$43,590.47; Glenwood extension, \$221,372.43; Tony branch line, \$15,762.74; preliminary surveys, \$2,508.77; terminal property St. Paul and Minneapolis, \$376,494.67; betterments to main line, 251,755.45; new equipment, \$774,851.98; joint terminals, Sault Ste. Marie, \$11,288.18; \$2,091,503.40; less refund by St. Paul Union Depot Company, \$192.85. Total, \$2,091,310.55.

RAILWAY FINANCE, MEETINGS, ETC.

Bellingham Bay and British Columbia Ry.—Officials state that the press reports recently current that the line was about to be sold to the Union Pacific Rd. are without foundation.

British Columbia Electric Ry. Co.—Earnings and expenses for July:—

GROSS EARNINGS.	1902.	1903.	Increase or Decrease.
Railway—Vancouver division	\$16,277	\$18,718	\$2,441+
Victoria	9,901	10,567	666+
Westminster "	9,822	13,554	3,732+
Lighting—Vancouver division	8,719	13,338	4,619+
Victoria	4,499	5,668	1,169+
	49,218	61,845	12,627+
Less working expenses.....	29,438	32,904	3,466+
	19,780	28,941	9,161+
Renewal funds.....	4,222	4,988	766+
Net income.....	15,558	23,953	8,395+
Aggregate gross earnings, July 1, to July 31.....	49,218	61,845	12,627+
Aggregate net earnings, July 1, to July 31.....	\$15,558	\$23,953	\$8,395+

Canada Atlantic Ry.—In addition to the annual meeting of the shareholders called for Sept. 29, a special meeting will be held on the same day for the purpose of taking into consideration the amended and extended powers of the company, and if deemed advisable to authorize the exercise of all or any of the powers of the company for dealing with the stock and bonds of the company; and for other purposes in connection with the stock and bonds of the company.

Canadian Northern Ry.—Earnings:—

	1903.	1902.	Increase or Decrease.
July.....	\$254,800	\$132,000	\$122,800+
Aug.....	250,800	131,200	119,600+
	\$505,600	\$263,200	\$242,400+

Working expenses for July \$165,600, against \$80,900, making net earnings \$89,200, against \$51,400 for July, 1902.

Chateauguay and Northern Ry.—The annual meeting was held in Montreal, Sept. 16, when formal business only was transacted. The officers re-elected were: President, D. Murphy, Ottawa; Vice-President, H. M. Melville, Boston, Mass.; Managing Director, J. P. Mullarkey, Montreal.

Dominion Atlantic Ry.—Gross earnings for July \$126,000, against \$122,284 for July, 1902; making for seven months to July 31, \$492,300, against \$502,244 for same period 1902.

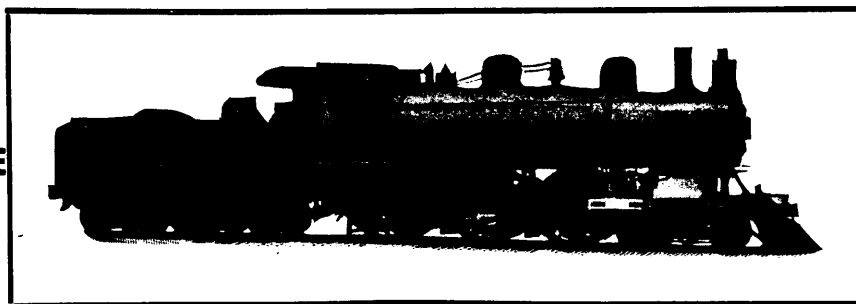
Grand Trunk Ry.—Grand Trunk stocks have certainly given a good account of themselves recently in spite of the dullness in other departments. The signal for the rise was the publication of the July working statement last Saturday. Previous to that these stocks had certainly been comparatively firm, because of the reassuring statements made by the President in regard to capital matters, at the special meeting on Aug. 24, and also on account of the low rates at the last settlement, and the apparent existence of a "bear" account. In our city article last week we said: "Grand Trunk stocks have been on the whole a strong market. The publication of the July statement, due to-day, is awaited with some anxiety, though it is hoped that not less than £15,000 net increase will be shown." As a matter of fact a much keener interest was taken in the monthly statement than in that for the half-year which preceded it. Our es-

timate proved to be within the mark, for the net increase on the entire system was £21,500. As the net outcome of a gross increase of £124,000, this does not appear very striking, but read with the context, so to speak, it is very encouraging. The preceding six months showed large gross increases, but no net gains—in fact, during the past half-year a gross addition to receipts on the main line of about £400,000 did little more than enable the company to mark time. Holders of the third preference and ordinary stocks, who have never been able to put the proper value upon the conservatism of the board, began to express the view that the directors did not intend to distribute more than the 1% dividend paid on the third preference for 1902, whatever the gross increases happened to be. All the surplus profit, they imagined, was being devoted to the improvement of the system in every conceivable way. The G.T.R. board probably well understand the value to be placed upon these murmurs from the junior stockholders, and were not at all likely to be affected by even the threats made in some quarters. The July statement has put an end to these faint signs of discontent, and the immediate outlook is regarded as much more favorable to the junior stockholders. The gross increase of £31,400 for the last ten days of August, published on Thursday, was also regarded with favor, and it is hoped that the August net result will be not less encouraging than that for July, particularly as the latter is understood to contain provision for an accident. To the end of July the statistical position shows that over 1¼% is being earned on the third preference, on the assumption that no further improvement is shown during the remainder of the year. The board does not seem to have relaxed its commendable efforts to strengthen the property—in-
deed, it put £15,000 additional aside for bridge

American Locomotive Company

BUILDERS OF LOCOMOTIVES FOR ALL CLASSES OF SERVICE.

President, S. R. CALLAWAY. Secretary, LEIGH BEST. Treasurer, C. B. DENNY.
Vice-President, A. J. PITKIN. Second Vice-President, R. J. GROSS. Mech. Engr., J. E. SAGUE.



SCHENECTADY WORKS, Schenectady, N. Y.
BROOKS WORKS, Dunkirk, N. Y.
PITTSBURG WORKS, Allegheny, Pa.
RICHMOND WORKS, Richmond, Va.

COOKE WORKS, Paterson, N. J.
RHODE ISLAND WORKS, Providence, R. I.
DICKSON WORKS, Scranton, Pa.
MANCHESTER WORKS, Manchester, N. H.

GENERAL OFFICE ————— **25 Broad Street, NEW YORK CITY.**

renewals in the past six months. Even the junior stockholders must also admit that but for past conservatism the road could not possibly deal with the enormous volume of traffic now being handled.—Railway Times, London, Eng., Sept. 5.

The officials at Montreal state that the persistent rumors that the G. T. R. has acquired the Wisconsin Central Rd., thereby securing an entrance into Minneapolis, Minn., are altogether without foundation.

Halifax Electric Tramway Co.—Gross receipts from railway:

1903.	1902.	Increase or Decrease.
Jan. \$10,867.33	\$10,764.58	\$102.75+
Feb. 9,321.75	8,498.39	823.36+
Mar. 10,195.12	9,761.57	433.55+
Apr. 10,532.55	10,025.66	506.89+
May 10,768.11	11,126.66	358.55-
June 11,843.82	11,528.19	315.63+
July 15,942.37	14,834.69	1,107.68+
Aug. 16,451.49	17,177.12	725.63-
\$95,922.54	\$93,716.86	\$2,205.68+

Halifax and Yarmouth Ry.—Negotiations are in progress for the sale of this line to Mackenzie, Mann & Co., for incorporation in the Halifax and Southwestern Ry.

The H. and Y. Ry. extends from Yarmouth to Barrington Passage, N.S., 50.10, with 2.83 miles of sidings, all laid with 56 lb. steel rails. The company has a paid-up capital of \$51,000 and has issued \$450,000 of bonds; and up to June 30, 1902, had received as subsidies \$90,400 from the Dominion Government; \$96,000 from the Nova Scotian Government, and \$5,000 from municipal subsidies. The Nova Scotian Government has authorized the payment of further subsidies since June 30. The total cost of the line and equipment was \$941,918.46. The equipment consists of four locomotives; seven 1st class cars; two baggage, mail and express cars; eight cattle, freight and box cars; 28 platform cars and one tool car. During the year ended June 30, 1902, the line was in operation from Yarmouth to Pubnico, 30.80 miles; but the remaining 19.30 miles from Pubnico to Barrington Passage has since been placed in operation. The report of the year showed: train mileage—passenger, 598; freight, 764; mixed, 44,545; total, 45,907 miles; engine mileage, 48,454 miles. Passengers carried, 36,157; freight carried, 8,071 tons. The income was: passengers, \$15,363.83; freight, \$7,716.26; mails and express, \$1,974.67; miscellaneous, \$859.20; total, \$25,893.96. Net earnings, \$6,119.37.

Hampton and St. Martin's Ry.—A company of St. Martin's, N.B., business men has arranged to operate the H. and St. M. Ry., and are putting it in order prior to re-opening it for traffic early in Oct. The H. and St. M. Ry. extends from Hampton on the I.C.R., to St. Martin's, 29.00 miles, and has half a mile of siding, all of which is laid with 50-lb. steel rails. It has issued \$100,000 of stock, and \$145,000 of bonds, and has received subsidies to the extent of \$83,612.54 worth of rails from the Dominion Government, and \$145,600 from the New Brunswick Government. The total cost of the line and equipment was \$245,000. During the year ended June 30, 1902, it ran 12,600 miles by mixed trains, carrying 4,637 passengers and 8,843 tons of freight. Its receipts amounted to \$7,275.93, including \$2,510.53 from passengers and \$4,352.10 from freight. There was a loss of \$2,562.12 in the operation of the line during the year, and a floating indebtedness of \$6,183.13.

Hereford Ry.—At the annual meeting of shareholders of the H. Ry., which is operated under a lease, extending for 99 years, by the Maine Central Ry. Co., held at Sherbrooke, Que., Sept. 8, the following officers and directors were elected: President, S. N. Bond, Boston, Mass.; Vice-President, T. F. Baxter, Boston, Mass.; other directors, W. H. Goodwin, Boston, Mass.; H. C. Warren, New

Haven, Conn.; C. B. Jordan, Manchester, N.H.; Secretary-Treasurer, H. B. Brown.

London, Aylmer and North Shore Electric Ry.—A mortgage deed, dated April 29, 1903, securing an issue of \$1,250,000 of 20-year bonds, was filed with the Secretary of State, at Albany, N.Y. The mortgage is made to W. Warnock, banker, Aylmer, Ont., and the Guardian Trust Co. of New York city.

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

1902-3.	1901-2.	Increase or Decrease.
Dec. \$15,041.80	\$12,947.48	\$2,094.32+
Jan. 12,132.54	10,117.60	2,014.94+
Feb. 10,716.42	8,894.78	1,821.64+
Mar. 11,533.68	10,233.21	1,300.47+
Apr. 11,818.06	9,941.94	1,876.12+
May 13,144.76	12,233.68	911.08+
June 16,223.80	13,642.77	2,581.03+
July 18,317.23	16,337.43	1,979.80+
\$108,928.29	\$94,348.89	\$14,579.40+

Gross earnings for Aug., \$19,094.16, against \$16,102.08 for Aug., 1902.

Lindsay, Bobcaygeon and Pontypool Ry.—A general meeting of the shareholders was held in Toronto, Sept. 14, when the lease of the line from Burketon to Bobcaygeon, Ont., now under construction, to the C.P.R. was ratified. The lease is for a period of 99 years.

At the annual meeting held in Toronto, Sept. 14, W. T. C. Boyd was re-elected President, and T. Stewart, Lindsay, Ont., Secretary. Other directors were elected, but their names have not been made public.

Massawippi Valley Ry. Co.—At the annual meeting held at Rock Island, Que., Sept. 2, the following officers and directors were elected for the current year: President, Hon. W. White, Sherbrooke, Que.; Vice-President, J. G. Foster, Derby Line, Que.; Treasurer, Jas. H. Williams, Bellow's Falls, Que.; Secretary, S. Stevens, Rock Island, Que.; other directors, L. Tuttle, O. Edwards, J. W. Dunklee, A. Barnes, Boston, Mass.; C. H. Kathan, Rock Island, Que., and C. W. Cote, Sherbrooke, Que.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Articles of incorporation of the Minneapolis, St. Paul and Sault Ste. Marie Ry. Co., a formal consolidation of the roads embraced by the "Soo" system, have been filed with the Secretary of State for Minnesota. The consolidation which takes in the Minneapolis, St. Paul and Sault Ste. Marie Ry., Minneapolis and St. Croix Rd., Minneapolis and Pacific Rd., and Aberdeen, Bismarck and Northwestern Rd., is to have a capital stock of \$21,000,000, divided into 210,000 shares, of which 70,000 shares are preferred and 140,000 common. Stock in the consolidated company may be exchanged for that of the merged companies as follows: "Soo" stock, preferred and common, will be exchanged evenly for preferred and common of the consolidation. The stock of the other companies will be taken three shares for one share preferred and two shares common in the new company. The directors are W. D. Washburn, John Martin, Thomas Lowry, R. B. Langdon, H. F. Fletcher, C. H. Pettit, C. C. Harriman, J. C. Oswald, C. J. Martin, W. H. Eustis and F. Brown. The stock has been listed on the Toronto stock exchange.

Montreal Street Ry. Co.—At a special meeting of the shareholders held in Montreal, Sept. 10, it was decided to issue an additional \$1,000,000 of stock to shareholders of record of Sept. 30, in the proportion of one share of new to six of old stock. Hon. L. J. Forget, President, explained that the new stock was required for improvements and additions to the lines of the company, and for rolling stock in addition to the seventy-five big cars lately turned out, as well as for other purposes. Of the \$1,000,000, a sum of \$680,000 had already been expended. Only 90 shares were voted against the proposal. The new stock will be issued Oct. 14.

Earnings and expenses for Aug.:

	1903.	1902.	Increase or Decrease.
Passenger earnings	\$208,586.49	\$195,610.14	\$12,976.35+
Miscellaneous earnings	3,229.16	3,794.77	565.61-
Total earnings	211,815.65	199,404.91	12,410.74+
Operating expenses	109,158.86	100,086.21	9,072.65+
Net earnings	102,656.79	99,318.70	3,338.09+
Fixed charges	21,415.22	22,950.48	1,535.26-
Surplus	81,241.57	76,368.22	4,873.35+
Expenses % of car earnings	52.33	51.17	

From Oct. 1, 1902, to Aug. 30, 1903:

	1902-3.	1901-2.	Increase or Decrease.
Passenger earnings	\$1,967,444.91	\$1,813,987.15	\$153,457.76+
Miscellaneous earnings	32,544.87	29,254.31	3,290.56+
Total earnings	1,999,989.78	1,843,241.46	156,748.32+
Operating expenses	1,218,968.52	1,040,946.02	178,022.50+
Net earnings	781,021.26	802,295.44	21,274.18-
Fixed charges	210,778.52	187,178.94	23,599.58+
Surplus	570,242.74	615,116.50	44,873.76-
Expenses % of car earnings	61.96	57.38	

Interest on M. P. & I. Ry. Co.'s bonds owned by the Co. not included.

Montreal Park and Island Ry.—At the annual meeting held in Montreal Sept. 17, the following officers and directors were elected: President, Hon. L. J. Forget; Managing Director, F. L. Wanklyn; Secretary-Treasurer, W. G. Ross; other directors, K. W. Blackwell, H. M. Allan, D. McDonald and Col. F. C. Henshaw. The gross earnings of the company for the year were reported to be in excess of those of previous years, but the net earnings were not larger owing to the heavy expenditures for rolling stock and the increased expenses of operation.

Montreal Terminal Ry.—The business at the annual meeting held in Montreal, Sept. 16, was purely routine. The retiring directors were re-elected, the officers being: President, D. Murphy, Ottawa; Vice-President, H. M. Melville, Boston, Mass.; Managing Director, J. P. Mullarkey, Montreal.

New Brunswick Southern Ry.—Press reports are current to the effect that the N.B.S. Ry., better known as the Shore Line Ry. of Nova Scotia, has been purchased by the Washington County Ry. of the U.S. The object of the purchase, if it is made, would be to provide a route between Boston, Mass., and St. John, N.B., independent of the C.P.R., and the Boston and Maine Rd. The report that such a purchase was in contemplation has been made at various times for several years.

Ottawa and New York Ry.—At the annual meeting held in Ottawa, Sept. 15, the following were elected directors: G. B. Moffat, G. F. Peabody, H. S. Snow, S. Trask, C. J. Peabody, A. M. White, jr., A. Nichols, R. B. Moffat, New York; H. W. Gays, Ottawa. The election of officers for the year, we were informed, would take place on an early date.

Qu'Appelle, Long Lake and Saskatchewan Ry.—Net loss for July \$3,128.72 against net earnings of \$5,100.32 for July, 1902, making for eight months ended July 31, net earnings \$14,140.47 against \$56,221.70 for same period, 1901-02.

Quebec Bridge Co.—The annual meeting announced to be held Sept. 1, was adjourned to Oct. 15.

Quebec Central Ry. Co.—Gross earnings for July \$74,045.63; working expenses, \$49,411.49; net earnings, \$24,634.14 against \$74,027.81 gross and \$27,074.45 net for July, 1902. Gross earnings for seven months ended July 30, \$389,267.51; net earnings, \$108,794.67, against \$365,613.14 gross and \$107,645.91 net for same period, 1902.

Quebec and Lake Huron Ry.—The following officers and directors were elected at the annual meeting held in Quebec Sept. 9: President, Hon. A. Turgeon; Vice-President,

Sir A. Pelletier; Secretary, J. C. Langelier; other directors: Hon. H. G. Carroll, Hon. C. Langelier, Hon. A. C. P. Landry, R. Larue, of Quebec; and F. Campbell, of New York.

Quebec and Lake St. John Ry.—Earnings for July, \$52,668, against \$44,818 for July, 1902; making for seven months ended July 31, \$194,724, against \$187,543 for the same period 1902.

South Shore Ry.—The annual meeting was advertised to be held at Montreal, Sept. 15, but it was decided by the two parties who each claim control, to adjourn the meeting pending the decision of the Court of Appeal. The majority of the stock was purchased by a New York syndicate and R. J. Campbell, of New York city, sold these shares to the Quebec Southern Ry., but the other members of the syndicate say he was not authorized to make such a sale. The action was brought to restrain the issue of Quebec Southern stock and bonds in exchange for the shares, and to decide their ownership. (Sept. pg. 301.)

St. Thomas Street Ry.—The receipts for August were reported to be \$1,595.09. The City Treasurer estimates that the receipts for the year will nearly pay running expenses.

Temiscouata Ry.—Net earnings for July, \$3,219, making for the seven months ended July 31, \$8,580.

Temiskaming and Northern Ontario Ry.—The Commissioners opened tenders at Toronto Sept. 12, for the issue of bonds for \$2,750,000 guaranteed by the Ontario Government for the construction of 110 miles of line, at the rate of \$25,000 a mile. None of the tenders were accepted, the price offered being below what the Commissioners believe the securities are worth.

Toronto Railway Co.—Car earnings:

	1903.	1902.	Increase or Decrease
Jan.....	\$161,938.22	\$137,135.21	\$24,803.01+
Feb.....	146,539.17	127,981.01	18,558.16+
Mar.....	159,913.85	141,681.22	18,232.63+
April.....	162,276.36	132,546.56	29,729.80+
May.....	174,519.58	145,195.54	29,324.04+
June.....	177,593.21	131,865.85	45,727.36+
July.....	192,629.06	162,072.02	30,556.94+
Aug.....	193,669.50	166,355.59	27,313.91+
	\$1,369,078.95	\$1,144,833.10	\$224,245.85+

White Pass and Yukon Ry.—Gross earnings for July, \$216,000; from Aug. 1 to 14, \$89,559.

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 \$3,997,343.75	\$2,678,816.63	\$1,318,527.12	\$142,815.86+

Approximate earnings for August, \$3,994,000, against \$3,448,000 for August, 1902. Mileage increased to 7,743.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for July, \$265,239.28; net earnings, \$99,282, against \$267,216.84 gross and \$115,540.42 net for July, 1902. Approximate earnings for Aug., \$269,565, against \$263,443 for Aug., 1902.

MINERAL RANGE RY.—Approximate earnings for Aug., \$47,325, against \$44,970 for Aug., 1902.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for July, \$589,731.76; net earnings, \$266,633.71, against \$592,278.76 gross and \$275,806.36 net for July, 1902. Approximate earnings for Aug., \$575,261, against \$529,025 for Aug., 1902.

Canadian Pacific Railway Land Sales.

	Acres.		Amount.	
	1903	1902	1903	1902
July..	267,647.32	155,344.08	\$1,020,404.70	\$672,876.50
Aug..	263,339.45	130,723.83	1,271,529.81	473,064.85
	530,986.77	286,068.81	\$2,291,934.58	\$1,145,941.35

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.

	1903.	1902.	Increase. Decrease
July.....	\$3,192,608	\$2,589,422	\$603,186
Aug.....	3,201,511	2,719,303	482,208
	\$6,394,119	\$5,308,725	\$1,085,394

The following figures are supplied from the London, Eng., office: .

GRAND TRUNK RY. CO.

Revenue statement for July:

	1903.	1902.	Increase.	Decrease.
Gross receipts....	£544,000	£437,600	£106,400	.....
Working expenses	380,000	292,800	87,200	.....
Net profit.....	£164,000	£144,800	£19,200	.....

GRAND TRUNK WESTERN RY. CO.

Revenue statement for July:

	1903.	1902.	Increase.	Decrease.
Gross receipts....	£91,700	£74,700	£17,000	.....
Working expenses	81,100	66,900	14,200	.....
Net profit.....	£10,600	£7,800	£2,800	.....

DETROIT, GRAND HAVEN & MILWAUKEE RY. CO.

Revenue Statement for July:

	1903.	1902.	Increase.	Decrease.
Gross receipts....	£20,200	£19,600	£600	.....
Working expenses	15,000	13,900	1,100	.....
Net profit.....	£5,200	£5,700	.....	£500

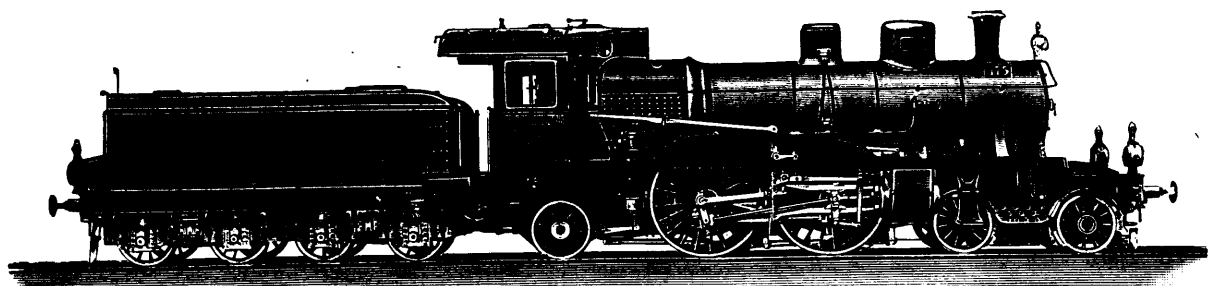
TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from July 1 to Aug. 31:

	1903.	1902.	Increase.	Decrease.
Grand Trunk.....	£1,090,637	£897,947	£192,690	.....
G. T. Western..	178,001	151,878	26,123	.....
D. G. H. & M..	45,223	41,009	4,214	.....
Total.....	£1,313,861	£1,090,834	£223,027	.....

The American Locomotive Co.

The second annual report of this company, just issued, covers the year ended June 30. The gross earnings were \$33,105,724.84, an increase of \$6,707,331.32, or 25.4% over the 12 1/2 months included in the first report. The expenses were \$28,052,314.90, an increase of \$4,761,098.00, or 20.4%. They included, in addition to all the ordinary charges, 20% written off from the book value of patterns and drawings, and a charge of \$484,369.64 representing positive additions to the company's property. The increase in the earnings is attributed to a larger output rather than to higher proportionate prices. The officers have conscientiously avoided any advance in the selling price of engines other



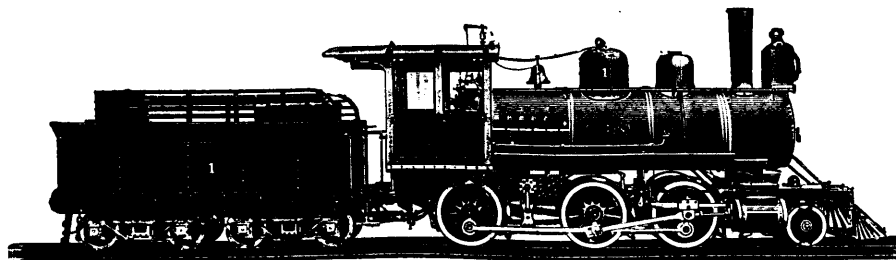
The Saxon Engine Works, late Rich. Hartmann, Limited

CHEMNITZ (Germany),

LOCOMOTIVES of every description.

Carry on the construction of

Number of Workmen, 5,200.



Capital, \$3,000,000.

than such as became absolutely necessary in order to meet the higher cost of labor and of raw material. It is the Company's intention to make a prominent feature of the general overhauling and extensive repairing of locomotives and the supplying of new parts; hence it is gratifying to be able to report the substantial growth of this department during the year. The increase in expense has not been in proportion to that in earnings, inasmuch as the economies introduced during the past two years are now beginning to bear fruit; these, however, do not show to their full extent, as in pursuance of the company's liberal policy in the matter of the upkeep and betterment of its plants, the charges to productive cost for maintenance, renewals and replacements were double those of the preceding year. The result of the operations of the company's eight plants is as follows:

	1902-3	1901-2
Gross earnings	\$3,310,574 84	\$2,639,393 52
Manufacturing, maintenance and administrative expenses	28,054,314 90	23,291,216 90
Net earnings	\$5,053,409 94	\$3,107,176 62
Interest on bonds of constituent companies, bills payable, etc.	248,156 79	105,864 58
Profit available for dividend	\$4,805,253 15	\$3,001,312 04
Dividend on preferred stock, at 7%	1,750,000 00	1,750,000 00
Surplus	\$3,055,253 15	\$1,251,312 04

In order to take advantage of the exceptional and widespread demands for new locomotives during the past two years, extensive purchases of land have been made, capacious new shops of the most modern design have been erected and equipped with the latest and most efficient machinery and tools. Old shops have been remodeled and re-equipped, with the result that the manufacturing capacity of the company has increased fully fifty per cent. over that of the constituent plants at the time of their consolidation into the American Locomotive Company. It is expected that the improvements authorized by the board of Directors will be completed during the fiscal year now opening. During the past fiscal year the sum of \$1,627,301.84 has been expended for additions to the company's property, as indicated above, which, together with the sum of \$1,629,227.90 announced in the report of the previous fiscal year, makes an aggregate expenditure of \$3,256,529.74 thus far, all of which will be paid for out of the current income.

Out of the resulting net earnings the required annual dividend of 7% on the preferred stock has been paid, amounting to \$1,750,000 and leaving a surplus of \$3,055,253.15 to be carried to the credit of "Profit and Loss" account.

The London and Port Stanley Ry.

In a recent issue of the London, Ont., Advertiser some interesting particulars are given relative to the London and Port Stanley Ry. Co., from which we extract the following:

Were it not for the fact that the London and Port Stanley Ry. insures in a measure cheap freight rates via lake connections to London, the road would certainly be an elephant on the city's hands, even when rented steadily, and earning what is generally accepted as a fair annual rental.

The line was built back in the 50's, and the men who projected it had in view the making of a sort of lake port of the city of London. At the time the reciprocity treaty with the United States had worked up a big lake business, and day and night teams walked the plank road from Port Stanley to London, and vice versa, with heavy wagons loaded with freight. London was growing rapidly. Port

Stanley was a port of importance, and it appeared to all that it was time London should have better connection with the lake. And the London and Port Stanley Ry. was built.

The city operated the road for some years with anything but marked success, until a collision occurred between the two locomotives owned by the city, and both were wrecked. The collision occurred just south of the first crossing from the bridge over the Thames river in this city, and for years afterwards the old smokestacks laid in the ditch marking the spot. After this collision in 1873 the line was leased to the G.T.R., which operated it until 1893. The G.T.R. gave it up at the expiration of their term, because they had built the Glencoe-Kingscourt loop line, and claimed it was no longer necessary to their interests. After some time a proposal was made by a Cleveland, Ohio, man, who offered to lease the line for \$28,000 a year, and put up \$20,000 as a security. His backers failed him and nothing was done, the city forfeiting the \$20,000. Then the Michigan Central Rd. operated the line, but later on it was leased to the Lake Erie and Detroit River Ry., by which company it is still operated. The L.E. and D.R. Ry. is owned by the Pere Marquette Rd. and operated as a part of its system.

It is understood that the G.T.R. endeavored to purchase the line in 1877 for \$500,000, but the city declined to entertain the offer. The cost of the line to the city is \$44,000 a year, against which the receipts amount to \$15,000, leaving a net amount of \$29,000 a year to be provided out of the taxes. The road cost in the first place, for land, land damages, grading, masonry, bridges, roadbed, etc., \$966,907.62. Since the construction of the road much money has been spent on it, however, the city in 1896 voting \$85,000 for repairs and improvements.

From Colborne st., where the L. E. and D.R. Ry. freight house stands, to the depot at Port Stanley, is 23.66 miles; there are 2.47 miles of siding, two engine houses and four bridges.

For some years the L. E. and D. R. Ry. tried to have the present lease extended, but for various reasons the city saw fit to put the matter off. The Pere Marquette Rd. are, it is understood, anxious to have their lease extended, and a proposition to the city in the near future may be expected.

Within the last year the road has increased in value through new factories locating along the line, and it is said that more factories are to be built just south of the river, which will increase its earning power for the lessees.

Thus, though the road has cost the people a good deal of money in the past, it would appear that it is rapidly approaching a condition where it will be self-sustaining, and though it may not earn much money for the city in rental, it nevertheless will continue to pull grist to London's mill by maintaining a low freight rate for London shippers to the lake, thus yielding an immense influence upon the other railroads entering London.

Railway Equipment Notes.

The C.P.R. is experimenting with an automatic firebox device on one of its locomotives.

The G.T.R. has received the following equipment between Aug. 18 and Sept. 14: 135 box cars, 300 steel coal cars, 12 cinder cars and 477 wooden coal cars.

The Hamilton, Grimsby and Beamsville Electric Ry. has added a new car to its equipment. The car is larger than any hitherto in service on the line, and is fitted with ball bearings to the axles.

The Government of New South Wales, Australia, is asking for tenders for the construction of 100 locomotives at an estimated

cost of \$1,250,000, to be delivered in the next four or five years.

The five dining cars recently ordered by the C.P.R. at its Hochelaga shops will be 72 ft. in length, and will have accommodation for 36 at the tables, an increase of six in comparison with the dining cars last built.

The C.P.R. since Aug. 12 has placed orders at its Hochelaga shops for the following equipment: 15 sleeping cars, five dining cars, 25 first-class passenger cars, six suburban cars and 25 tourist cars.

The Record of Recent Construction, no. 44, issued by the Baldwin Locomotive Works, Philadelphia, Pa., contains, among other illustrations, two locomotives with cars for inspection and observation purposes, and a double-end locomotive to work on a 4% grade with curves up to 30 degrees.

The locomotive recently constructed by the Baldwin Locomotive Works for the Canadian Copper Co., Sudbury, Ont., the following parts were made of nickel steel; Frames and frame rails, driving axles, piston rods, guides, guide bearer knees, boiler plates, boiler tubes, main driving-wheel centre, eccentric strap, reverse shaft, lifting links, driving tires, crank pins, tender axles, connecting rods, guide bearer, driving spring links, firebox plates, crossheads, rockshaft, equalizing beams, cross-ties, drawhead socket, driving boxes and cellars.

The equipment of the C.P.R. on June 30 was stated in the annual report to consist of 840 locomotives, 725 first and second-class passenger cars, baggage cars and colonist sleeping cars, 139 first-class sleeping and dining cars, 45 parlor, official and paymaster's cars, 26,270 freight and cattle cars (all kinds), 492 conductors' vans, 984 board, tool and auxiliary cars and steam shovels.

The Minneapolis, St. Paul and Sault Ste. Marie Ry. Co. in its annual statement of accounts shows that during the year ended June 30 it added to its equipment 300 box cars, 200 flat cars, 50 refrigerator cars, one dining car, seven 1st-class passenger coaches, four sleeping cars, four tourist cars, five baggage cars, two switching engines, four passenger locomotives, three compound consolidated locomotives, three compound mogul locomotives, one wrecking train, one steam shovel and one ballast unloader, at a total cost of \$827,102.67.

The Minneapolis, St. Paul and Sault Ste. Marie Ry. Co. reported that on June 30 its equipment consisted of 116 locomotives, 26 first-class passenger coaches, 12 second-class passenger coaches, six combination cars, 16 sleeping cars, nine tourist sleeping cars, six dining cars, one buffet car, 28 baggage, mail and express cars, two official cars, 6,802 box cars, 1,084 flat cars, 68 cabooses, 143 ore cars, 98 stock cars, 122 refrigerator cars, 20 charcoal cars, 20 logging cars, eight furniture cars and 15 tool cars, etc.

The annual report of the C.P.R. shows that from the new capital stock issued there had been expended on additional equipment the following amounts: 127 locomotives, \$2,372,205.04; 32 sleeping, parlor, dining, official and pay cars, \$464,128.68; 48 passenger, tourist and colonist coaches, \$432,636.53; 14 baggage, mail and express cars, \$62,600.91; 135 conductors' vans, \$113,970.41; 4,110 box, stock, refrigerator and furniture cars, \$3,717,542.89; 1,680 flat, coal and ore cars, \$1,282,716.92; 42 miscellaneous cars and snow ploughs, \$269,895.62; total \$8,715,697.

The C.P.R. has received the following equipment between Aug. 12 and Sept. 8: six passenger locomotives from Glasgow, Scotland; two passenger and five freight locomotives from the American Locomotive Co.'s Schenectady works; five 1st-class passenger cars from its Hochelaga shops; two 1st-class

passenger cars, nine refrigerator cars for passenger train service, 12 refrigerator cars for freight train service, and 17 stock cars from Rhodes, Curry & Co., Amherst, N.S.; 183 stock cars from its Perth, Ont., shops; 20 flat cars from the Algoma Central and Hudson's Bay Ry. Co.'s car shops, Sault Ste. Marie, Ont.; six vans from its Farnham, Que., shops.

A Freight Car Locating System.

There has recently been installed in the office of the Car Service Agent of the C.P.R. at Winnipeg, a system of keeping track of the cars under his control. The system is known as the graphic system, and requires for its operation a cabinet some 6 ft. in height. This cabinet is divided into compartments in which are placed tablets representing each car under the supervision of the office. The cars at present represented are stock cars, palace horse cars, furniture cars, refrigerator cars and ventilator cars. The case is set off to represent the whole of the road under the care of the Winnipeg car service agent, and

is subdivided into the divisions of superintendents. The territory covered extends from Fort William, Ont., to Laggan and Kootenay Landing, B.C. There are eight superintendents in the line covered. For each car there is a pallet into which there is inserted a card on which the movement of the car is entered. The number of the car is duplicated on the pallet, and the color of the pallet shows the class of car that is represented. By this system it can be seen at a glance just how the cars are distributed over the line, where they are located, and the condition that they are in. An empty movement is indicated by blue pencil marks, and a loaded movement by an entry in black pencil. As the car moves along the rails so do the pallets in the case. The system is regarded as a most perfect one. A large cabinet is in use in Montreal by which the whole equipment of the road is located by the officials of the car department at headquarters.

The Dominion Iron and Steel Co. is constructing a new rod and rail mill at its plant at Sydney, N.S.

The C.P.R. has been Discovered.

The following appeared in a recent issue of the Railway and Engineering Review:

"Canada.—It is stated that the Canadian Pacific will discontinue work for the time being on its Western division, owing to the fact that it has been found almost impossible to obtain material. During the last two years work on the Canadian Pacific has been almost continuous. Its object has been to become one of the great trunk lines of the continent."

This last sentence will certainly strike C.P.R. officials as very late news, as they as well as all Canadians had been under the impression that the C.P.R. had been one of the great trunk lines of the continent, and in fact was the only trunk line extending right across the continent from the Atlantic to the Pacific, operated and owned by one company.

The Hampton and St. Martin's Ry. has been re-opened for some distance from Hampton, N.B., and will be operated for its entire length, early in Oct.

Pintsch System Car and Buoy Lighting.

This Company controls in the United States and Canada the celebrated Pintsch System of Car and Buoy Lighting. It is economical, safe, efficient, and approved by the railway managers and 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. 120,000 cars, 5,000 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 20,000 cars.

Car Heating.

This Company's Systems have been adopted by 130 of the principal Railroads of the United States and by the great Sleeping Car Company. They consist of The Steam Jacket System of hot water circulation, The Direct Steam Regulating System and Straight Steam (plain piping).

Automatic Steam Couplers. Straight Port Type.

THE SAFETY CAR HEATING and LIGHTING CO.,

General Offices: 160 Broadway, New York.

Branch Offices: Chicago, 1017 Monadnock Building - - - St. Louis, 1015 Missouri Trust Building
Montreal, 67 Lusignan Street

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RAILWAY**

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INTERCOLONIAL For "A Week in the Woods."

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**INTERCOLONIAL
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**FAST
FREIGHT
TRAINS**

VIA



RUNNING DAILY BETWEEN

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

Give every satisfaction to shippers

October Birthdays.

Many happy returns of the day to

E. P. Allen, Travelling Passenger Agent, C.P.R., at Syracuse, N.Y., born Oct. 21, 1839.

E. N. Bender, General Purchasing Agent, C.P.R., at Montreal, born at Quebec, Oct. 3, 1858.

T. C. Burgess, Commercial Agent G.T.R., at Minneapolis, Minn., born at New York City, Oct. 2, 1853.

James Conmee, M.L.A., railway contractor, etc., Port Arthur, Ont., born at Sydenham, Ont., Oct. 13, 1848.

C. Cooper, Assistant Treasurer, Secretary and Auditor, Halifax and Yarmouth Ry., at Yarmouth, N.S., born in New Jersey, Oct. 18, 1869.

G. L. Courtney, Traffic Manager, Esquimalt and Nanaimo Ry. at Victoria, B.C., born at Chatham, Ont., Oct. 7, 1868.

F. S. Darling, Division Engineer, C.P.R., at Montreal, born at Burlville, R.I., Oct. 8, 1863.

J. Earls, Secretary and Treasurer Canadian Freight Association at Toronto, Ont., born in Ireland, Oct. 30, 1838.

A. H. Harris, ex-General Traffic Manager Quebec Southern Ry., now C.P.R. freight service, at Montreal, Que., born in Devonshire, Eng., Oct. 15, 1855.

H. Paton, Secretary-Treasurer Shedden Forwarding Co., director Bell Telephone Co., Montreal, born at Johnstown, Renfrew, Scotland, Oct. 5, 1852.

D. Pottinger, General Manager Canadian Government Rys. at Moncton, N.B., born at Pictou, N.S., Oct. 7, 1843.

J. E. Price, General Superintendent I.C.R. at Moncton, N.B., born at Petitcodiac, N.B., Oct. 18, 1854.

N. L. Rand, Master Mechanic I.C.R. at Moncton, N.B., born at Shediac, N.B., Oct. 28, 1843.

G. B. Reeve, ex-Second Vice-President and General Manager G.T.R., La Mirada, Cal., born in Surrey, Eng., Oct. 23, 1840.

E. W. Rathbun, President Bay of Quinte Ry., Deseronto, Ont., born at Auburn, N.Y., Oct. 5, 1842.

Sir Thomas G. Shaughnessy, President C.P.R. at Montreal, born at Milwaukee, Wis., Oct. 6, 1853.

C. W. Spencer, Vice-President and General Manager Ottawa, Northern and Western Ry., Pontiac Pacific Ry., Hull Electric Ry., and Kingston and Pembroke Ry., and General Superintendent of Transportation Eastern Lines C.P.R. at Montreal, born at Kemptville, Ont., Oct. 31, 1857.

W. S. Taylor, Treasurer C.P.R. at Montreal, born at Dornoch, Sutherlandshire, Scotland, Oct. 18, 1839.

£100,000, of which £50,207 was applied for by private subscription, and on which five shillings a share, or £12,551 15s., has been called up. Of the amount called up £7,500 had been deposited with the Bank of Montreal in London to pay surveys, etc. The company also undertook to pay £50,000 in cash or shares for the charter of the A. Q. and W. Ry. A preliminary survey of the route had been made by H. Sullivan, and further surveys will be gone on with this year. It is not likely that any construction will be done this year. The line is projected from Gaspé to near Caupascal on the I.C.R., 170 miles, and thence to Edmonton, N.B., 90 miles. The distance from Paspebiac, the terminus of the Atlantic and Lake Superior Ry., to Gaspé is about 80 miles. C. B. K. Carpenter, of Gaspé, Que., who represents the company in Canada, has an office in Montreal. (Aug., pg. 267.)

Bay of Quinte Ry.—Arbitrators have been appointed to assess the value of some properties at Tweed, Ont., required by the company for the extension of its line. At the meeting of the Railway Committee of the Privy Council, Sept. 22, J. James objected to the location of the line and a station on his mining lots in Elzevir tp. The application was adjourned for a week, to enable the applicant to notify the company of his intention to operate the mine, whereupon the company will construct a subway and remove the



TEN WHEEL COMPOUND FREIGHT LOCOMOTIVE, BUILT BY THE SAXON ENGINE WORKS, CHEMNITZ, GERMANY, FOR THE CANADIAN PACIFIC RAILWAY.

W. P. Fitzsimons, Manager Lackawanna-Grand Trunk Line at Buffalo, N.Y., born at Detroit, Mich., Oct. 27, 1868.

C. F. Gildersleeve, General Manager Richelieu & Ontario Navigation Co. at Montreal, born at Kingston, Ont., Oct. 17, 1833.

B. W. Greer, General Freight Agent, C.P.R. at Vancouver, B.C., born at Aldboro, Ont., Oct. 4, 1867.

W. M. Kirkpatrick, Assistant General Freight Agent Pacific Division C.P.R. at Vancouver, B.C., born at Kingston, Ont., Oct. 8, 1874.

J. F. Lee, ex-Traffic Manager White Pass & Yukon Route at Seattle, Wash., born at London, Eng., Oct. 23, 1851.

Jas. W. Leonard, Assistant General Manager C.P.R. Western lines at Winnipeg, born at Epsom, Ont., Oct., 1858.

A. Leslie, General Auditor and Accountant Lake Erie & Detroit River division, Pere Marquette System, at Walkerville, Ont., born at Toronto, Oct. 3, 1864.

R. Marpole, General Superintendent C.P.R. Pacific Division at Vancouver, born in Montgomeryshire, Wales, Oct. 9, 1850.

I. G. Ogden, Third Vice-President C.P.R. at Montreal, born at New York City, Oct. 10, 1844.

G. Olds, ex-General Traffic Manager C.P.R., born at Stapleton, Gloucestershire, Eng., Oct. 29, 1832.

L. H. Wheaton, ex-Chief Engineer and General Superintendent Halifax and Yarmouth Ry., born at Sackville, N.B., Oct. 5, 1866.

E. A. Williams, Superintendent Rolling Stock C.P.R. at Montreal, born at Wiscasset, Me., Oct. 4, 1848.

RAILWAY DEVELOPMENT.**Projected Lines, Surveys, Constructions, Betterments, Etc.**

Algoma Central and Hudson Bay Ry.—All operations in connection with the railway ceased on Sept. 17, in connection with the closing down of the various companies controlled by the Consolidated Lake Superior Co. It was announced that only one train a week would be run on the line from Sault Ste. Marie, Ont., to the end of the track near Mekatina, 64 miles. The company's car shops have also been closed. (Aug., pg. 267.)

Atlantic, Quebec and Western Ry.—The new Canadian Co. (Ltd.), a British corporation, which has been granted a Dominion charter at the current session of Parliament, holds the Quebec charter of the A. Q. and W. Ry. Co., and has an application for a Dominion charter before the current session of Parliament. The N. C. Co. has a capital of

station, allowing Mr. James to operate an aerial tramway. (Aug., pg. 267.)

Beersville Coal and Ry. Co.—The Lieut.-Governor of New Brunswick, by proclamation dated Sept. 8, declared the act passed at the last session of the Legislature, incorporating the B. C. and Ry. Co., to be in force. The provisional directors named in the act are: C. G. Polleys, M. F. Keith, F. C. Robinson, B. N. Jones, R. I. Irving and H. H. Pottle, and the offices of the company are at Beersville, N.B. It is authorized to issue \$20,000 of common stock, and bonds to the extent of \$5,000 a mile of its railway. The line to be constructed will extend from a point on the I.C.R. near Adamsville, to Brown's Landing, and branches therefrom may be constructed. The subsidies passed at the recent session provided for the payment of \$2,500 a mile in respect of this railway. A contract for the construction of about seven miles of line, from the mines of the Imperial Coal Co. at Beersville to Adamsville, has been let to J. C. Gilmore and W. Brown. The construction is reported to be easy, and the contractors expect to have the line ready by Jan. 1. (June, pg. 213.)

Bellingham Bay and British Columbia Ry.—D. O. Mills, President of the B. B. and B. C. Ry., has received details of a survey showing a new route through the Cascade

mountains, south of the International Boundary. The company's surveying party, which went through the pass, is engaged locating a line from Whatcom to Spokane, Wash.

British Columbia Electric Ry.—A preliminary survey has been made with a view of extending the company's line from New Westminster to Ladner. After crossing the Fraser river by the new bridge, the projected route would be along the river bank to Ladner.

The company is considering tenders for the erection of a new reduction station at the corner of Westminster avenue and Barnard st., Vancouver, at a cost of about \$40,000. (Jan., pg. 19.)

Brookville, Westport and Sault Ste. Marie Ry.—The Senate Railway Committee decided to hold over for further consideration the application of the Reorganization Syndicate of New York, which purchased the B. W. and S. S. M. Ry. at the mortgage sale, for confirmation of its title and powers to extend the line. The bill was opposed by the judgment creditors, and the committee is of opinion that the conflicting interests should be har-

monized, hence the adjournment. (Aug., pg. 267.)

Canada Atlantic Ry.—The work of bridge improvement, ballasting, etc., on the western portion of the line commenced in the spring has been completed, and attention will now be paid, G. Mountain, Chief Engineer, recently stated, to the work on the new subway at Elgin st., Ottawa.

The position of matters in connection with the agreement entered into in 1895 for the construction, within three years, of a central station in Ottawa remains as it was. The city council has had an interview with the Dominion Government, which leased the site of the proposed station to J. R. Booth. There is a dispute between the Government and the Sparks estate in respect to a portion of this land, and Mr. Booth's contention is that he cannot build the station until the appeal, which is pending before the courts, regarding the title to the land is disposed of.

In connection with the line of passenger steamers which the company will run from Chicago, Ill., and Duluth, Minn., to Depot Harbor, Ont., in 1904, it proposes to con-

struct one or more hotels on the Georgian bay, and in the Algonquin Park district. (Sept., pg. 305.)

Canada Central Ry.—Press reports state that among the railway subsidies to be asked for at the current session of the Dominion Parliament will be one for the construction of the C.C. Ry. from Scotia Jct. to Sudbury, via French river. (Aug., pg. 267.)

Cape Breton Coal, Iron and Ry. Co.—This company, which was incorporated by the Nova Scotia Legislature in 1895, was authorized at the recent session of the Legislature to increase its capital to \$4,000,000, and with the approval of its shareholders to \$5,000,000. The company is opening up its coal areas, has built a shipping pier, and proposes to construct docks at Sydney, and lines of railway to connect its mines with the points of shipment. (Sept., pg. 305.)

Cape Breton Ry.—All the work on the C.B. Ry. from Point Tupper to St. Peter's, N.S., 32 miles, has been completed, the line approved by the Provincial Engineer, and passenger traffic was opened Sept. 7.

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No decision has been reached as to the starting of work on the projected extension of the line from St. Peter's to Louisburg, or the branch to Arichat. (Aug., pg. 267.)

Chateauguay and Northern Ry.—Notice has been served on the municipality of Longue Point, Que., to the effect that the company is prepared to proceed with the construction of an electric railway on the main road of the municipality, and to connect the same with the main line of the C. and N. Ry. and with the lines of the Montreal Terminal Ry. The line proposed to be constructed covers the district which the Montreal Park and Island Ry. Co. desired to enter, but which it was enjoined by the courts from entering.

By an arrangement with the C.P.R. the C. and N. trains will be switched over the former's lines from Hochelaga to the wharves, so that for some time it will not be necessary to construct an independent line to the water front.

Rapid progress has been made with the bridges over the river at Bout de l'Isle, and it is expected that the line will be opened for freight traffic early in Oct. The steel work on the western section of the bridge is nearly completed. The grading between Charlemange, on the mainland, and Joliette is well forward and was expected to be completed by the end of Sept. Tracklaying has been going on for some time, and four miles, between L'Epiphanie and L'Assomption, was laid early in Sept. The rails, ties, etc., are all on the spot ready for laying. (Sept., pg. 305.)

The Colchester Coal and Ry. Co. has been incorporated under the Nova Scotia Companies' act with a capital of \$1,000,000, the promoters being J. Fleming, Halifax, and J. Hayes, M.D., Parrsboro, N.S., who have associated with them a number of prominent men, including officials of the Dominion Atlantic Ry. The company owns considerable coal areas at Debort, and has completed surveys for four miles of railway from the mines to Debort station on the I.C.R. There are no engineering difficulties in the way of construction; the grade will not exceed 1%, the total rise from the Debort station to the mine being only 150 ft., or 1 ft. in 140 ft. R. Archibald, C.E., made the surveys and is in charge of operations at the mine. (July, pg. 234.)

Detroit River Bridge.—G. S. Morrison, the special engineer employed by the G.T.R. and Michigan Central Rd. to make some special surveys and to report upon the question of bridging the Detroit river, died recently, and A. P. Boller, of Boller & Hodge, consulting engineers, New York, has been engaged to take up and complete his work. (Aug., pg. 267.)

Embro Radial Ry. (Electric).—A meeting was recently held at Embro, Ont., in support of the projected electric railway. There has been \$50,000 of the capital raised privately, and it is proposed to ask the municipalities, through which the line will pass, to subscribe towards the additional capital required. (Sept., pg. 305.)

Fraser River Bridge.—All the frame work for the short spans on the south side was reported to be in place Sept. 15, and the work of riveting was in progress. The steel work for the 380 ft. span is being got ready for placing. Of the remaining portion of the substructure no. 3 pier is nearing completion, and no. 2 pier is progressing. (Sept., pg. 305.)

Gaspe and Western Ry.—The application for the incorporation of a company with this title to construct a railway through Gaspe county, Que., at the current session of the Dominion Parliament has been rejected by the Senate Railway Committee. (June, pg. 213.)

Grand Valley Ry. (Electric).—Tracklaying on the extension of this line from Paris to Galt, Ont., 20 miles, was commenced Sept. 14. (Aug., pg. 267.)

Great Northern Ry. of Canada.—The workshops of the G.N.Ry. on Louise embankment, Quebec, were burned out recently, the loss being estimated at about \$70,000. The machine shop was totally destroyed, and a number of cars, which were undergoing repairs, were burned. The site has been cleared, and the directors have decided to rebuild the shops on a larger scale. The buildings, however, will not be gone on with this year. (July, pg. 235.)

Great Northern Ry. (U.S.)—An agent of the G.N.R. is negotiating for the purchase of land near the Vancouver, B.C., city hall, in order to build a large six story hotel.

In connection with the building of railways in B.C., there are a great many rumors in circulation, most of which have a political significance, seeing that a provincial election is in progress. The Premier recently had an interview with J. D. Farrell, who represents President J. J. Hill at Seattle, Wash., and on his return to Vancouver, B.C., said in an interview: "The Great Northern has much in store for British Columbia, and will afford transportation without being bonused. Mr. Hill will proceed under the charters of the Vancouver, Westminister and Yukon Ry., the Kootenay Central Ry., and the Kootenay, Cariboo and Pacific Ry., to give two connections with the Grand Trunk Pacific Ry. in the north, one from Vancouver and the other from southeast Kootenay. He also said that the line from Vancouver through Cariboo will have a branch through the Yellow Head Pass to Edmonton, so that the Great Northern may tap the great wheat fields of the Northwest." Senator Templeman, in an interview at Ottawa, stated: "While B.C. is the largest gold-producing province in the Dominion, it is at the same time prolific of gold bricks, in the shape of railway projects, on the eve of an election. The fertility of resource possessed by the average Provincial Premier when it becomes necessary for him to provide one of these gold bricks is unailing. A gold brick of this kind has been handed out at every general election, and at not a few by-elections, during the last ten years. Two or three elections were fought in Victoria on the British Pacific Ry. project, a railway that was to run from Bute Inlet to Yellow Head Pass, and which was ultimately, it was claimed, to make Victoria the terminus of another transcontinental line. At the last by-election in Victoria, the branch of the Canadian Northern over practically the same route was the great drawing card. In the cases mentioned, the companies were already granted subsidies from the Province, which gave the color of genuineness to the schemes. But now the Great Northern has no contract of any kind with the Province, and will not make one. Mr. Hill publicly stated at Grand Forks, B.C., that he would build the road to the coast without a subsidy. All he wanted was a good grade. It is quite true Mr. McBride has not stated that he has made a contract with Mr. Hill, or with anyone representing Mr. Hill."

See also Vancouver, Westminster, Yukon and Northern Ry.

Guelph Junction Ry.—P. A. Peterson, consulting engineer, Montreal, and formerly chief engineer C.P.R., paid a visit to Goderich, Ont., Sept. 15, with a view of looking over the suggested route for the entrance of the projected extension of the G.J.Ry. to Goderich. W. Bell, President, and H. A. Macdonald, Secretary of the G.J.Ry., met Mr. Peterson and discussed the matter with him. The Secretary stated that as a result of the information now available representatives of the company will have an interview with the C.P.R. officials with a view to arranging for the construction of the line.

Two routes have been looked over between Guelph and Goderich, but no decision has been reached as to which will be followed.

The northern route is by Elmira, Listowel, Brussels and Blyth. The other route would take in St. Jacob's, Milverton and Clinton. Goderich people seem to generally favor the northern route, as it would give them connection with a section of country from which they are at present virtually shut out. An entrance into Goderich and to the wharf, Mr. Peterson says, can be secured with a grade of 1/4%. (July, pg. 235.)

Guelph Radial Ry. (Electric).—In connection with the proposal of the city to take over the existing street railway lines and to extend the same, a public meeting was recently held at which the following information was given relative to other street railway lines in the province: The Berlin and Preston Ry. last year carried 355,000 passengers, the Galt and Hespeler line carried 277,000 passengers, in Guelph last year the number of passengers was 352,000. In 1902 the Woodstock-Ingersoll line paid the shareholders 6% of a semi-annual dividend, which is very satisfactory in view of the fact that, unlike Guelph, the road there has to compete with two steam lines. The population of Woodstock and Ingersoll combined is 13,300, while Guelph, Elora and Fergus have a population of over 14,000, and the distance between the places is about the same. The Woodstock-Ingersoll line carries no freight, while the Guelph charter allows the carrying of freight. (July, pg. 235.)

Halifax and South-Western Ry.—D. D. Mann recently went over the route of the H. and S.W.Ry. from Halifax to Barrington Passage, N.S. He says that there are 1,800 men employed in grading between Halifax and Liverpool. This work is expected to be completed this winter, and the whole line by June, 1904. A press report states that the Atlantic Contracting Co. has let the following subcontracts on the line: McKay, Wells & Morrison, 20 miles; Lindsay & Farrell, 5 1/2 miles; H. Sorette, 15 miles; Dini & Cozzolino, 15 miles. There has been landed at Bridgewater rails, etc., for 44 miles of track, and other steamers with rails, etc., are on the way. (Sept., pg. 305.)

Hamilton, Caledonia and Lake Erie Ry. (Electric).—A site for the power dam has been secured at Indiana on the Grand river, and plans are being prepared for the work. The power canal will be 1 1/2 miles in length. (Sept., pg. 305.)

Hamilton, Grimsby and Beamsville Electric Ry.—The company had some difficulty with property owners in connection with the location of poles for its Vineland extension, but these were adjusted early in Sept., and it was expected that the extension would be in operation by the end of the month. (Sept., pg. 305.)

Hamilton Inlet to Lake Superior.—Press reports are again current to the effect that J. J. Hill, of the Great Northern Ry., U.S., has in contemplation the construction of a line of railway from a point on Lake Superior, in Ontario, to Hamilton Inlet, on the Atlantic coast of Labrador. An exploration party, headed by Col. Glazier, who has undertaken preliminary surveys for railways in other countries, has been formed to start inland from Hamilton Inlet, but up to Sept. 15 had not been able to secure a suitable vessel for the trip to Rigolet.

Hamilton to Port Stanley.—R. S. Portheim, who is connected with an Edinburgh (Scotland) firm of railway promoters and contractors, has been looking over the ground with a view of obtaining franchises for the construction of an electric railway from Hamilton to Port Stanley, Ont., running through Brantford, Woodstock, London and St. Thomas, about 100 miles.

Hampton and St. Martin's Ry.—The ballasting and other work on this line from Hampton, on the I.C.R., to St. Martin's,

N.B., 29 miles, has been practically completed. A train service was put in operation on a portion of the line from Hampton early in Sept., and it was expected that it would be extended over the whole line by Oct. 1. (Aug., pg. 268.)

Intercolonial Ry.—Tenders are being considered for the erection of a combined passenger and freight station, a one-stall engine shed, a shelter and a section tool house on the recently completed branch from Riviere Quelle, Que., to the St. Lawrence river.

Another span of the new bridge over the Miramichi river has been completed, and preparations are going on for putting up the other two spans required to complete the bridge. There are in all 12 spans of 240 ft. each in the bridges which are being replaced with heavier superstructures at this point. These spans are to be removed to Prince Edward Island and re-erected over the Hillsboro river on the Murray Harbor branch of the P.E.I.R., now under construction. The contract for the removal of these spans and their re-erection has been let to H. McDonald, North Sydney, N.S. The contract price is \$85,000.

The new roundhouse at St. John, N.B., is expected to be completed early in Oct.

The work of extending and rebuilding the foundation of the Courtenay bay extension of the I.C.R., at St. John, N.B., is being proceeded with at a satisfactory rate. The extension will consist of 8 ft. to the present work and its rebuilding with a batter of $3\frac{1}{2}$ ins. to the foot instead of being plumb as was before. After the work is brought up to high water mark the contractor will tear down and build in under the track about 9 ft. on the old property. Only 1,400 ft. of the whole length of structure will be improved, and this extent will be in three different places so as to cover the portions most in need of repair. This means about one-third of the whole affair. The logs will project out where necessary for the addition of further improvements. The wharf for a distance of 250 ft. has already been built up to an average height of 8 ft. (Sept., pg. 306.)

James Bay Ry.—W. H. Moore, representing Mackenzie, Mann & Co., had a conference with the board of control of the Toronto city council, Aug. 28, with a view to obtaining the co-operation of the city in securing from the Dominion Government subsidies towards the construction of the line. The company, Mr. Moore explained, proposed to construct 450 miles of line from Toronto to make connection with the Grand Trunk Pacific Ry., so as to be ready to exchange traffic with that line as soon as it was in operation. The

THE GRAND TRUNK RAILWAY COMPANY OF CANADA

NOTICE is hereby given that the ordinary general half-yearly meeting of the Grand Trunk Railway Company of Canada will be held at the City Terminus Hotel, Cannon Street, London, E.C., on Friday, the 9th day of October, 1903, at 12.00 o'clock noon, precisely, for the purpose of receiving a report from the directors, and for the transaction of other business of the Company.

Notice is also given that the transfer books of the company will be closed from Monday, the 14th day of September, to the day of Meeting, both days inclusive.

By order,

C. RIVERS WILSON, President.
H. H. NORMAN, Secretary.

Dashwood House,
9 New Broad Street, London, E.C.,
4th September, 1903,

Canadian Northern Railway

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WINNIPEG	EMERSON	NEEPAWA
PORTAGE LA PRAIRIE	CARMAN	DAUPHIN
BRANDON	HARTNEY	SWAN RIVER

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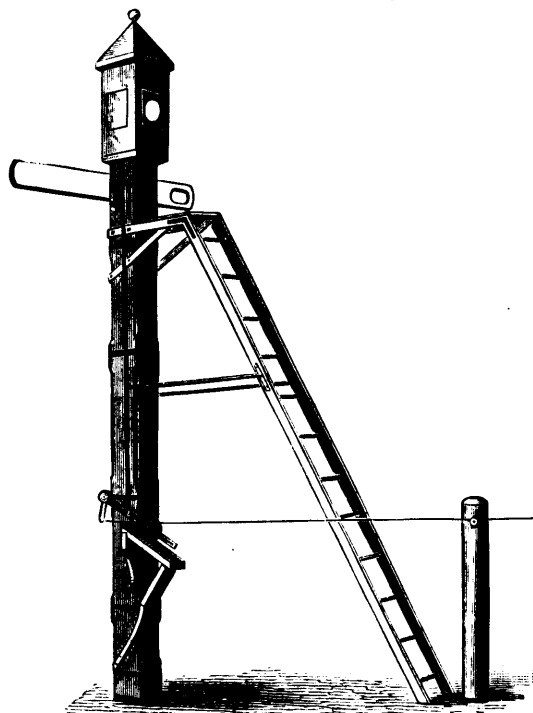
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PIPER'S PATENT DISTANT SEMAPHORE.

James Bay Ry. has already four miles of its line built, giving Parry Sound a connection with the Canada Atlantic Ry., and has surveyed a considerable portion of the remainder of the line. The line proposes to pass through the Muskoka and Parry Sound districts, touching various Georgian bay ports, and west of Lake Nipissing to Sudbury, thence northerly. The country through which the line will pass, Mr. Moore says, would be a traffic producing one from its first operation. The board of control passed a resolution favoring the construction of the line, and appointing representatives to go before the Government. A few days later a deputation representing Toronto, Toronto Junction, and other municipalities waited on the Government and stated the case for the railway. The projected line will, it is claimed, shorten the journey to the west by many miles, and divert transcontinental traffic to Toronto; will connect with the Grand Trunk Pacific, tap the country extending as far north as James Bay and make it tributary to Toronto, and will open up extensive belts of agricultural and mineral lands. The Ontario Government has already recognized the necessity for the line by granting it subsidies in cash and land. Dominion assistance is asked for in order to push forward and complete a project which has hung fire for several years. The line will serve no less than twenty townships, containing good agricultural land, between Parry Sound and Sudbury, and will also serve to develop fertile areas north of the latter town. Some of the townships north of Sudbury are already partially settled, including those of Blezard, Hanmer, Lumsden and Capreol. North of these again are the townships of Wismer and Hutton, containing extensive nickel and iron deposits. At Sudbury the line will get in touch with the industries at Sault Ste. Marie and the Algoma Central system. In the northern district lumbering is extensively carried on, and fine crops of oats and all kinds of vegetables are grown. Wheat has not been raised to any extent, but for the reason chiefly that there is as yet no market for it. The Government promised to give full consideration to the matter. (July, pg. 236.)

Lake Erie and Detroit River Ry.—Representatives of the Pere Marquette Rd., owning the L.E. and D.R. Ry., are reported to be negotiating for the purchase of property between Sandwich and Walkerville, Ont., with the object of constructing a terminal railway to connect the various railways reaching the waterfront at and near Windsor.

The question of the amount to be paid by the L.E. and D.R. Ry. to Chatham on account of the closing of the shops of the old Erie and Huron Ry. when it was taken over by the former company, has been again before the city council, when it was agreed to take steps to ask the Railway Committee of the Privy Council to settle the amount. The company offered \$2,500 in settlement of the claim.

The St. Thomas, Ont., city council is negotiating with the company with a view of having the car shops now at Walkerville located at that place. F. H. Walker recently said there was no doubt that eventually the car shops would be removed from Walkerville to some more central point. (Sept., pg. 307.)

Levis County Ry. (Electric).—The construction of the line from Levis to St. Romuald, Que., is expected to be completed this season, track having been laid to the bridge at Etchemin early in Sept. (April, pg. 119.)

Lindsay, Bobcaygeon and Pontypool Ry.—Work is progressing rapidly on the construction of this line from Burketon on the C.P.R. via Lindsay to Bobcaygeon, Ont., and it is hoped to have the grading completed by Dec. There are nine camps of men at different points between Lindsay and Bobcaygeon. (Aug., pg. 269.)

Londonderry Iron and Mining Co.—The new owners of the plant of the old Londonderry Iron Co. have practically rebuilt the various branch railway lines at the works, and have provided new rolling stock. At the last session of the Nova Scotia Legislature the company was authorized to construct the following lines of railway: from the works at Londonderry to a point on the Bay of Fundy between Great Village and Parrsboro; from a point on the I.C.R. near Brookfield to the company's quarry; from the I.C.R. at Londonderry to the company's works; and from the company's works or any of the lines already mentioned to any quarry or mine in the county of Colchester which the company may hereafter acquire.

Mantoulin and North Shore Ry.—In connection with the closing down of all operations at the mines of the Consolidated Lake Superior Co. in the Sudbury district, traffic has been suspended on the section of the M. and N.S. Ry. already completed. No work in the way of any extension of the line has been in progress recently. (Sept., pg. 307.)

Massey Copper Mines.—The report of the Ontario department of mines for 1903 stated that one mile of line from Massey station on the C.P.R. Sault Ste. Marie branch towards the copper mine 3 miles out, had been graded, and that the ties were on the spot, and rails for two miles of track had been secured. It has since been reported that the line has been completed. (July, pg. 237.)

Metropolitan Ry. (Electric).—Surveys are in progress for the extension of this line from Newmarket to Jackson's Point, on Lake Simcoe, Ont., and for branch lines to Roche's Point and other places on the lake. Nothing has been decided as to when construction will be gone on with. (Nov., 1902, pg. 383.)

Michigan Central Rd.—The Kettle creek bridge, on the Canada Southern division at St. Thomas, Ont., is being strengthened and enlarged to such an extent that it may be said that the bridge has been reconstructed.

The St. Thomas city council has appointed a committee to interview the company's officials in regard to the widening of the subway at First avenue. (Sept., pg. 307.)

Midland Ry.—At the last session of the Nova Scotia Legislature an act was passed authorising the company to construct a line of railway from a point on the I.C.R. near Truro, thence northerly along a route to be approved by the Lieut.-Governor-in-Council, to Northumberland strait. The surveys for this line have been completed, the work hitherto having been done under the old North Colchester Ry. charter. (See North Colchester Ry., Aug., pg. 269.)

Minudie Coal and Ry. Co.—J. H. Seaman, A. Vernon, M. M. Sterne, J. McKeen, J. W. Seaman and R. Mitchell were incorporated under this title at the last session of the Nova Scotia Legislature to construct a railway in connection with their collieries, from near River Herbert Corner to Minudie, in Cumberland county, with power to cross the Joggins line of railway. The company is authorized to issue \$100,000 of common stock and \$50,000 of bonds. It is provided that the land required for right of way, stations, etc., shall be a county charge, and that the line shall be commenced within two years.

Moncton and Buctouche Ry.—The new bridge constructed across the little Buctouche river, at McKie's Mill, N.B., consists of one 72-ft. span and two 63-ft. spans. It is built of pitch pine throughout, and designed to carry the heaviest load. The company contemplates erecting a new and heavier bridge across the Cocagne river during 1904. (Sept., pg. 307.)

Montreal and Southern Counties Ry. (Electric).—It is reported that arrangements

have been completed by A. J. de B. Corribeau, President and General Manager, with a syndicate of Chicago capitalists for the construction of this line, and that work will be commenced at an early date. (Aug., pg. 269.)

Montreal Northern Ry.—Lawton Wark, of New York, President of the M.N. Ry., and connected with the pulp and paper mills at Ste. Agathe, Que., states that the company proposes to construct its line as fast as possible right to Hudson's Bay. The distance by this railway from Montreal will be about 400 miles, and preliminary surveys have been made over it. The country is thickly timbered, and when cleared will be admirably adapted for agricultural purposes. (June, pg. 217.)

Montreal Street Ry. (Electric).—A letter was read at a recent meeting of the road and finance committee of the city council from F. L. Wanklyn, General Manager M.S. Ry., asking for a new franchise, and offers to remove snow, etc., if the city will give a franchise for 30 years, and permission to arrange under reasonable restrictions with other companies about matters affecting the use of the streets on which they run. At the end of thirty years, in the event of expropriation by the city, it is to be agreed that the city will not only acquire the tracks within the city, but the whole of the undertakings owned and managed by the company. The company further agrees to sell workingmen's tickets at the rate of ten for a quarter at certain hours of the morning and evening, and the new obligations are to be in lieu of all taxes, except such as all joint stock companies are required to pay. The matter is under consideration.

At the meeting recently held for the purpose of authorizing the increase of the capital stock, the General Manager explained that among the purposes to which it was to be applied was the construction of additional lines. The company intended to build a line on Atwater avenue, from St. Antoine st. up past St. Catherine st., to form a loop line; then there was a line to be built on Laurier avenue, in the north-east section of the city. Besides, they expected to come to an arrangement with Westmount shortly to build a line along the high level, to connect with the Guy st. line to Monklands. (May, pg. 150.)

Montreal Terminal Ry. (Electric).—J. P. Mullarkey, Managing Director, has applied to the Montreal city council for permission to operate in other parts of the city than it does at present. The council thought that the application should state the streets upon which it was desired to lay tracks, and Mr. Mullarkey promised to send in an amended application, when a special meeting will be called to consider the same. (May, pg. 150.)

New Brunswick Coal and Ry. Co.—The line of the old Central Ry. of New Brunswick has been acquired by and, under the powers conferred by an act passed at the last session of the New Brunswick Legislature, amalgamated with the N. B. C. and Ry. Co. The construction of the line, which extends from Norton, on the I.C.R., to Chipman, 45 miles, was started in 1887 by the Central Ry. Co., the contract being let to Kellam & Wheaton. The company put up the bonds and the contracting interest in the stock for a loan which, with the subsidy, was supposed to be sufficient to complete the road. Dr. L. G. de Bertram, of New York, was the agent of the company, which was made up largely of Philadelphia people. In 1889 the company took the road off the hands of the contractors and completed it. In 1890 the road was operated by the bondholders, who continued to operate it until 1903. In 1901 an option on the line was given by the bondholders to E. G. Evans, representing the N. B. C. and Ry. Co., and under it about \$80,000 has been expended on its improvement. All the trestle bridges have been rebuilt with southern pine lumber.

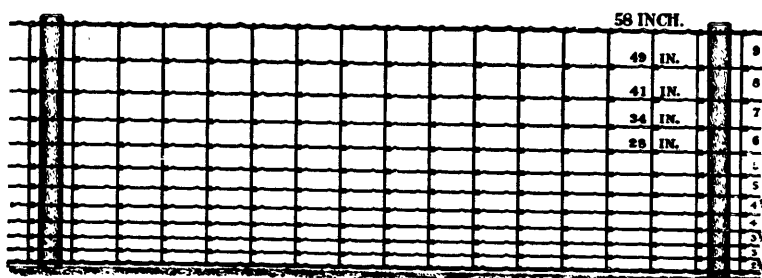
The truss bridges have been repaired, but in the course of a year or two will probably be rebuilt with steel superstructures and masonry substructures. About 600,000 ft. sup., of hard lumber was used in the work. A large amount of money has also been spent on the road-bed in ties, in improving the road-bed and in providing new rolling stock and additional buildings. It is intended to further improve the line and raise the standard. Another lift of ballast in addition to the 130,000 cubic yards already distributed will be put on. Mr. Evans has had full charge in the improvements made. The yard at Chipman, formerly the terminus of the line, has been enlarged and provided with greater facilities for the handling of freight.

Under the charter of the N.B.C. and Ry. Co. there has been constructed a line from Chipman to a point beyond Minto, in the Newcastle coalfields. This line is now under construction to Gibson, from which point it is proposed to carry it to Fredericton. The portion of the line completed has been constructed in the most substantial manner. The bridges are of steel with masonry substructures on concrete foundations. The large and important culverts are of stone laid in cement mortar, and the small culverts are of stone laid dry. The line is fenced on both sides with wire fencing; and snow fences have been constructed where required. Special attention has been paid to drainage by the provision of surface drains throughout the whole length of the line. The road has been ballasted its entire length with a bottom lift of about 6 ins. and a top lift is in process of being applied. It will be 4 ins. deep and gravel is being used. A telephone line extends over the whole line of railway with connections with the New Brunswick Telephone Co. at Norton. Station buildings have been erected at Newcastle and Minto, which are quite close to each other, and about 14 miles from Chipman. Flag stations have been placed at Iron Bound Cove and other places, and a large and commodious freight shed has been built at Minto; a three-stall roundhouse and other facilities. The station at Minto is large and convenient and the station-master will have his home in it. A tank house has been erected about 1,600 ft. to the westward of Minto station. The sidings are, one extends to the King, Kennedy's and Sullivan's mines; the second siding is over 3 miles long and runs to the south of the main line, connecting with the Welton, O'Leary, Coakley, McDonald, Balkam, Evans, Gibbon and Kelly coal mines near Newcastle. The contract was let to the James Barnes Construction Co., which also has the contract for the line from Newcastle to Gibson. E. G. Evans is Chief Engineer and General Manager, and the directorate consists of G. McAvity (President), A. P. Barnhill, C. N. Skinner, A. I. Trueman, of St. John; T. B. Winslow, G. W. Allen, of Fredericton. (Sept., pg. 307.)

Nepigon Ry.—Work is being proceeded with on this line from Nepigon station, on the C.P.R. transcontinental line, to the south shore of lake Nepigon, Ont., about 40 miles. (Aug., pg. 269.)

Niagara Transfer Co.—A company with this title has been incorporated under the laws of the State of New York with the following directors: E. Michoes, J. A. Roberts, J. C. Conway, Senator T. Ellsworth, T. C. Becker, I. Michael, H. Woods, S. T. Franchot and H. W. Alvord. The object of the company is to bring in all the railways operating in Canada and United States, and meeting at the Niagara river. The company has secured options on land from the International bridge to a point beyond Rattlesnake island, where the proposed bridge of the Pere Marquette Rd., connecting its Canadian line, the Lake Erie and Detroit River Ry., with the U.S., terminates. The land pro-

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posed to be acquired covers about five miles of water front and has a considerable depth. It is proposed to construct about 70 miles of track, and to connect the same with the switching grounds of Tonawanda and Buffalo. The plan of operations of the company will be to receive the cars from all companies operating on both sides of the river and to distribute the same.

Nova Scotia Southern Ry.—Tracklaying is in progress and is expected to be completed early in Oct. on this line from New Germany to Caledonia Corner, N.S., about 22 miles. The charter it is proposed to amalgamate with the Central Ry. of Nova Scotia, recently purchased by Mackenzie, Mann & Co., and the new line, when opened, will be operated as a branch of it. (July, pg. 239.)

Nova Scotia Steel Co.—The company is constructing a branch line, two miles in extent, from the Point Edward quarries to the I.C.R. at Big Brook siding, near Leitches Creek station, N.S.

Orford Mountain Ry.—The plans and profiles of the proposed extension of the O. M. Ry. from Kingsbury to Windsor Mills, Que., have been deposited in the registry offices at Richmond and Sherbrooke, Que., in compliance with the Railway Act. (July, pg. 239.)

Oshawa Electric Ry.—The company proposes to extend its line along St. Mary st., Oshawa, and a number of citizens appeared before the Railway Committee of the Privy Council in opposition to the proposal. The committee declined to entertain the opposition as the town council had not countenanced it.

Ottawa and New York Ry.—We were recently advised that it is contemplated to carry out a number of improvements on the line, the extent and exact character of which will be decided at a meeting of the directors to be held at an early date.

Ottawa, Northern and Western Ry.—Track has been laid to within six miles of Maniwaki, on the extension of this line from Gracefield. Maniwaki is expected to be reached by the tracklaying gang early in Oct. (July, pg. 239.)

Pere Marquette Rd.—The P. M. Rd. has completed arrangements by which it will use the tracks of the Chicago Terminal Transfer Co., and use the Grand Central station in Chicago. The arrangement will take effect in Jan., 1904, when it is expected that the connecting line from New Buffalo to Chesterton, Ind., will have been completed. From Chesterton to Chicago the P.M. Rd. has arranged for trackage rights over about 20 miles of the Lake Shore line. (July, pg. 239.)

Peterboro Radial Ry. (Electric).—The by-law giving a franchise for an electric railway in the town was passed by the council Sept. 15. The company is given a franchise to operate a street railway in the town, the franchise to extend over a period of 30 years from July 1, 1904. The company will use the tracks of the old Peterboro & Ashburnham Ry. Co., and agrees to have the system in operation not later than July 1, 1904. The rolling stock equipment and income of the railway is to be exempt from taxation during the life of the franchise, and it is understood that the contract for street lighting for ten years is to be given to the Peterboro Light & Power Co., a constituent company of the P.R. Ry. Co. The capitalists interested in the street railway are those identified with the American Cereal Co., including Hon. Senator Geo. A. Cox. The work of equipping the road will be proceeded with at once, and orders are being placed for the necessary rolling stock and generators. The company is spending \$250,000 on a new dam and power house, where the power to operate the railway will be generated. (Aug., pg. 269.)

Prince Edward Island Ry.—Tracklaying is being proceeded with on the Murray Har-

bor branch. Work was commenced at Montague Cross and is in progress towards the Hillsboro river, where the bridge to give a connection to Charlottetown is being constructed. The tender of M. F. Schurman & Co., Kensington, P.E.I., has been accepted for the construction of the stations and other buildings on the branch. Work is being proceeded with on the substructure of the bridge over the Hillsboro river and it is expected that the work will be completed in the fall of 1904. The spans for the bridge are to be brought across from the I.C.R., having been replaced on the Miramichi river bridges by heavier structures. (Sept., pg. 307.)

Quebec Bridge and Ry. Co.—The work of completing the approaches and of preparing for the erection of the main spans of the superstructure is being pushed ahead. The work is of so extensive and heavy a character that it is not expected it will be completed until well on into 1904. Negotiations are understood to be in progress with the Dominion Government with a view of the bridge being taken over as a part of the Government section of the new national transcontinental railway. (Aug., pg. 269.)

Quebec Central Ry.—The station at St. Henri, Que., was recently burned, the building being totally destroyed.

Quebec Ry. Light and Power Co. Owing to the increasing passenger traffic on the line to Ste. Anne de Beaupre, Que., it is reported that the directors are considering the advisability of taking in hand the double tracking of the line at an early date.

Reid Newfoundland Co.—C. Petrie has recently made a thorough inspection of the main line from St. John's to Port aux Basques, and of the various branch lines, with a view of making a special report to the Government respecting the physical condition of the line. A special correspondent of the Montreal Herald has recently gone over the line, and in referring to it, and to what the Reid Newfoundland Co. has done for the island colony, says: Evidences abound on every hand illustrative of the tact and ability of the Reid Newfoundland Co. The great works already perfected tell the story of difficulties overcome, of prejudice combatted and of victory achieved where failure was anticipated by persons unacquainted with the energy and faith of those at the head of the company. Although the last winter was very severe, the railway was operated right through to Port aux Basques without serious interruption, except for three weeks, when banks of snow twenty feet deep stopped the running. During the year 20 new bridges were built, having spans of from 20 ft. to 150 ft., each erection being of the most substantial character warranted to withstand the rush of waters or the assaults of ice. The rolling stock is first-class, and though largely increased is occupied to its fullest capacity. The comfort of passengers receives special attention, the testimony of the travelling public certifying that nothing is wanting in this respect. The natural result follows, that tourists and sportsmen have increased threefold during the season, and still larger numbers are planning to put in an appearance for sport with the gun during the fall. . . . To-day by the energy and business tact of the Reid Newfoundland Co., the fact of the country's wealth in timber, in minerals and as an Eldorado for sportsmen are known and appreciated abroad, as they never could have been in the absence of the railway. Foreign capital has been drawn, chiefly by the Reids, to invest in the resources of the country. . . . The new freight dock at St. John's will afford conveniences for quick despatch in handling freight, and, as the rates charged are reasonable, there is no doubt the railroad will become the great carrier of freight from Canada and the United States to Newfoundland. The

Reids are undemonstrative men, but they display large experience and marked ability in their works. Nothing shoddy appears anywhere in the large expenditures already made, for which first-class returns have been made. One governing mind has planned the enterprise—including the building of first-class steamers to connect the principal harbors with the railroad—and has perfected all the details within a brief period in A1 style. The article concludes by recommending the construction of a first-class hotel for the accommodation of tourists, and personal references to W. D. Reid, Vice-President, and R. G. Reid, jr., General Superintendent. (June, pg. 217.)

St. John, N.B., Ry.—The company has had some difficulty with the city council in connection with the extensions it is making in Carleton and other points in the city. A good deal of the work on the extension had been completed, when, on Sept. 17, the company discharged all the men at work on the west side, and W. Z. Earl, General Manager, says that the work will not be recommenced until the whole of the matters in dispute with the city council are settled. (Feb., pg. 47.)

St. John's, Nfld., Street Ry. (Electric).—In consequence of the city council having decided to repair a number of streets, the company has arranged to take up some of its existing tracks and lay down additional ones to form a new belt line. (June, pg. 218.)

St. Thomas St. Ry. (Electric).—The St. Thomas, Ont., city council has determined, for the present at any rate, to keep the management of its street railway entirely in its own hands, instead of appointing commissioners. No decision is expected to be reached until early in 1904 as to any extensions of the line. (Aug., pg. 269.)

Schomberg and Aurora Ry.—The award of the arbitrator, Judge Winchester, in the action of Capt. Armstrong, of Lloydtown, against the S. and A. Ry. Co., is not likely to be given out for some time. The proceedings arise out of what Capt. Armstrong says is a breach of the agreement when the Metropolitan Ry. took over the S. and A. Ry. from the original promoters. This agreement stated that the line was to be constructed to Lloydtown or near thereto, but the line as constructed does not touch Lloydtown. The plaintiffs state that there is a practicable route to the village, and the company alleges that there is not. Evidence upon this point has been heard by the arbitrator at length. (Aug., pg. 269.)

Sherbrooke Street Ry. (Electric).—The agreement between the city and the company in reference to the double-tracking of Bridge and Pine streets has been signed by the city, but no work having been done under it, the council has withdrawn its consent to the work. (Aug., pg. 269.)

Southwestern Traction Co. (Electric).—Representatives of the syndicate of English and Scottish capitalists, who have been interested in this electric line, recently visited Canada, and have been over the route. It is reported that the necessary financial arrangements have been completed and that the work of construction will be gone on with at once. (Aug., pg. 269.)

The Spokane and Northern Ry., through one of its subsidiary companies in British Columbia, is constructing a spur line to the White Bear mine.

Sydney and Glace Bay Ry. (Electric).—Surveys have recently been made for the extension of the line from Bridgeport to New Aberdeen, N.S., and it is reported that the work will be gone on with at once.

Sydney and Louisburg Ry.—The company's station at Morien Jct., two miles from Port Morien, N.S., was completely destroyed by fire, Sept. 6. (Feb., pg. 47.)

Temiskaming and Northern Ontario Ry.—Tracklaying is being proceeded with, and it is expected that by the end of the year 60 miles of rails will have been laid from North Bay, Ont. Sixty-five miles of grading is expected to be completed by the end of the year, out of North Bay, and about 10 miles, from New Liskeard, southerly. The contractor expects to have the line completed from North Bay to New Liskeard, 110 miles, by July, 1904, about six months earlier than the date called for in the contract.

Respecting the proposed extension of the line from New Liskeard, northerly to a junction with the projected line to be constructed from Moncton, N.B., to Winnipeg by the Dominion Government, the Ontario Government has voted \$10,000 for making the additional survey. Legislative authority will be asked at the next session for the construction of this extension. W. B. Russell, Chief Engineer, reports that a reconnaissance survey has been made by one of the engineers on the staff, of the country north of New Liskeard, and that he states that the country will be a comparatively easy one in which to construct a railway. A further survey is in progress, and when this is completed a party will be organized to make the regular survey. It is thought at present that the line, to give the easiest curves and grades, will follow the valley of the Wabis from New Liskeard for about six miles, where there is an easy pass into the valley of the Blanche river. The survey would then follow the valley of the Blanche river to its source. (Sept., pg. 307.)

Thunder Bay, Nipigon and St. Joe Ry.—D. F. Burk, President, recently informed us that there had been no abandonment of this projected line from Port Arthur, Ont., to lake Nipigon, and to the lake St. Joseph, Albany river, notwithstanding the arrangement to transfer a portion of the land subsidy voted by the Ontario Government to the Nipigon Ry. Co. He did not know when construction would be commenced, but negotiations were in progress to that end.

Tobique Valley.—J. E. Stewart, of Perth, N.B., is at the head of a syndicate of New Brunswick men, which is looking over the ground with a view of promoting the construction of a railway from Plaster Rock, the terminal point of the Tobique Valley Ry., further up the valley to the Forks, then to branch across country so as to effect a junction with the Restigouche and Western Ry., now under construction from Campbellton to St. Leonards, N.B.

Toronto and Hamilton Ry. (Electric).—The application at the current session of the Dominion Parliament of a company to construct an electric railway to connect Hamilton and Toronto, with powers to acquire other lines, has been approved by the House of Commons. It was opposed by a large number of interests including the Ontario Municipal Association, mainly on the ground that a Dominion incorporation would take away from the municipalities the right to regulate speed, etc. The bill was opposed by the same interests in the Senate, but it passed its third reading Sept. 24. Senator Kerr addressed a letter to the press in which he says:

“The bill is to incorporate a company to build a railway—I want to emphasize the word ‘railway’—to build a railway from Toronto to Hamilton. The impression is that it is an electric tramway. I desire to have it understood here that it is nothing of the kind, but that it is destined to be a main through railway from Toronto to Hamilton, crossing the G.T.R. near Burlington Beach, and crossing at Burlington Beach, with the permission of the municipality, if that can be obtained, and which no doubt can be obtained of the townships of Saltfleet and Nelson, and to a point connecting with the other two

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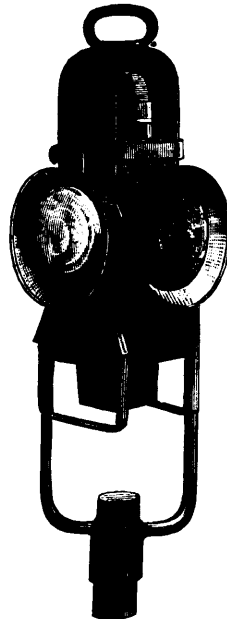
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roads leading from there to Niagara Falls. The idea and ambition of those who are seeking incorporation for this purpose is to build a high-class railway, of the very highest order, equipped in the best and most complete and perfect manner, and to have it propelled with power from Niagara Falls as an exemplification of the finest piece of railway construction and the finest piece of electric road on the continent, and that means anywhere in the world. I can conceive of nothing in the present age better calculated to be of benefit to Canada than a road of that order, built under such circumstances, in such a place, and equipped in that manner, drawing power from Niagara Falls, connecting on the Niagara river with the leading United States railways, on the boundary of the Dominion, and from there to Hamilton over the lines of railroad which are already within the jurisdiction of this Dominion, connecting at Hamilton with this new road to be built from Toronto to Hamilton, making one complete line." The township council of Nelson has granted permission for the construction of the line through the township, and a Hamilton solicitor is engaged in looking into the titles of properties along the route on which the promoters of the line have obtained options. (July, pg. 241.)

Toronto, Hamilton and Buffalo Ry.—The company is building a large addition to its bonded warehouse in Hamilton, Ont. The new addition is 102 ft. long, and 30 ft. wide; it is of fireproof construction, and is expected to be ready for receiving freight early in Oct.

Press reports state that a surveyor has been over the route of a projected extension of the line from some point, whether Brantford or other place, to Woodstock. E. Fisher, General Superintendent, says there is no truth in the report that the company intends to extend its line to Woodstock. A later report states that the projected extension will be from Brantford to Drumbo, where connection will be made by the C.P.R. line from Toronto to Windsor. (Sept., pg. 307.)

Toronto Ry. (Electric).—A writ has been issued by the company against the city asking the courts to declare that it may lay tracks on the 230 ft. reserve on Avenue road in particular. The company claims that under its agreement with the city it may lay tracks on any street, and the council holds that the company may only lay tracks on such streets as it may be directed to do by it.

The company is installing additional plant in its power house so as to secure additional power for its various lines. The new plant will give 3,200 additional h.p., and with a view of securing extra power during the busy hours a storage battery with a capacity of 3,000 ampere hours will be added. During the times of ordinary traffic the surplus power is stored in this battery, and is drawn upon at the rush hours. For the distribution of the additional power over the lines between 40 and 50 miles of feed wire has been strung. (Aug., pg. 269.)

Vancouver, Victoria and Eastern Ry.—The construction of the spur line from Grand Forks to Phoenix, B.C., has not been commenced, and it is not expected that anything will be done on it this year. (July, pg. 241.)

Vancouver, Westminster, Northern and Yukon Ry.—Work is being proceeded with on the line which the company is constructing into Vancouver from New Westminster, B.C. The company has been having some difficulties with the city of Vancouver respecting the right of way, and with the C.P.R. respecting the crossing of its tracks at Sapperton. These matters were before the courts, the Railway Committee of the Privy Council, and the Cabinet. The latter body was asked by the C.P.R. to revoke the permission for the V. W. N. and Y. Ry. to cross its tracks at

Sapperton, but the cabinet declined to interfere. (Sept., pg. 307.)

See Great Northern Ry., U.S.

Winnipeg Electric Street Ry.—The contract for the construction of the extension of the W.E. St. Ry. into St. Boniface was signed Sept. 19. The work has been commenced and the line is expected to be in operation by the winter. (Sept., pg. 307.)

Westminster Bridge Co.—Application is being made at the current session of the Dominion Parliament for an act incorporating a company with this title to acquire from the B. C. Government the bridge now under construction over the Fraser river at New Westminster, B.C., and with power to construct other bridges. The application is signed by J. Hendry, President of the Vancouver, Westminster, Northern and Yukon Ry.

Canadian Northern Ry. Construction.

General.—In explanation of the interviews published in the early part of Sept., in which it was stated that there had been an abandonment of the C.N.R. transcontinental plans, W. Mackenzie, President, recently said that the statement made by D. D. Mann had been entirely misunderstood. The plans of the Canadian Northern, he said, so far as an Atlantic terminal was concerned, had been spoiled by the announcement of the Grand Trunk Pacific scheme, but the road would be built and the eastern terminals would be Quebec, Ottawa, Montreal and Toronto. (Sept. pg. 308.)

Port Arthur to Winnipeg.—We have been officially advised that considerable improvements have been effected on the line between Port Arthur, Ont., and Winnipeg, Man., since the beginning of the year. Three steam shovels were at work for some months in connection with improvements on the line, and the roadbed is now in excellent condition. The line has been diverted in several places to improve the curvature and to get clear of soft ground. A considerable number of trestles have been filled in; the balance of trestles strengthened by driving extra piling and putting in stringers. Side tracks have been lengthened 2,500 ft.; this is necessary on account of the very large locomotives recently put on this portion of the line hauling 65 to 70 cars. All the light steel has been lifted between Port Arthur and Stanley Jct., Ont., and replaced with heavy rails. New stations and section houses have been erected all along the line, and many small improvements made in the way of "off take" ditches, etc. (June, pg. 205.)

Winnipeg Terminals.—Some amendments have been made in the proposed agreement between the city and the C.N. Ry. relative to the closing of Broadway east, Christie st., and several other lanes on the east side of Main st., between Water st. and Assiniboine river. The company proposes to give the city a road 80 ft. wide from the front of Water st. to Broadway bridge. The board of works postponed the consideration of the question, and the matter is still under discussion. The construction of the following works, in addition to the new station and hotel, will be gone on with as soon as the agreement is signed: Machine shop, 300 ft. long by 100 ft. wide; blacksmith shop, 80 ft. by 70 ft.; ash-pit, 100 ft. long; coal shutes for coal engines; cold storage shed, 100 ft. by 175 ft.; dry kiln, 30 ft. wide by 60 ft. long; planing mill, 180 ft. by 60 ft.; freight car repair shed, 220 ft. by 120 ft., to hold twenty cars; store buildings with offices for mechanical department, 300 ft. long by 50 ft. wide; large power house; coach repair shop, 120 ft. by 25 ft., to hold six coaches. This building will also include cabinet and coach finishing shop. Transfer table between freight car and coach repairing shops; foundry, 100 ft. by 60 ft.

All these buildings will be composed of fire-proof materials, being built of either brick, concrete, cement or wire lathe.

The site for the 40 stall roundhouse has been pegged out and is being cleared for the foundations. Smith and Sharpe are the contractors. (Sept., pg. 309.)

Emerson Terminals.—It has been decided to construct terminals at Emerson, Man., and a Y. connection with the Great Northern Ry., U.S., at that point. At the present time the terminal work of the company is being done by the Northern Pacific Ry., at Pembina, N.D.

New Stations in Manitoba.—New stations have been opened at Eden and Birnie, on the McCreary branch; and grain-loading platforms have been erected at 15 other points, and grain stations have been opened at a number of additional places.

Rosendale Extension.—Grading has been completed for 35 miles on this extension from Portage la Prairie. Tracklaying was commenced during the last days of Sept., and it was expected to lay at least 20 miles, to Rosendale, this season. If sufficient rails can be obtained track will be laid beyond Rosendale towards Brandon. (Aug., pg. 271.)

McCreary Branch.—Ballasting has been completed on this branch, and a passenger train service was put on from Neepawa, Man., early in Sept. (Aug., pg. 271.)

Prince Albert Extension.—Grading into Melfort, Sask., was expected to be completed by the end of Sept. Stanley and Gerond have completed their contract at the Melfort end, and in the early part of the month moved their outfit further east to Leather river, to fill in a gap and meet the men grading westerly. Tracklaying has been going on for some time, and is progressing at a satisfactory rate. (Sept., pg. 309.)

Hudson's Bay Line.—A survey party started out from Erwood, Sask., early in June, for Port Nelson, on Hudson's Bay, to survey a route for the projected branch line from the C.N.R. to Hudson's Bay. No news had been received from the party up to Sept. 15. The object of the party was to make a thorough examination of the land from a point north-east of Erwood to Port Nelson, and to locate a route favorable for the construction of a railway. The distance between the two points is about 300 miles. (Sept., pg. 309.)

Edmonton.—The disputes as to right of way in Edmonton, Alta., were expected to be settled so as to permit of the laying of track from the present station to the Hudson's Bay reserve early in Oct. The excavations for the new station buildings on the reserve will be completed during the fall, and material collected ready for the building of a new station in the spring. (Sept., pg. 309.)

G.T.R. Betterments, Construction, Etc.

Montreal Terminals.—The company has been for some time purchasing land in the vicinity of Turcot, between Montreal and Lachine, and a press report states that it has acquired altogether 320 acres. The object in view is the laying out of new yards at this point, and the erection of running sheds for the accommodation of the locomotives. This would do away with the present running sheds at Point St. Charles, and relieve the yard there, which is at present badly congested. The yards at Point St. Charles would in future be used for local freight and storage purposes only.

Lindsay Yards.—A third siding, in addition to the two already being constructed at Lindsay, Ont., is to be put down. Each siding will accommodate two double-header trains of 30 cars each. (Sept., pg. 309.)

Barrie Car Shops.—A site has been located at Barrie, Ont., for a shop for the repairing of cars on the northern division of the line.

Midland and Victoria Harbor Yards.—The yards at Midland and Victoria Harbor, Ont., are to be rearranged and enlarged in order to meet the increased demands of the grain carrying trade at these ports.

Yonge St. Bridge.—The matter of the construction of a bridge over the tracks at the foot of Yonge St., Toronto, was before the Railway Committee of the Privy Council, Sept. 22, and was adjourned for a week. The Mayor of Toronto stated in reply to a question that the Council had decided to retain the level crossing, and to press for the construction of a bridge in addition.

Toronto Yards.—Rapid progress is being made with the laying out of the new freight yards on the site of the old Parliament Buildings, Toronto. The foundations for the office building, fronting on Simcoe st., have been completed, and the three storey building is in course of erection. The structure will be of brick, with brown stone trimmings, the main entrance, on Simcoe st., being entirely of stone. The outward freight shed, 930 ft. in length, and extending from the office building to John st., is 40 ft. in width from Front st. It is a single storey building, and is constructed of steel columns, with steel girders supporting the roof. The steel columns are set on concrete foundation pillars, and the floor is supported on a double row of cedar posts and the concrete pillars. The floor of the shed consists of one thickness of matched hemlock, and a top thickness of matched maple laid diagonally, and is supported on oak beams placed 15 ft. apart. The roof will be a flat gravelled one, and the sides of the shed will be formed by large double sliding doors. The end at John st. will be of brick. The other portion of the area is being laid out for tracks. The work is expected to be completed early in Dec. The erection of the inward freight shed, which will be a duplicate of the outward shed, will not be gone on with until the spring. (Sept., pg. 310).

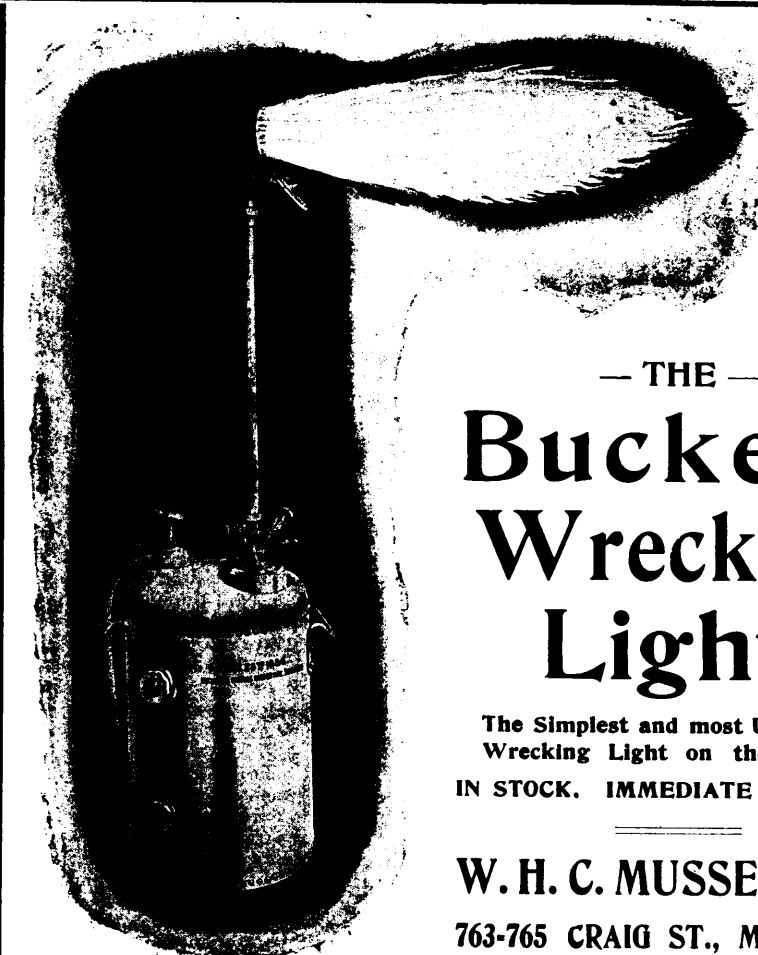
Toronto-North Bay Double-tracking.—G. C. Jones, Superintendent Middle Division, Toronto, has written to the Toronto city council in respect to a proposal to extend Wallace avenue across the tracks of the old Northern Ry. He states that the G.T.R. would not assent to the extension of the street unless the city assumed the cost and the liability for accidents. The double-tracking of

the line, which, he added, was in contemplation, would increase the liability for accident.

Hamilton Improvements.—Objection has been made by the Toronto, Hamilton and Buffalo Ry. to the erection of an overhead bridge at the corner of Wellington and Ferrie streets, as is proposed by the agreement between the G.T.R. and the city. The grounds upon which the objection is made are that the bridge is unnecessary, is not in the public interest, and will destroy the value and

usefulness of the T.H. and B. freight yard at the corner of Wellington and Simcoe streets. (June, pg. 243.)

Brantford Improvements.—After lengthened negotiations which were more than once in danger of being postponed until the spring of 1904, or of being broken off entirely, an agreement has been reached respecting the improvements to be effected in Brantford, Ont., owing to the carrying of the main line through the city. Summarized, the agree-



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ment gives the company permission for the closing of the four crossings at Niagara, Albion, Bedford and Bond sts.; for diverting Paris road through the Lyons property to St. Paul's crossing; for the closing of north side of Durham st., and for the extension of the double-track on Clarence st. as far south as Nelson st., to be used only for regular traffic and to occupy no more street than at present, and the company agrees to the following: St. Paul's avenue to be left open with a signal bell placed there; the bell is to be operated at the expense of the company; to construct a subway at Albion st., the necessary approaches to be made to Albion st. from Bedford, Bond and Pearl streets; to construct a subway at Niagara st.; to erect a new station valued at \$30,000; gates at Market and George sts. to be operated at the company's expense by one man at Market st.; a new street north of the cemetery, property to be purchased by company, street to be opened by city; a foot passage under subway from Gray and Elgin streets. The city pays for the streets, for the purchase of all property necessary for approaches to the subways, and one-half of all damages to property incidental to the construction of the subways. The formal agreement will be presented for signature to the council on an early date. Some of the work is being proceeded with, but the main features of it will not be carried out until early in 1904. The plans prepared are being revised to suit the conditions of the agreement. (Sept., pg. 310.)

Paris Improvements.—The differences between the G.T.R. and the Paris town council respecting the proposed alteration of the line between Paris and Brantford will probably go before the Railway Committee of the Privy Council. It is agreed by both sides that the best way to improve the grade is to divert the line, and the company has made a certain proposal, but asks that Paris contributes to the cost. This the council refuses to do, and also refuses to consent to any plan of diversion of the line which will interfere with the public park.

Stratford.—Application is being made to the courts by the representatives of the estate of M. F. Goodwin, Stratford, Ont., for an injunction to prevent the laying of tracks on the south side of Falstaff st., on some land recently acquired there. (July, pg. 243.)

Grand Trunk Pacific Ry.

The bill incorporating the Grand Trunk Pacific Ry. has been passed by the Senate and only requires the consent of the Governor-General to become law. The act has been amended so as to give power to construct a line to Fort William or any other Canadian port on Lake Superior, the object being to give the company the choice of any other point on Lake Superior to which a line could be more easily constructed than to either Port Arthur or Fort William.

The discussion on the agreement with the G.T. Pacific Ry. Co. has been continued in the House of Commons and the end, at the time of writing, Sept. 29, does not appear to be in sight, although Oct. 15 has been mentioned as a probable date for the closing of the session. One of the important features arising out of the discussion has been that an intimation has been given by the Government that legislation will be introduced for the purpose of creating a fund from the sale of Dominion lands for the purpose of satisfying all the obligations of the Government in connection with the G.T.P.Ry. The intention is, the Ottawa correspondent of the Globe says, to permit settlers who take up homesteads to purchase an additional 160 acres adjoining their locations at a certain price per acre, to be fixed, and utilize the proceeds for the pur-

pose of retiring the bonds issued in connection with the railway work.

Survey parties are in the field at different points of the projected route, and as dog trains are being engaged the operations, particularly between Yorkton, Sask., and Edmonton, Alta., will be carried on during the winter. T. H. Armstrong, engineer to the Edmonton corporation, has been granted a lengthened leave of absence in order to engage in survey work for the G.T.P.Ry., east of Edmonton. Another party is operating west of Yorkton, and a third party is being organized at Yorkton to operate east. (Sept., pg. 309.)

MAINLY ABOUT PEOPLE.

J. McAdam, railway contractor, St. Peters, P.E.I., died suddenly at North Bay, Ont., recently.

E. F. Trites, Paymaster of the Intercolonial Ry., has recently been spending a holiday in British Columbia.

R. Kerr, Passenger Traffic Manager C.P.R., has returned to Montreal after a six weeks' business trip to England.

W. Pearson, who died suddenly at Rymal, Ont., Sept. 8, was father of John Pearson, inspector of the Hamilton Street Ry. Co.

Jas. Cochrane, Mayor of Montreal, attended the convention of the Old-Time Telegraphers, at Milwaukee, Wis., Sept. 23, 24 and 25.

J. Earls, Secretary and Treasurer Canadian Freight Association, has presented a raccoon to the Toronto city menagerie at Riverdale park.

R. G. Reid, President Reid Newfoundland Co., is spending a lengthened holiday in France. He is not expected to return to Montreal until Nov.

R. A. Smith, for many years connected with the Allan Line at Montreal, died in London, Eng., recently, where he had resided since 1889, aged 70.

Miss V. M. Kennedy, eldest daughter of Jas. Kennedy, foreman of construction, G.T.R., Hamilton, Ont., died in St. Joseph's hospital there recently.

Miss E. M. King, daughter of S. King, Master Car Builder I.C.R., at Moncton, N.B., was married there to E. B. Graham, of London, Ont., Sept. 18.

Sir W. Van Horne and Sir T. G. Shaughnessy are reported to be members of the syndicate proposing to erect a large steel plant near Chippewa, Ont.

A. J. de B. Corriveau, Vice-President and General Manager, Montreal and Southern Counties Ry., has opened an office on Notre Dame st., Montreal.

A. S. Coleman, foreman painter in the I.C.R. car shops, Moncton, N.B., attended the convention of Master Car Painters, recently held in Chicago, Ill.

Mrs. McNicoll, wife of D. McNicoll, General Manager C.P.R., recently arrived in Montreal from England, where she had been spending the summer.

Miss Evelyn Lukes, daughter of Lewis Lukes, of Mackenzie, Mann & Co., Toronto, was married in Toronto Sept. 17, to A. G. Slaght, of Simcoe, Ont.

A. A. Wanless, of the engineering staff of the Nova Scotia Steel and Coal Co., Sydney Mines, N.S., was married in Toronto Sept. 16 to Miss F. T. Montgomery.

G. W. Mitchell, Purchasing Agent, Great Northern Ry. of Canada, was married in Quebec to Miss R. Scott, daughter of the late C. A. Scott, C.E., Sept. 16.

R. Booth, sr., who was actively engaged in the construction of the lines of the Montreal Telegraph Co., from 1850 onwards, died at Huntington, Que., recently.

S. J. Hungerford, Master Mechanic, West-erly division C.P.R., Calgary, Alta., arrived in Montreal, Sept. 10, for surgical treatment at the Royal Victoria hospital.

J. Wilkinson, locomotive foreman, C.P.R., London, Ont., was entertained at dinner by the employees of the department on his resigning from the Company's service.

Miss C. Steers, niece of Hon. W. Harty, M.P., President Canadian Locomotive Co., Kingston, Ont., was married there to J. Primrose, Brooklyn, N.Y., Sept. 9.

P. J. Lally, well known in lacrosse circles, has resigned his position as agent of the G.N.W. Telegraph Co., at Cornwall, Ont., which he has held for the past 16 years.

E. A. Rodey, yardmaster of the C.P.R. and Boston and Maine Rd., at Newport, Me., has resigned that position to enter the service of the New York Central and Hudson River Rd.

Superintendent McIntee, of the Colonial Copper Co.'s line of railway at Cape D'Or, N.S., was run over by a car Sept. 12, and as a result one of his legs had to be amputated.

Lord Strathcona, who visited Canada to attend the meeting of the Associated Chambers of Commerce at Montreal, recently, sailed from New York for England, Sept. 19.

F. H. Wallace, Toronto Junction, Ont., has been elected a member of the executive board of the Brotherhood of Railway Carmen of America, at its recent convention in St. Louis, Mo.

Otto Emerson, of the Reid Newfoundland Co.'s staff at St. John's, Nfld., was presented with an address and a purse containing \$200 in gold, on the occasion of his recent marriage.

F. Nicholls, President Canadian Shipbuilding Co., Toronto, and connected with other transportation companies, has presented a white camel to the Toronto city menagerie at Riverdale Park.

W. H. Moore, assistant to the President Toronto Ry. Co., and assistant solicitor, Canadian Northern Ry., recently underwent an operation for appendicitis, in Ottawa hospital, and is recovering.

Sir T. G. Shaughnessy, President C.P.R., accompanied by Lady and Miss Shaughnessy, R. B. Angus and the Misses Angus, left Montreal Sept. 16 for a holiday and business trip to British Columbia.

W. R. Callaway, General Passenger Agent, Minneapolis, St. Paul and Sault Ste. Marie Ry., Minneapolis, Minn., and Mrs. Callaway celebrated the twenty-fifth anniversary of their wedding Sept. 3.

N. L. Rand, Division Master Mechanic, I.C.R., Moncton, N.B., was present at the recent convention of Travelling Engineers in Chicago, and took part in the discussion on Locomotive Front-ends.

J. Judge, heretofore conductor on the Kingston and Pembroke Ry., has been appointed to a position on the Temiskaming and Northern Ontario Ry., under construction for the Ontario Government.

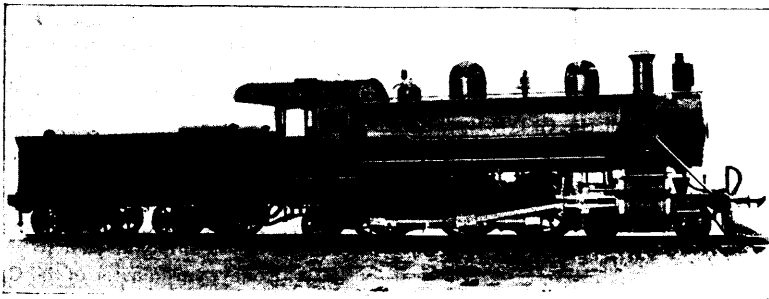
C. H. Beavington, formerly Trainmaster G.T.R. at Montreal, and more recently with the Rutland Rd., has been appointed to a position on the Pittsburg, Shawmut and Northern Rd., at Olean, N.Y.

Sir Wm. Van Horne purchased the imported Shorthorn bull Spicy Marquis, No. 36,118, which won the first prize in the three-year-old class at the recent Dominion Exhibition, Toronto. The price paid was \$3,000.

H. J. Sutherland, C.P.R. local freight agent, Winnipeg, Man., was married in Toronto to Miss N. Herbert. On returning to Winnipeg, Sept. 17, he was presented with a cabinet of silverware by the clerks of the department.

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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, Coteau Landing, Que.	"	500,000 "
Northern Grain Co., Manitowoc, Wis.	"	1,350,000 "
Union Elevator, East St. Louis, Ill.	"	1,100,000 "
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- 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.

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.

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Land Commissioner C.P.R. Co.,
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92 BAY ST.

The marriage of Miss C. Whyte, daughter of W. Whyte, Assistant to the President, C.P.R., at Winnipeg, Man., to J. A. Hunter, Secretary Manitoba Cement Building Co., Winnipeg, is announced to take place early in Oct.

C. A. Hanson, well known in railway finance circles in Montreal and elsewhere, has declined an invitation to become the candidate for the representation of the St. Austell division of Cornwall, Eng., in the Imperial Parliament.

J. M. Buntzen, General Manager, B.C. Electric Light and Ry. Co., was entertained at dinner by the citizens of Vancouver, B.C., and the chief employees of the company Sept. 3, on the occasion of his return from a trip to Europe.

W. H. Rosevear, jr., was presented with a suit case by the officers and staff of the G.T.R. car department, Montreal, on resigning his position as chief clerk in that department. He is also Secretary of the Canadian Ry. Club.

On the occasion of his leaving Toronto to take up his new duties as C.P.R. ticket agent and agent Dominion Ex. Co., at Windsor, Ont., J. Madill was presented with a ring by his fellow-employees in the C.P.R. city ticket office, Toronto.

G. W. Vanderslice, at one time Superintendent Northern Pacific Lines in Manitoba, and recently with the Northern Pacific Ry. Co. at Brainerd, Minn., has been appointed Superintendent Chicago, Rock Island and Pacific Rd., at Trenton, Mo.

Sir Percy Girouard, who has charge of the railway lines in the Transvaal and Orange River Colonies for the British Government, was married at Pretoria, Transvaal, Sept. 10, to the daughter of Sir R. Solomon, Attorney-General of the Colony.

Jay Downer, General Manager, Cape Breton Ry., who had charge of the completion of the line between Point Tupper and St. Peter's, N.S., was presented with an address on the occasion of the opening of the line for passenger traffic, Sept. 15.

T. A. Foque, Superintendent Motive Power, Minneapolis, St. Paul and Sault Ste. Marie Ry., Minneapolis, Minn., read a paper on "The Travelling Engineer and His Work" at the recent convention of Travelling Engineers, held in Chicago, Ill.

Sir Percy Girouard, who has charge of the railway system of the Transvaal and Orange River colonies for the British Government, has been granted six months' leave of absence, and, accompanied by Lady Girouard, sailed from Cape Town for England, Sept. 17.

D. McDonald, Assistant General Manager, Montreal Street Ry. has gone to Paris, France, to close up some business matters in connection with his former position as manager of the electric street railway there. He will return to Montreal early in Nov.

Miss M. M. Stovel, niece of W. R. Callaway, General Passenger Agent, Minneapolis, St. Paul and Sault Ste. Marie Ry., formerly of Winnipeg, but lately Detroit, Mich., was married from her uncle's house, Minneapolis, Minn., Sept. 3, to R. F. McWilliams, Peterboro', Ont.

G. D. Stinson, a G.T.R. train dispatcher, Montreal, who was on duty at the time of a collision between two I.C.R. freight trains, near Ste. Madeleine, on the G.T.R. line, has been suspended. An engineer and a fireman were killed, and at the inquest the jury placed the blame for the accident wholly on the dispatcher.

A. C. Baird, chief clerk to Trainmaster Doyle, G.T.R. and Wabash Rd., at St. Thomas, Ont., was presented with an address, a gold watch, chain and locket by the Wabash employees of the division on his being

appointed to the position of accountant to G. M. Burns, Superintendent, Wabash Rd., Detroit, Mich.

T. H. Armstrong, city engineer of Edmonton, Alta., and heretofore acting for the Canadian Northern Ry. at that point, has been granted two months' leave of absence from his civic duties. It is understood that he will engage in survey work for the Grand Trunk Pacific Ry., and will have charge of the work west of Edmonton.

Mrs. Greenwood, wife of Col. H. S. Greenwood, resident engineer of the Transvaal railway department at Braamfontein, South Africa, died there recently. Mrs. Greenwood was a daughter of Sir H. Joly de Lotbiniere, Lieut.-Governor of B.C., and Col. Greenwood is also a Canadian. Col. Greenwood returned to Canada early in Sept.

F. Walsh, District Superintendent, Bell Telephone Co., Winnipeg, Man., owing to ill-health, has resigned his position, and has been granted a pension of \$2,000 a year by the Company. Mr. Walsh was given a six months' leave of absence about a year ago, which he spent in California, but the benefit resulting has not proved permanent.

T. A. Ronald, Vice-President Dominion Atlantic Ry., recently made a visit of inspection of the line and the company's steamships. On Sept. 5 Mr. and Mrs. Ronald, P. Gifkins, General Manager, and Mrs. Gifkins, and R. L. Campbell, Secretary, on behalf of the company, entertained the employees at a reception and concert at Kentville, N.S.

B. Holman, formerly C.P.R. city ticket agent and agent Dominion Ex. Co., at Windsor, Ont., was acquitted at the Essex Assizes, Sept. 23, on two charges of embezzlement preferred against him by the express company. On Sept. 21, he was arrested on another charge of appropriating \$30 belonging to the express company, and remanded for a week.

J. F. Lee, at one time General Passenger Agent C.P.R., at Chicago, Ill., and recently Traffic Manager White Pass and Yukon Route, has been appointed 2d Vice-President and General Manager, Valdez, Copper River and Tanana Ry., with office at Seattle, Wash. The railway is at present under construction from Valdez, Alaska, through the Copper River valley.

G. F. Bristol, who has been appointed General Manager of the Duluth, Virginia and Rainy Lake Ry., with headquarters at Virginia, Minn., will be brought into direct contact with Canadian railway officials when his company has completed its line to Koochiching, Minn., opposite to Fort Frances, Ont. A bridge or ferry connection between the D.V. and R.L. Ry. and the Canadian Northern Ry. is contemplated.

W. C. Ely, President International Ry. Co., Buffalo, owning the Niagara Falls Park and River Ry., the steel arch bridge at Niagara Falls and the suspension bridge connecting Queenston, Ont., and Lewiston, N.Y., acted as President of the recent convention of the American Street Ry. Association at Saratoga, N.Y., in the absence of the President through illness.

Miss E. S. Clement, daughter of P. W. Clement, President Bristol Rd., and formerly President, Rutland Rd., Rutland, Vt., was married, Sept. 9, to W. H. Field, a New York journalist. Special attention was attracted to the wedding because Miss Clement objected to the use of the word "obey" in the ceremony, and finding that the clergyman of the Anglican church, which she attends, would not omit the word from the prescribed service, was married by a Congregational minister at Rutland.

H. Mann, brother of D. D. Mann, of Mackenzie, Mann & Co., was crushed to death by

his track-laying machine, at a point on the Canadian Northern Ry., about 20 miles beyond Erwood, Sask., Sept. 11. The body was removed to Acton, Ont., where the funeral took place from the family residence, Sept. 15. Amongst those who attended the funeral were Lewis Lukes, of Mackenzie, Mann & Co.; D. B. Hanna, 3rd Vice-President Canada Northern Ry. Co.; W. Laidlaw, K.C., solicitor Toronto Ry. Co., and J. A. Macdonald, railway contractor.

Among those present at the recent convention of the American Street Ry. Association at Saratoga, N.Y., were: W. C. Ely, T. E. Mitten, V. H. Ely, J. H. Belsler, H. M. Pease, H. E. Yost, representing the International Ry. Co., Buffalo, N.Y., owning the Niagara Falls Park and River Ry.; C. K. Green, W. T. Marlott, representing the Hamilton Electric Light and Cataract Power Co., Hamilton, Ont.; C. E. A. Carr, J. A. Currie, E. R. Carrington, representing the London Street Ry., London, Ont.; T. W. Casey, H. H. Lockwood, W. G. Ross, representing the Montreal Street Ry., Montreal; E. Mackenzie, representing the Toronto Ry. Co., Toronto.

W. P. Hinton, General Freight and Passenger Agent, Canada Atlantic Ry., and President Canadian Freight Association, whose portrait appears on the first page of this issue, was born at Hintonburg, Ont., Aug. 30, 1871, and was educated at Ottawa Collegiate Institute. He entered railway service May, 1887, and was consecutively to Aug., 1891, clerk freight, passenger and car accounts and travelling auditor Canada Atlantic Ry.; Sept., 1891, to Mar., 1898, rate clerk, general freight and passenger departments, same road, and accountant Canada Atlantic Fast Freight line; April, 1898, to June 30, 1901, Assistant General Freight Agent, same road, and Canada Atlantic Transit Co.; June 30, 1901, to Jan. 30, 1903, General Freight Agent, same road; Jan. 30, 1903, to date, General Passenger and Freight Agent, same road.

The following item is going the round of the U.S. daily and weekly press: "The Canadian Pacific carries off the honors for strange names among its officials. Mr. Ham is the road's advertising manager, with headquarters at Montreal, and the city ticket office there is in charge of Mr. Egg. Because of their strange names, the two men became fast friends, and if they chance to be out of town, as they sometimes do, they both report to Mr. Bacon, whose chief clerk is Brown. A few days ago Ham called on Egg at the latter's office. While talking, the telephone rang. He was asked if that was the Canadian Pacific office. Before he answered as to that, he said, 'Who do you want, Ham or Egg?' 'Neither,' was the reply. 'I want the Canadian Pacific ticket office. I don't want any of your old ham or eggs. Central, get that cheap restaurant off this wire.' Both Ham and Egg are now looking for that man."

Canadian Railway Club.—A regular meeting was held in Montreal Sept. 1, and a special meeting in Toronto Sept. 7, at both of which a paper on apprenticeship, by R. Patterson, Master Mechanic G.T.R., Stratford, Ont., was read and discussed. The discussion will be continued at the regular meeting in Montreal Oct. 6, when a paper will also be read on the maintenance of air brakes under freight cars and the method of keeping check of same.

I. McMichael, who has been appointed General Manager of the G.N.W. Telegraph Co., was born in Brantford, Ont., about fifty years ago, and learned telegraphy in his native place. He subsequently entered the service of the Western Union Telegraph Co., and has latterly filled the position of Manager of the Minneapolis and Northwestern districts for that company.

The Vancouver Power Company.

The Vancouver Power Co. is developing a hydro-electro transmission plant which will be capable ultimately of delivering 30,000 horse-power to Vancouver and the surrounding districts. Work was commenced in the early summer of 1902, and while the final completion of the undertaking is yet a matter of a year or more, the generation of power sufficient for immediate requirements will, it is expected, be possible by December of this year. Primarily, the installation of the plant is for the purpose of furnishing light and power for operating the street and inter-urban railways in Vancouver, New Westminster and Burnaby, but the installation has been designed to furnish 30,000 horse-power, for which the hydraulic end of the plant is being developed; the initial installation of machinery being equal to the generation of 9,000 horse-power.

The sources of water supply for power are two very deep glacial lakes, known as Coquitlam and Trout, or Lake Beautiful. The first mentioned lake has an area of 2,300 acres, and it is at an elevation of 32 ft. above the latter, which has an area of 460 acres. Both lakes are surrounded to their outlets by rugged mountains, rising abruptly from the shore lines, and between the two towers a granite range 4,000 ft. above water level. It

is through this range that a tunnel 13,000 ft., or nearly 2½ miles in length, is being driven to connect the two lakes for the purpose of using the stored waters of Coquitlam for the main supply, and Trout lake as a balancing reservoir. Trout lake alone as a source of power is of no value whatever, as the watershed is very limited, and the outlet is practically dry except during the rainy season.

The first plan of development proposed some years ago was to convey the Coquitlam lake water by means of a flume along the steep hillside a distance of about seven miles, placing the power house on Burrard inlet, nearly opposite Port Moody. The soil along the proposed flume route is of glacial silt, and exceptionally subject to landslides, which would make expensive construction, and be subject to serious interruptions which would cripple the service for long periods, no matter what precautions were taken. This scheme was discarded on account of there being no storage at the end of the flume and the heavy cost of depreciation and maintenance, and the unreliability of service. It was then suggested that a tunnel connecting Coquitlam lake with the North Arm be constructed. While such a tunnel would be slightly shorter than the one now under construction, the main objections were that there was no possible means of procuring storage to act as a balancing reservoir, and also that the tunnel

would of necessity be large enough to carry water for the highest peak load. It was then decided to run the tunnel from Coquitlam to Trout lake. Under this plan of development Trout lake acts as a balancing reservoir, and the tunnel required is only large enough for the average instead of the peak load. The depreciation and maintenance on the hydraulic system will be exceedingly low, and the reliability of service to be obtained will make an ideal installation.

Both lakes will be controlled by dams at their outlets, and from the dam at Trout lake steel pipe lines will convey the water under an effective head of 390 ft. to the power station, located just above high tide mark on the shore of the North Arm of Burrard inlet, into which the water wheels will discharge. The dam at the outlet of Coquitlam lake will raise the water 12 ft. above low water level. It will be constructed of rock-filled timber crib, a type which has proven thoroughly successful in many mountainous streams. The materials are provided by nature in ample quantity at the point where they will be used. The dam will be planked and constructed with an apron, extending far enough down stream to prevent any back-cutting action by the water flowing over.

The tunnel is 9 ft. wide by 9 ft. in height, with rounded corners, and is being driven from both ends by compressed air drills. At

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the portals open cuts were carried into the solid rock, and at one end, where the depth of the open cut became inconvenient, a tunnel was driven for a short distance temporarily timbered, and the ground above the roof of the tunnel sloped down through chutes in the roof directly into the car. Before the machine drills and air compressors arrived hand drills were used, and the average progress was 2 ft. per day in each heading, but since the advent of the drilling machinery, this has been increased to 10 ft. per day. A system of electric haulage has been installed to facilitate the rapid and economical removal of the muck. The plant at each end includes a 100 h.p. boiler, 60 k.w. 500 volt generator, and a 4-drill two-stage air compressor, 3 $\frac{1}{2}$ air drills, and an electric locomotive. Ventilation is provided for by a 12-inch galvanised iron pipe, through which the air is exhausted by means of an air jet under 100 lbs. pressure, acting as an injector. This is only put in operation for a few minutes after each blast to remove the smoke, the exhaust from the air drills furnishing all the fresh air necessary at other times.

A concrete dam 350 ft. long on the crest and 50 ft. high is now in course of construction across the outlet from Trout lake, and arrangements have been made for bringing out ten 54-inch pipe lines from the dam, but only three lines will be completed at present. Each steel pipe line will be 1,600 ft. in length, 48 ins. in diameter at the upper end, 44 ins. in the middle section, and 42 ins. at the power station. Close to the power station site on the shore of the North Arm a wharf has been erected, at which steamers and barges from Vancouver may discharge their freight on to the cars of an incline tramway built from the wharf to the tunnel portal at Trout lake. By this means all material for the camp at the tunnel portal and for the dam and pipe lines is delivered rapidly and with the least possible handling. To deliver material to the tunnel camp at the Coquitlam portal is quite a different undertaking, since it can only be reached by waggon road from a station on the C.P.R., 10 miles distant. For the greater part of this distance the road penetrates the dense forests, and in winter can be kept in a passable condition only by constant attention.

The power station will be constructed of granite masonry, and much of the material excavated to obtain a building flat will be used in the walls. The water-wheel equipment will consist of three sets of impulse wheels, each set capable of developing a maximum of 3,000 horse-power at 200 revolutions a minute, under the effective head of 390 ft., and one set consisting of 200 horse-power wheels for driving the exciters at 580 r.p.m. Each of the main units will consist of two overhung wheels, one mounted on each end of the shaft of a 1,500 k.w. engine type rotating field generator. The wheel centres are of the steel disc type, and fitted with cast steel buckets, secured to the wheel rims by turned steel bolts driven in reamed holes. The hubs of the wheel centres are bored out for a press fit on a shaft 12 inches in diameter, and will be pressed on in place at the lower station. Each wheel will be enclosed in a cast-iron housing, and provided with centrifugal discs and pockets, and suitable drain pipes for preventing leakage of water along the shaft.

Probably the most interesting feature of the equipment is the single combination, deflecting and needle regulating nozzle provided for each water wheel, and fitted with a high pressure ball joint, which is leather packed, and rocks on forged steel trunion bolts. The joint permits of effecting regulation by deflecting the nozzle by governor or hand, independent of the control of the needle, thus permitting of load and speed variations, independent of any change of velocity in the pipe lines. The deflecting portion of the nozzle is counterbalanced by hydraulic pressure, so that quick operation can be secured from the

governor on account of the absence of inertia of heavy counterbalanced weights. The taper pipe of the nozzle is provided with the necessary geared connections for hand control of the needle, and will have a tell-tale indicator showing the size of the stream for all positions of the needle.

The shaft of each unit is 13 in. in diameter in the journals, and will be carried in two ring oiling ball and socket bearings. The enclosing shells of the oil compartments are provided with cooling pipes, connected through the pedestal with the main wheel compartments and controlling valves, so that cooling water, after being discharged from the wheels may flow continuously through them to keep the oil cool. For each wheel is provided a 24-in. high pressure gate valve, with roller bearing thrusts. The gates are all furnished with the usual hand wheel, and in addition there is provided a worm gear device which can be connected at will to facilitate the working of the gate when nearly closed. The governing of the water wheel units will be effected by means of three type "E" Lombard governors. This type operates under water pressure, and the water used by them will be first passed through a filter tank located some 200 ft. above the power house.

The two 80 k.w. exciters, with their respective wheels will be mounted on a common bed-plate, with a 120 horse-power induction motor between the two exciters. Each exciter will be provided with a pair of jaw-clutch couplings and shifter rigging, so that either water wheel will drive its exciter and the induction motor at the same time. The motor leads are connected to the main bus bars, and the motor is normally run at synchronous speed, neither giving nor taking electric power. Should the exciter water wheel nozzle become clogged and the speed fall, the motor immediately takes power from the bus bars and drives the exciter until the nozzle is cleared by the attendant, or the other exciter unit started up. The deflecting nozzles of the exciters are arranged for hand regulation for the exterior of the wheel case through worm gearing.

The contract for the entire electrical equipment has been awarded, and includes the apparatus for the generating station and the sub-stations at Vancouver and Burnaby. The three 1,500 k.w. 60 cycle, 2,200 volt alternators for the power station are of the rotating field type, and are arranged for a movement of the external frame in a direction parallel to the shaft, to allow access to the windings. For the control of the apparatus at the power station the switchboard will contain nine panels, one for the induction motor and one for each exciter, three panels for control of the main units, and three for the control of the three sets of 550 kilowatt air-cooled transformers, with their motor blower sets, consisting of 20 horse-power motors and 110 in. Sturtevant fans. The step-up transformers, static interrupters, high potential switches, and lightning arresters will be installed in a separate building located on the hill above and just back of the power house. As the static interrupters contain oil they will be separated from the main room and each other by brick partitions. The machinery for the sub-stations includes the usual transformers, rotary converters, switchboards, etc., for the reception and distribution of transmitted power.

The route of the transmission lines to Vancouver is 16 miles in length, and involves the crossing of a navigable arm of Burrard inlet, with a span of 2,800 ft. On one side two steel towers 140 ft. in height will be erected to support twelve 9-16 inch galvanised plow steel cables with wire centres, but on the opposite side there is high ground, and the cables will be supported on poles. Two independent transmission lines, each consisting of two 3-wire circuits of no. 2 copper, will be

constructed on the same right of way, to a point near Barnett. From here one line will be continued to Vancouver and the other to Burnaby. A transmission line already exists between Burnaby and Vancouver, which will be reconstructed to carry 20,000 volts, the pressure to be used on the new lines, and a new line will be built from Burnaby to New Westminster, thus providing what is in effect a double transmission line over the entire distance between the power station and each of the sub-stations. W. Meredith, of San Francisco, is directing the entire work, assisted by Hermon and Burwell, civil engineers, of Vancouver. R. H. Sperling, Chief Engineer of the B.C. Electric Ry. Co., is supervising the work on behalf of that company, whose shareholders hold the controlling interest in the Vancouver Power Co.

TRANSPORTATION APPOINTMENTS.

Brockville, Westport, and Sault Ste. Marie Ry.—S. Rothwell has been appointed mechanical superintendent, succeeding H. Wilkinson, resigned.

Canadian Northern Ry.—A. Wilcox has been appointed Chief Train Dispatcher at Port Arthur, Ont., vice W. A. Stewart.

Canadian Pacific Ry.—F. W. Forster, hitherto traffic agent of the Elder-Dempster line of steamships, at Bristol, Eng., has been appointed Bristol Traffic Agent, C.P.R. Atlantic Steamship Lines, with office at Canada House, Baldwin st., Bristol. He will report to the European Traffic Manager at London.

L. G. Roblin has been appointed locomotive foreman at London, Ont., succeeding J. Wilkinson, resigned.

Cape Breton Ry.—G. E. Johnson, of New York, is reported to have been appointed General Manager.

Grand Trunk Ry.—H. A. White, heretofore mechanical accountant at Point St. Charles, has been appointed chief clerk to Superintendent Car Department, vice W. H. Rosevear, jr.

E. J. Hilliard has been appointed Traveling Freight Agent for the maritime provinces, with headquarters at Moncton, N.B.

J. W. Higgins, heretofore Assistant Superintendent Eastern Division, is appointed Assistant, 1st, 2nd and 3rd Districts, vice C. S. Cunningham, transferred. Office at Island Pond, Vt.

W. Holmes is appointed Trainmaster 1st and 2nd Districts. He will report to and receive instructions from the Assistant Superintendent. Office at Island Pond, Vt.

H. F. Coyle is appointed Trainmaster, 6th and 7th Districts, vice W. Holmes, transferred. He will report to and receive instructions from the Assistant Superintendent. Office at Belleville, Ont.

L. G. Coleman is appointed Trainmaster, 4th District, vice J. H. Dull, transferred Office at Montreal.

U. E. Gillen, heretofore Trainmaster at Belleville, Ont., has been appointed Assistant Superintendent, in charge of transportation and station service 5th, 6th, and 7th districts. Office, Belleville, Ont. The position of Trainmaster at Belleville has been abolished.

J. Irwin has been appointed Trainmaster 8th, 9th, and 10th districts, in charge of transportation station and yard service. Office at Lindsay, Ont.

Charles Moore has been appointed chief clerk to G. C. Jones, Superintendent Middle Division, at Toronto, succeeding W. White, promoted.

Yardmaster Farrell, at the Toronto terminals, has been transferred to other duties, and has been succeeded by J. Tobin, heretofore assistant yardmaster.

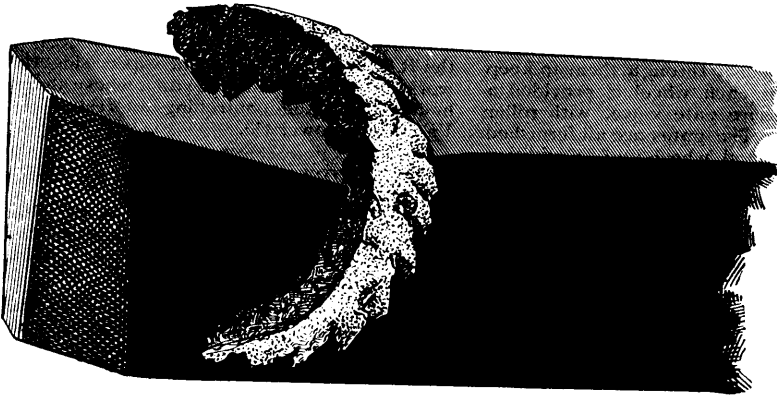
C. S. Cunningham, heretofore Assistant Superintendent Eastern division, has been appointed Assistant Superintendent 16th dis-

trict (between Toronto and Hamilton), 17th, 18th, and 19th districts, and 20th district (between Harrisburg and Tillsonburg Junction), vice Mr. Costello, transferred. Office, London, Ont.

J. Gillam has been appointed Yardmaster at Woodstock, Ont.

W. E. Costello, heretofore Assistant Superintendent at London, Ont., has been transferred to the western division. Office at Battle Creek, Mich. He will take over the duties formerly performed by Trainmaster McCarthy, who was killed in the recent collision at Durand, Mich.

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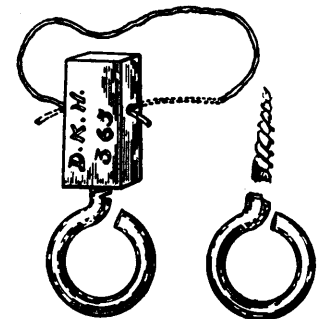
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Montreal Terminals.—The company is acquiring property in the neighborhood of Montreal West, Cote St. Paul and Turcot, the object being to provide for future extensions of tracks, yards, shunting premises and of a general widened radiation from the Montreal terminus.

Place Viger Yard Extensions.—Negotiations are still in progress with the Montreal city council respecting the application of the company for permission to close certain streets in the vicinity of Place Viger station. At the recent meeting of the special committee it was decided to address a set of questions to the city attorneys respecting the right of the city to alienate the streets. A statement was made during the discussion that the company had purchased 83,905 sq. ft. of land, and asked the city to cede to it 65,202½ sq. ft. by closing up the streets. (July, pg. 245.)

St. Denis Subway.—It is expected that the subway under the C.P.R. tracks at St. Denis st. will be completed early in Nov. The Montreal Street Ry. will lay tracks immediately on completion of the grade. Martineau and Prenoveau are the contractors. The cost of the subway will be about \$60,000, which will be paid one-third each by the C.P.R., the Montreal Street Ry. and the city. (April, pg. 131.)

Guelph to Goderich.—The mayor of Goderich, Ont., was informed that a party of C.P.R. surveyors would reach that town Sept. 25 for the purpose of locating a line between Goderich and Guelph. (See Guelph Junction Ry., pg. 341.)

London Township.—Application was made at the recent sitting of the Railway Committee of the Privy Council for permission to divert the 3rd concession road of London tp., near London, Ont., in order to meet a new bridge to be built at that point.

Webbwood Turn Table.—Owing to the fact that larger and heavier engines have been placed on the runs over the Sault Ste. Marie branch, a new turn table has been put in at Webbwood station, Ont.

Hutton Township Branch.—Press reports state that surveys are being made for a line from Sudbury, Ont., northwesterly to Hutton township. A line to this point, in addition to opening up some good agricultural lands, would reach iron ore deposits near Hutton tp. The distance from Sudbury to Hutton tp. is about 25 miles.

Fort William Power Plant.—Construction has been commenced on an electric power plant at Fort William, Ont. The plant will be utilized mainly for running the elevators.

Winnipeg Subway, Etc.—The formal agreement between the company and the city council relative to the construction of the subway and the erection of a new station and an hotel at Winnipeg, had not been signed up to Sept. 25. The terms of the agreement, however, have been finally approved and the solicitors were expected to have the document ready for signature at the regular meeting of the council Sept. 21. It was announced that a special meeting would be called to pass the formal resolution as soon as the document was ready for signature. The agreement is substantially on the lines of the one adopted earlier in the year, which, however, was not approved when it was presented to the Legislature for ratification, with the exception that the outside damages are to be borne by the city. The damages on the area closed are to be borne by the company, and this area has been enlarged to include the 16 ft. frontage strip on Point Douglas avenue, held by the company for track purposes. In respect of elevating the grade on Point Douglas avenue to King st., and constructing the Main st. subway, hotel, depot and office block, etc., the old agreement is unchanged.

It is also agreed that the city will close down Point Douglas avenue and portions of intersecting streets. The subway will be 11 ft. in depth below the present street level, and the track will be raised 5 ft. above its present level by iron supports. The grade of the raised tracks will be 1 ft. in 20 ft., or 5%. The subway will be 100 ft. wide, with a double track for street cars and a walk for foot passengers. The company is to make an emergency crossing on King st. and a level crossing at Gladstone st., and have the option of exchanging for another subway crossing at any time, the subway to be 66 ft. wide. The company agrees to build a suitable station and offices fronting on Higgins avenue, with an hotel on the corner of Main st. and Higgins avenue, and also to indemnify the city against actions for damages, and to keep the subway clear of water, make provision for sleighs passing safely through the subway, and nothing in the agreement is to interfere with the city's right of assessing or taxing the property. Both the company and the city agree to apply to the Legislature at its next session for an order ratifying the agreement.

Operations will be commenced at once upon such work as can be carried out without the passing of by-laws, and as much as possible done this year, and it is understood that the whole of the work will be completed in the fall of 1904. (Sept., pg. 309.)

Winnipeg Yards.—The Manitoba Construction Co., which has secured the contract for the brick-work for the new shops and roundhouse at this point, is a local company in which T. Kelly is largely interested. Work on the foundations is in progress. The estimated cost of the work covered by the contract is \$250,000. (Aug., pg. 271.)

Spur Lines in Winnipeg.—A spur line 200 ft. in length has been laid from Sutherland st. to the Northern Elevator Co.'s elevator. It is stated that the company had no permission to lay this track, and that it simply put the ties on the road and laid the track. The matter is being looked into by the city solicitors.

The company has given notice of its intention to apply to the Railway Committee of the Privy Council for permission to lay a spur track from Fonseca st., in a southerly direction parallel to Princess st.

Brandon.—Press reports state that it is intended to erect a new freight station at this point, west of Ninth st.

Neepawa Improvements.—The freight shed at Neepawa, Man., has been raised and enlarged, and the stock-yards adjoining, 200 ft. long by 150 ft. wide, are completed.

Pipestone Branch.—Tracklaying is being proceeded with from Regina, Assa., easterly towards Arcola, the present terminal point. Grading is also being pushed from Arcola and tracklaying is expected to be commenced at that end early in Oct. It is expected that tracklaying will be completed on the extension, 113 miles, to permit trains being run through to Regina early in Nov. (Sept., pg. 309.)

Moose Jaw to Swift Current.—A contract has been let to Foley Bros., for the straightening of the track between Moose Jaw and Swift Current, Assa., 112.3 miles. A number of curves will be straightened out and the grades throughout will be reduced. The improvements will necessitate the construction of about 60 miles of new track.

Calgary and Edmonton Ry.—D. McNicoll, General Manager; J. W. Leonard, Assistant General Manager, and E. H. McHenry recently went over the C. and E. Ry., with a view of deciding on the improvements which it would be necessary to make in order to bring the line up to the requirements of the traffic. They also had a conference with the

Strathcona, Alta., Board of Trade in regard to the extension of the line into Edmonton, and the other extensions projected. They also looked over the site of the proposed high-level bridge over the Saskatchewan river, for which three trial lines have been run. (Sept., pg. 309.)

Clanwilliam Improvements.—The transcontinental line near Clanwilliam, about 10 miles west of Revelstoke, B.C., is being diverted, the object being to secure a line clear of snowslides. The estimated cost of the work is about \$90,000, and it is expected that the work will be completed by Dec. 1. J. W. Stewart is the contractor.

New Westminster Lines.—The company has been involved in litigation in connection with the crossing of its tracks near New Westminster by the Vancouver, Westminster, Northern and Yukon Ry., through which company the Great Northern Ry., U.S., will obtain an entrance to Vancouver. The matter has been before the Courts, the Railway Committee of the Privy Council, the Cabinet, and the Governor-in-Council. The V., W., N., and Y. Ry. was given permission to cross the C.P.R. tracks, and pending an appeal against that decision, laid the crossing. This caused the legal proceedings.

New Wharf at Victoria.—Application has been made to the Governor-in-Council for approval of the construction of a wharf at Victoria, B.C. The plans provide for the erection of a wharf 480 ft. west from Menzies st., to navigable water. The plan of construction calls for five piers, each 650 ft. long by 175 ft. wide, with two warehouses on each 50 x 150 ft., and a railway track between. No. 1 pier, on which construction is to be started first, will be at the foot of Thurlow street, and the rest of them between there and Seymour st.

Tourist Hotel at Victoria.—The by-law granting a free site, exemption from taxes and free water for 15 years to the C.P.R., in consideration of its erecting a tourist hotel to have about 300 rooms, was passed by the taxpayers, Sept. 16.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Grading has been completed on the extension from Glenwood, Minn., north to a point in the White Indian reservation in Norman county, and tracklaying has been completed to Alexandria, about 20 miles. (Sept., pg. 309.)

The G.T.R. has opened an office in Victoria, B.C.

The Ontario Wind Engine and Pump Co., Toronto, has received an order for 12 purification plants to be erected at different points on the C.P.R. system.

The tariff committee of the Canadian Freight Agents' Association met at the Secretary's office, Union Station, Toronto, Sept. 15, and arranged fall rates.

The Michigan Central Rd. no. 3 express train recently made the run from St. Thomas to Windsor, Ont., 111 miles in 98 minutes, actual running time.

The Detroit and Toledo Shore Line, owned jointly by the G.T.R. and the Toledo, St. Louis and Western Rd., has entered into an agreement with the Toledo Terminal Belt Line by which an entrance into the Toledo terminals has been secured. The first G.T.R. train entered Toledo Sept. 10.

A resolution providing that advances may be made from the consolidated revenue fund of Canada to the Minister of Railways for the purchase of stores, etc. necessary for the operation of the Government railways, has been approved of by the House of Commons. The amount advanced to the I.C.R. shall not exceed \$1,500,000 a year, and to the Prince Edward Island Ry. shall not exceed \$100,000.

Consolidated Lake Superior Co.

On Sept. 18, notice was given closing the whole of the works carried on by the subsidiary companies of the Consolidated Lake Su-

perior Co. with the exception of the water and light company at Sault Ste. Marie, Ont., the street railway lines on both sides of the river, and the ferry service connecting them, and the running of one train a week on the

Algoma Central and Hudson's Bay Ry. In all some 3,500 men have been thrown out of employment in consequence, the following being those connected with the company's transportation interests: Michipicoten branch

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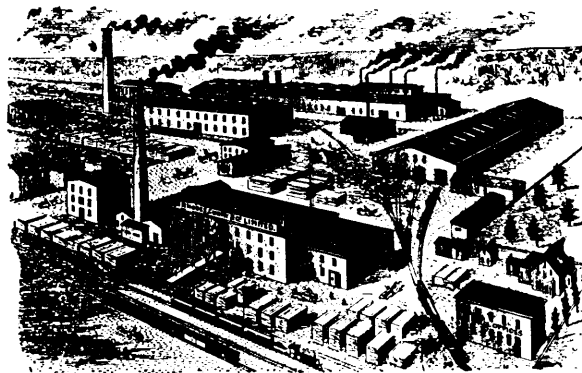
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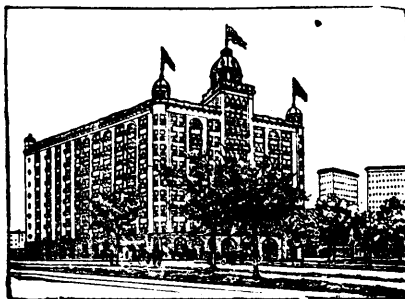
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FOR STEAM AND ELECTRIC RAILWAYS.

A. C. and H. B. Ry., 50 men; A. C. and H. B. Ry. car shops, 20 men; Algoma steel plant, 150 men; A. C. and H. B. Ry., about 200 men. The steamers employed by the Algoma Central Transit Co., continued in operation until the men were brought out from the mines and lumber camps, and are being laid up. The reason given for the closing down of operations was that there were no funds in hand to meet the demands of the men for money, and to pay current accounts, and no immediate prospect of obtaining money to meet them. The stoppage of the works is an admission on the part of the management that all the efforts recently put forward to find money to pay off present indebtedness and to provide for the future continuance of the various operations, have failed. The directors give various reasons for this, but there is a general agreement that the present financial depression following the recent fall in industrial securities is accountable for the failure to raise the money. Following the failure to raise the money from the shareholders upon bonds, or in any other way, Speyer & Co., of New York, called up the loan of over \$5,000,000 made in the spring, and due in July, for the payment of which the company pledged the whole of its assets. The property was announced to be sold in New York, Oct. 1.

The Grain Movement from Manitoba.

The total quantity of wheat inspected at Winnipeg for the year ended Aug. 30, 1903, was 51,833,000 bush., against 42,406,923 bush. for the two ports of Duluth and Superior, Minn.; and 37,940,953 for Chicago, Ill. Including oats, the inspection at Winnipeg for the year amounted to 56,117,200 bush., or 55,005 cars. The proportion of wheat from Manitoba was four times that from the territories, and the quantity carried by the C.P.R. was about four times that carried by the Canadian Northern Ry. The inspections on the two railways and the destination of the cars is given below:

On C. P. R.—	Cars.
For Fort William	32,650
For Winnipeg	7,601
For all rail	2,218
For Duluth via G. N. R.	2
For Duluth, via Soo line	269
For Minneapolis, via Soo line ..	291
For Minneapolis, via G. N. R.	40
For Vancouver	202
Total	43,333
On C. N. R.—	Cars.
For Port Arthur	9,755
For Duluth	1,310
For Minneapolis	514
For Seattle	93
Total	11,672

Grain Elevator Notes.

M. Sellers, who has had charge of the C.P.R. elevators at Fort William, Ont., has resigned.

The total capacity of the elevators at the head of the lake and in Manitoba and the Northwest Territories is 39,333,400 bush. There were 175 new elevators erected in the Northwest during the year.

Tenders have been invited by the Merchants Bank of Canada for putting the Prescott, Ont., elevator in repair, with a view to its being again placed in operation. Nothing has been officially reported as to when business is likely to be resumed, or under whose management.

The Canadian Northern Ry. Co. has granted sites for four elevators at Edmonton, Alta., and it is understood that the construction of the elevators will be gone on with this year. The elevators will be erected for the Brackman-Ker Elevator Co., N. Bawlf of Winnipeg, J. West, and John Ross & Co., of Edmonton.

The C.P.R. and the Canadian Northern Ry. Co. have notified the Winnipeg Grain

Exchange that it is intended to increase the present rates for storage of grain in their terminal elevators at the lake front to the following: Elevating, including 15 days' storage and insurance against loss by fire, per bushel, 3/4c; storage for each succeeding 30 days and insurance against loss by fire, per bushel, 3/4c. No charge for cleaning and storing.

Referring to the capacity of the elevators at Fort William and Port Arthur, Ont., and in Manitoba and the Northwest generally, C. C. Castle, Warehouse Commissioner, is quoted as saying that it was equal to caring for a crop of 150,000,000 bush. There had been many additions made to the loading platforms, the number and capacity of the elevators had been increased, and large additions had been made to the rolling stock by the railway companies. He expected 65% of this year's crop to be moved before the close of navigation.

The annex to the C.P.R. elevator D at Fort William, Ont., has been completed. It provides for the storage of 1,700,000 bush., and is an excellent example of the modern storage house. The basement is of solid concrete, and is a large, light place, in which all the operations of handling which are done in this portion of the annex are in full view all the time. The upper story consists of a huge hall, 120 ft. by 240 ft., with a solid concrete floor, covering the tops of the storage tanks which are of steel, 32 in number, 80 ft. high, and 28 ft. in diameter, and each one containing 41,000 bush. The interstices between these tanks are also used for storing grain, bringing the total capacity to 1,700,000 bush. The building is capable of taking in 40,000 bush. an hour, and shipping 20,000 bush. It fronts upon the navigable waters of the Kaministiquia river, where vessels drawing 19 ft. of water can lie alongside the docks. This addition will bring the total capacity of elevator D to 3,000,000 bush. or over. Press reports state that plans are already under consideration for again doubling this and making it a 6,000,000 bush. house.

The elevator constructed at Point Edward, Ont., by the Point Edward Elevator Co. (Ltd.) was reported to be ready for business Sept. 15. The elevator consists of a working house, power house, 48 ft. by 48 ft., and an annex. The basement is floored with concrete at the water line. The equipment of the working house consists of a marine leg of 12,000 bush. capacity, two sets of unloading shovels, a receiving leg to carry the grain from the marine leg, and two shipping legs to deliver the grain to cars. At the top of the building are three scales of 72,000 lbs. capacity. The bins in this building will contain 75,000 bush. The annex is 30 ft. distant from the working house, back from the river, and separated by the railway track. It is 166x126 ft., and has 36 bins, with a total capacity of 450,000 bush., which, with the bins already mentioned, gives the elevator a total capacity of 525,000 bush. The method of conveying the grain is by means of wide rubber belts. These belts are in channels at each side of the building, between the rows of bins and below, and when the bins are opened the grain runs out on to the belt and is carried along to any desired bin or back to the working house to be weighed before going into the cars. The power house contains a 350 h.p. engine and two boilers 16 ft. x 72 in. There is a conical smoke-stack 177 ft. high, being one foot higher than the elevator.

On Sept. 12 the 50th anniversary of the turning of the first sod of the St. John and Shediac Ry., or as it was also called the European and American Ry., was celebrated at St. John, N.B. This railway is now part of the Intercolonial Ry.

SHIPPING MATTERS.

Notices to Mariners.

The Department of Marine has issued the following notices to Mariners:

No. 70. Aug. 11—New Brunswick—180. Northumberland strait, Kouchibouguac bay, Blackland's gully, range lights established. 181. West coast Miramichi bay, Fox island, northwest point, lights increased in intensity. Newfoundland—182. West coast, Gulls' Marsh, wreck in approach.

No. 71. Aug. 14—Quebec—185. Gulf of St. Lawrence, Magdalen islands, Bird rocks, change in characteristic of light. 186. River St. Lawrence, Saguenay river entrance, Pointe Noire, range lights established. Labrador—187. Strait of Belle Isle, Amour point, change in characteristic of light.

No. 72. Aug. 18—New Brunswick. 188. South coast, Bay of Fundy, St. John Harbor, buoy established. 189. East coast, off Pokenouché gully, buoy established. Prince Edward Island—190. North coast, Cascumpeque harbor entrance, buoy established.

No. 73. Aug. 19—Ontario—191. Lake Huron, south end, Point Edward, range light established.

No. 74—Aug. 19—New Brunswick—195. South coast, Bay of Fundy, Letile passage, Mascabin point, light established.

No. 75—Aug. 20—British Columbia—196. Strait of Georgia, Fraser river mouth, change in color of beacon lights.

No. 76. Aug. 21—Quebec—200. River St. Lawrence below Montreal, Boucherville channel, Ile St. Joseph, range lights established.

No. 77. Aug. 26—Ontario—201. Lake Ontario, Bay of Quinte, Belleville, change in color of light. 202. Lake Huron, Manitoulin island, Providence bay wharf, shoal located and buoyed.

No. 78. Aug. 28—Quebec—206. River St. Lawrence, ship channel between Montreal and Quebec, Lake St. Peter, lightship no. 1, temporarily moved.

No. 79. Aug. 29—Nova Scotia—207. South coast, Grampus rock, buoy established. Prince Edward Island—208. Gulf of St. Lawrence, Souris east breakwater, light increased in intensity.

No. 80. Aug. 31—Ontario—209. Lake Ontario, eastern entrance to Toronto harbor, breakwater dangerous. 210. Lake Superior, Thunder bay, entrance to Fort William, lighted buoy established.

No. 81. Sept. 1—Ontario—211. Lake Huron, east side, Saugeen river, range light masts replaced by towers.

The following notices have been issued by the U.S. hydrographic office:

No. 35. Aug. 29—Lake Superior—1764. Apostle islands, Raspberry island light station, fog signal to be established. 1766. Portage lake ship canals, Lily pond, beacon light to be established. St. Clair river—1767. Russell island, wreck, light exhibited. Lake Ontario—1769. Oswego approach, Ford shoal, buoy to be established.

No. 36. Sept. 5—Lake Superior—1805. Portage lake ship canal, dredged channel, buoys, directions. Lake Huron—1806. St. Clair river, northern approach, information respecting shoal spot. St. Clair river—1807. Russell island shoal, gas buoy established, float light withdrawn. Lake Erie—1808. Conneaut range light, temporary change of position.

No. 37. Sept. 12—Lake St. Clair—1841. Port Huron shoal, buoy established. Lake Ontario—1842. Oswego approach, Ford shoal, buoy established.

The tug Reliance, owned by the Midland Towing and Wrecking Co., Midland, Ont., was burned to the water's edge, near John's Island, Georgian Bay, Sept. 18. The Reliance was built at Collingwood, 1892.

Maritime Provinces and Newfoundland.

The Nova Scotia schooner *Encore* has been destroyed by fire at Chateau Harbor, Nfld.

At the last session of the Newfoundland Assembly there was voted \$4,000 as bonuses on vessels built in the island.

A 2-000 ton steel steamer, *Pontiac*, has been launched in Scotland for J. W. Carmichael, of New Glasgow, N.S.

The Newfoundland Assembly at its last session voted \$55,925 for the maintenance and repair of lighthouses, etc., on its coast.

The tug *John Greene*, built at St. John's, Nfld., for the Messrs. Rendell, of that port, has been completed and given a trial trip by her owners.

The Boston schooner *Altama* was sold at Boston, Mass., recently to Nova Scotia owners, to satisfy a claim for salvage brought by the Dominion Atlantic Co.

The Cape Breton Coal, Iron and Ry. Co. are preparing to erect a large pier, etc., at Louisburg, N.S., with a view of making that port its shipping point.

Some Charlottetown, P.E.I., people have been negotiating with the North American Transportation Co. (Ltd.) for the purchase of the str. *City of London*.

The str. *Strathcona*, built at Port Clyde, N.S., for the Halifax and Canso Steamship Co., has been placed on a run between Halifax and Guysboro, calling at various ports en route.

The St. John, N.B., city council at a special meeting Sept. 15, ratified the agreement with the Imperial Dry Dock Co. for the construction of a dry dock at that port at a cost of \$1,000,000.

The str. *Westport III*, was placed on the run from Westport to St. John, N.B., Sept. 1. She was built at Shelburne, N.S., and engined at Yarmouth, N.S., and is owned by the Insular Steamship Co. of Westport, N.S.

There is a considerable scarcity of small tonnage in Nova Scotia at present. One coal company has been enquiring for about 20 vessels of small and medium tonnage, and found considerable difficulty in obtaining them.

The Newfoundland Government has decided to place two lighthouses on the Labrador coast in the spring, and to construct three

additional lighthouses and a number of fog signal stations on the coast of Newfoundland.

The court appointed to enquire into the circumstances attending the recent stranding of the *Plant Line str.* *Halifax* in Halifax harbor, found that the master did not allow for currents in coming into the harbor in a fog. Capt. Ellis was admonished by the court.

Among the vessels launched or under construction at Shelburne, N.S., are the following: *Monica A. Thomas*, schooner, for Capt. H. Thomas; a 63 ft. steamer for R. Simpson & Co., Halifax; a 75 ton schooner for Newfoundland owners; and an 84 ft. steamer for the Newburrell Johnson Iron Co., Yarmouth, N.S.

G. Robertson, M.P.P., St. John, N.B., has submitted to the Dominion Government the completed plans for the building of a dry dock in St. John, N.B. Should the government approve of the scheme, a subsidy will be granted. The agreements with the New Brunswick Legislature and the city of St. John are ready, and the financial aspect is now receiving the attention of the Imperial Dry Dock Company, which hopes to be in a position to ask for tenders in November. The new dock will be 700 feet long and 140 feet wide at the top. It will be a composite one, with entrances of solid granite of a substantial character.

Province of Quebec Shipping.

The Dominion Government is re-establishing a lighthouse at Pointe Noire on the Saguenay river, and will add other aids to navigation.

The Montreal Harbor Commission has received the balance of the loan from the Dominion Government for the construction of the new elevator.

The Montreal Harbor Commissioners have accepted the tender of the *Pontbriand Co.*, of Sorel, for the construction of a harbor tug, at a cost of \$30,300. Delivery is to be made in June, 1904.

The Montreal Harbor Commission has notified the Montreal Grain Elevating Co. that it must remove the wreck of its floating elevator which recently sunk in the harbor. The wreck is a menace to navigation.

La Compagnie Maritime et Commerciale du bas St. Laurent has been incorporated under

the Quebec Companies' Act, with a capital of \$40,000 and offices at Ellis Bay, Anticosti island, to carry on a general navigation business, etc.

The coroner's jury at the inquest on the only body recovered from the *Mersey*, recently sunk in the St. Lawrence, returned a verdict which resulted in the arrest of Capt. Gagnon and chief officer Barras on a charge of manslaughter.

The Great Lakes and St. Lawrence Transportation Co., better known as the Wolvin Syndicate, of Quebec, has seven of its lake grain carriers in operation to Quebec, and will have five more in operation when the new wheat is ready for transport.

The number of ocean-going vessels arriving in Montreal for the season of navigation

DOMINION LINE STEAMSHIPS
FAST TWIN-SCREW SERVICE. WEEKLY SAILINGS.

MONTREAL TO LIVERPOOL
HALIFAX TO LIVERPOOL Via Queenstown
BOSTON TO LIVERPOOL Via Queenstown
BOSTON TO MEDITERRANEAN PORTS

MONTREAL TO LIVERPOOL

Canada	June 13th	July 18th	August 22nd
Kensington	" 20th	" 25th	" 29th
Dominion	" 27th	Aug. 1st	Sept. 5th
Southwark	July 4th	" 8th	" 12th

BOSTON TO LIVERPOOL

Commonwealth	July 2nd	July 30th	August 27th
New England	" 9th	Aug. 6th	Sept. 3rd
Mayflower	" 16th	" 13th	" 10th
Columbus	" 23rd	" 20th	" 17th

BOSTON TO MEDITERRANEAN

Vancouver	June 6th	July 18th	August 20th
Cambroman	" 20th	Aug. 8th	Sept. 19th

Spacious Promenade Decks, Electric Light. Passenger Accommodation all amidships.

The steamers on the Montreal and Boston services to Liverpool are all twin-screw and powerful steamers. They are fitted in the most modern style to enable the patrons of the Company to cross the Atlantic with comfort.

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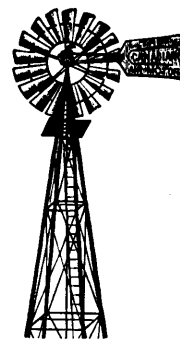
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to Aug. 31, was 511, having a tonnage of 1,196,219, against 485 vessels of 962,217 tons in 1902. Of inland vessels there arrived within the same period 6,560 vessels, having a tonnage of 1,460,437, against 5,479 vessels having a tonnage of 1,144,720 in 1902.

The Minister of Marine recently informed a deputation from Quebec that a thorough investigation will be made into the pilotage system on the St. Lawrence, and steps taken to put it on a more satisfactory basis. The ship owners ask for a dissolution of the present pilots' corporations, and the placing of the whole system under direct Government control.

The steam tug Mersey, owned by M. Connelly & Co., contractors, sank near Point Outard, recently, while on a trip from Quebec to Seven Islands Bay, five men being drowned. As a result of the investigation the certificate of Capt. Gagnon has been cancelled; Chief Officer Barras and Engineer Lamothe censured, and the court recommended that the Minister of Marine deal with the chief officer's certificate.

The Revillon Canada Far North Co. (Ltd.) has been incorporated under the Dominion Companies' Act, to own and operate freight and passenger vessels in Canada and elsewhere. The capital is fixed at \$250,000, and the offices are to be in Montreal. The company acquires the business of Revillon Bros., of Paris, France, including the trading posts in Canada, and the steamers Mary and Stord, now owned in London, Eng. The Stord recently arrived in Canada and got ashore in the St. Lawrence.

The Richelieu and Ontario Navigation Co.'s str. Carolina ran on the rocks at Passe a Pierre, Saguenay river, recently, and her 300 passengers had a narrow escape of drowning. The steamer lies at an angle of 45 degrees, half her length being on the rocks, and her stern is under water. Tugs failed to tow her off, and other attempts to float her failed. The fixings and furnishings have been removed, and it is feared that the hull may have to be abandoned. The steamer, which was valued at \$65,000, was purchased in the U.S. in 1902.

The improvements at the Lachine canal locks at Montreal, now in progress, will cost about \$250,000. The preliminary work was confined to the upper basin and the bridge foundations. But since May the work has been extended to reconstructing the locks, and on Sept. 1 more than one-half of the lower lock was completed. A feature of the work is that the lower walls and foundations are being constructed of concrete and laid in sections of 30 to 40 ft. at a time. The new walls are about 34 ft. high, the lower half being of solid concrete, while the upper portion is of concrete backing with a facing of large stones.

The hull of the steamer Montreal, which was built by the Bertram Engine Works Co., of Toronto, is to be utilized. The steamer's hull was built at Toronto and brought to Montreal through the rapids in 1902. She was taken to Sorel for completion, but owing to the difficulty of obtaining the necessary labor was brought to Montreal. While firmly embedded in the ice in March, she caught fire and the whole of the steamer above the water line was burnt, nothing except the hull and engines being left. These, it was thought, were too much damaged to be of any use, and were sold. The Richelieu & Ontario Navigation Company, for whom the boat had been built, acquired the remains of the vessel and now intend to rebuild her. She has been taken to Quebec and placed in the dry dock where she is being carefully overhauled, after which she will again be taken to the company's shops and completed. It is anticipated that she will be ready to sail some time next season.

Ontario and the Great Lakes.

R. Morrill, Parry Sound, is building a 50 ft. tug boat for the Thompson Lumber Co., Longford.

The str. Island Queen, of Montreal, sprang a leak at Portsmouth, Ont., recently and sank at her wharf.

Capt. M. Leroux, master of the str. City of Toronto, died in Parry Sound hospital Sept. 2, after a short illness.

The str. Empire State, recently burned at Kingston, will not be rebuilt. The amount of insurance paid was \$17,500.

The str. Garden City recently made the run from Toronto to Port Dalhousie in 2 h. 2 m. 2½ secs., the best on record.

The str. Alexander Fraser, owned by the Upper Ottawa Improvement Co., struck a rock near Pembroke, Ont., recently and sank.

The Chatham Board of Trade proposes to subsidize a steam barge to operate on a route from Chatham to Sault Ste. Marie and north shore points.

The Dominion Government proposes placing a new lifeboat on Lake Erie at Port Stanley. The present lifeboat has been in service for about 20 years.

A steam yacht, owned by C. F. Bunnell, of Rat Portage, and his boathouse on the Lake of the Woods, have been burned. The loss is estimated at over \$10,000.

The Northwest Transportation Co.'s str. Huronic has been fined \$1,800 by the U.S. Customs authorities for carrying passengers from Sault Ste. Marie, Mich., to Duluth.

It is reported at Sault Ste. Marie, Ont., that the C.P.R. steamers will call at the docks there next season, instead of at the docks on the U.S. side of the river as at present.

The act incorporating the Canadian Transportation and Storage Co. (Ltd.), has been amended in the Senate by the insertion of a clause limiting the operations of the company to Ontario.

The Canadian North-West Steamship Co. (Ltd.), a Dominion company, has been registered in Ontario as an extra-provincial company, G. T. Marks, of Port Arthur, Ont., being its attorney.

Capt. A. Campbell, of the str. Majestic, was presented with a gold locket by the members of the Western Canadian Press Association, who were passengers on the steamer on their recent trip east.

The str. Joe Milton, of Wiarton, ran ashore on the White Shingle shoal near Tobermory, recently. The crew and passengers were saved, and the steamer was subsequently got off without material damage.

Midland, Ont., has been declared to be a port for the registration and classification of ships under the provisions of sec. 4 of the Imperial Merchant Shipping Act, and the Canadian acts amending the same.

The Dominion Government has purchased the str. Valeria from H. S. Folger, Kingston, Ont., for use as a patrol boat on the St. Lawrence to see that buoys and other aids to navigation are in their proper positions.

The G. T. R. officials state that the Company does not propose to establish a line of steamers of its own between Goderich and U.S. ports, but will enter into traffic agreements with steamship lines from Chicago and upper lake ports.

The Dominion Fish Co.'s str. Hiram Dixon engaged in carrying freight and passengers from Owen Sound and Wiarton to Sault Ste.

Marie and other ports, was burned to the water's edge recently at Michipicoten. She was insured for \$16,000.

The str. Erin, with railway iron from Montreal to Fort William, went ashore at Farran's Point, but was got off with but slight damage; she went ashore again near Kingston, and was so badly damaged that she had to discharge her cargo and go on dry-dock for repairs.

The Farrar Transportation Co. of Collingwood, Ont., has purchased the str. New mount, built in Great Britain, and will put her on a route from Fort William to Kingston. Her dimension are: length, 254 ft.; breadth, 42 ft., depth, 23 ft. Her tonnage is 3,400 gross, but she will carry 2,000 tons on a 14 ft. draught.

The Thunder Bay Harbor Improvement Company (Ltd.) has been incorporated under the Ontario Companies' Act, with a capital of \$50,000, to construct wharves, etc., and to carry on a general navigation business at Port Arthur, Ont. The incorporators are: R. and W. Vigers, Jas. and G. F. Whalen, W. F. Langworthy, all of Port Arthur.

The Ontario court of appeal has allowed the appeal of the Dominion Elevator Co. against the decision of Justice MacMahon giving the Midland Navigation Co. damages for not supplying a cargo of grain at Fort William to the steamer Midland Queen, and has given judgment for the Elevator Co. for \$50 and costs for breach of agreement in not carrying the cargo.

The Lake Ontario Steamship Co. has been incorporated under the Ontario Companies' Act, with a capital of \$150,000, to carry on a general navigation business. The head offices are in Hamilton, and the directors are: G. Hope, W. C. Hawkins, C. A. Birge, J. Moodie and J. I. Davidson. This is the company which proposes to operate a turbine steamer between Toronto and Hamilton, capable of making the round trip in three hours.

The tug which is being built at Collingwood for the Montreal Transportation Co. will be of steel, and will be fitted with a complete electric light plant and all modern improvements. The engines will be of the triple expansion type, the cylinders being 15 in., 25½ in. and 43 in., and the stroke 36 in. Steam will be supplied by two Scotch boilers 11 feet 6 in. in length and 11 feet in diameter, carrying a pressure of 185 pounds to the square inch. The tug, it is expected, will be launched early in Oct.

The total freight passing through the Canadian and the U.S. canals at Sault Ste. Marie, in July, was 5,403,808 tons, against 5,070,496 tons in July, 1902. The figures for the Canadian canal are:

	1903.	1902.	Increase or Decrease.
April	159,763 tons	190,026 tons	31,163 tons -
May	636,747 "	314,262 "	322,485 " +
June	917,105 "	1,118,364 "	201,459 " -
July	890,338 "	523,936 "	366,402 " +
Aug.	879,420 "	659,858 "	219,562 " +
	3,483,373 tons	2,807,546 tons	675,827 tons +
	+ increase, - decrease.		

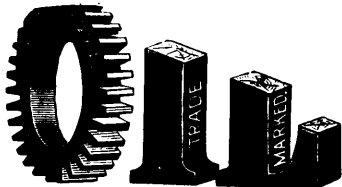
Arrangements have been made by the Grand Trunk Ry. to inaugurate a car ferry service from Grand Haven to Milwaukee, Wis. The ferry-boat Grand Haven, a new vessel launched at the Craig shipyards, will be put into service, in addition to two other boats, and it is expected to put two more large boats into service within a year. It is stated that the Grand Trunk was induced to this move by the experience of the Ann Arbor and the Pere Marquette roads, which found that cars could be ferried over Lake Michigan quicker and cheaper than they could be switched through Chicago.—Railway and Engineering Review.

The Canada Atlantic Ry. Co. proposes establishing a line of passenger steamers between Depot Harbor, Ont., and Chicago and Duluth, in connection with its present line of freight steamers. E. J. Chamberlain, General Manager, recently said in reference to the proposal: "We have difficulty in keeping people off our grain boats now. At Chicago and other cities they come down to our docks and dump their trunks, under the impression that we operate passenger steamers. We will not take action in the matter immediately, but as soon as the financial arrangements are perfected and the road can get the money, the project will be seriously considered."

The Midland King, the latest addition to the Midland Navigation Co.'s fleet, is fitted with triple expansion engines having cylinders 20 in., 33½ in. and 54 in., by a 40 in. stroke. The two boilers are of Scotch pattern, 14 ft. by 12 ft. The working pressure is 180 pounds, and they will be capable of developing 1,500 horse-power. The steamer is also supplied with a complete up-to-date lighting plant and for the handling of freight, and is fitted with three cranes at as many hatches, the object being to permit of unloading and loading concurrently. On the forward main deck, besides the officers' quarters, is a suite of rooms comprising a parlor,

two staterooms and a bathroom, all finished in quartered oak.

The str. Pittsburg, better known as the Carmona, belonging to the Georgian Bay Navigation Co., was burned to the water's edge at Sandwich recently. The steamer, which was valued at \$60,000, is a total loss, and it is reported that the underwriters in London, Eng., where she was insured for £10,000, will hold an investigation. The steamer was built at Port Robinson in 1871, and sailed the lakes for a number of years as the Manitoba. Then her name was changed to Carmona, and she was brought to the upper lakes; for a couple of seasons plied out



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EVERYTHING UP-TO-DATE.

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Catalogue and Price List sent on application.

Holt, Renfrew & Co.
TORONTO and QUEBEC.

MANITOBA

The Government Crop Bulletin issued Dec. 12th, 1902, gives the following statistics for the year:

CROPS.		
ACRES.	AVRAGE YIELD.	TOTAL.
Wheat..... 2,039,940	26. bus.	53,077,267 bus.
Oats..... 725,060	47.5 "	34,478,160 "
Barley..... 329,790	35.9 "	11,848,422 "
Potatoes... 22,005	157. "	3,459,325 "

STOCK.

Number of stock in the Province, July 1, 1902:
Horses..... 146,591 Sheep..... 20,518
Cattle..... 282,343 Pigs..... 95,598
Value of Dairy Products..... \$926,314

15,000 FARM LABORERS

Came from Eastern Canada to assist in the harvest fields of Manitoba in 1902—and the demand was not fully satisfied.

MANITOBA FARMERS ARE PROSPEROUS.

Farmers erected, this year, farm buildings valued at one and one-half million dollars.

MANITOBA LANDS—For sale by the Provincial Government. Over 1,000,000 acres of choice land in all parts of the Province are now offered at from \$2.50 to \$5.50 per acre. Payments extend over nine years. **Special Attention** is directed to 500,000 acres along the line of the Manitoba and Northwestern Railway at \$3.50 and \$4.00 per acre.

FREE HOMESTEADS are still available in four parts of the Province.

For full information, maps, etc., FREE, address JAMES HARTNEY, Manitoba Emigration Agt., 77 York Street, Toronto, Ont.
Or J. J. GOLDEN, Manitoba Emigration Agt., 617 Main St., Winnipeg, Man.



LOW COLONIST RATES TO NORTH-WEST AND CALIFORNIA

Special Low Rates Homeseekers' Excursions, Sept. 15th, Oct. 20th

To all points in Louisiana and Mississippi, \$18.00 from Chicago.

To all Texas points on the Southern Pac. Ry. at proportionate rates.

The Local Agent is asked to note Cheap Rates to all the North-West, also to California from Sept. 15 to Nov. 30, nearly \$20 less than regular second-class fare and ordinary Pullman service from Chicago or Cincinnati. Special folders for St. Paul, Minneapolis, California and West, and regular folders with it all in. July folder is a good one. Get it!

G. B. WYLLIE,

Canadian Passenger Agent,

210 ELLICOTT SQUARE, BUFFALO, N.Y.

RICHELIEU AND ONTARIO NAVIGATION COMPANY.

"Niagara to the Sea."

MAIL LINE STEAMERS

(Palatial Steel Steamers)

Leave Toronto (from June 1st to 13th) Mondays, Wednesdays and Saturdays; thereafter daily, except Sunday, for Rochester, Kingston, Clayton, 1,000 Island Points and intermediate ports (running all the Rapids) to Montreal, where connection is made with steamers for Quebec, Murray Bay, Tadousac and points on the famous Saguenay River.

HAMILTON LINE

(Fine Iron Steamers)

Plying between Hamilton, Toronto, Montreal and intermediate ports, passing through the picturesque scenery of the Bay of Quinte, 1,000 Islands and shooting the Rapids.

Service: Tri-weekly, Tuesday, Thursday and Saturday from Hamilton and Toronto. Monday, Wednesday and Friday from Montreal.

For further particulars apply to

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2 King Street E., Toronto,
JOS. F. DOLAN, C.P. & T.A.,
128 St. James Street, Montreal;
or,
THOS. HENRY, Traffic Manager,
Montreal.

NEW YORK CENTRAL

& HUDSON RIVER R. R.

THE FOUR-TRACK TRUNK LINE.

In connection with the C.P.R., T.H. & B. and M.C. Railroads operate the quickest and best trains between Toronto, Hamilton and New York.

Day Train leaves Toronto 9.45 a.m., Hamilton 10.45 a.m., connects with the "EMPIRE STATE EXPRESS" Arrives New York 10 p.m.

Night Train with sleeping car and dining car leaves Toronto 5.20 p.m., Hamilton 6.20 p.m., arrives New York 7.50 next morning.

ONLY ONE

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

Connections at Lewiston with the Niagara River Line, and at Suspension Bridge with the Grand Trunk Railway.

L. DRAGO,

Canadian Passenger Agent, 69½ Yonge Street, TORONTO, ONT.

of Owen Sound to Sault Ste. Marie in connection with the C.P.R. Later she was taken to Lake Ontario and ran out of Toronto. Finally she was bought by W. J. Brown, of Detroit, Mich., and placed in the excursion business between Toledo, Detroit and Sault Ste. Marie. The first year the venture proved very profitable, and the steamer was brought to Collingwood in 1900, lengthened and practically rebuilt at a cost of between \$25,000 and \$30,000. In 1901 the venture was not so profitable, and last spring she was sold at marshal's sale, bid in by the Detroit Savings Bank, and turned over to the Georgian Bay Navigation Co. for operation.

Manitoba and Northwest Territories.

The str. Josie, belonging to Capt. Deacon, Prince Albert, Sask., is undergoing a thorough overhaul.

H. H. Ross, of Medicine Hat, Assa., has contracted to build two steamers for navigation on the Saskatchewan river between Medicine Hat and Prince Albert, Sask. He built one steamer this season, which was despatched to Prince Albert.

The str. Pathfinder was launched at Prince Albert, Sask., recently by Capt. Deacon. The dimensions of the new steamer are: length, 70 ft.; breadth, 12 ft.; draught, 9 inches. For some time the Pathfinder will be utilized as a tow boat, but will eventually be used for excursion traffic and a general carrying trade on the river.

Capt. F. W. Coates and R. J. Mosher, hitherto associated with the Rainy River Navigation Co., Rat Portage, Ont., have organized a company to operate a line of steamers between Prince Albert, Sask., and Edmonton, Alta. The company will build the hull of a steamer at Prince Albert during the winter and will have the engines constructed at Toronto.

Capt. G. Phillips, of Rat Portage, Ont., Dominion Government steamboat inspector for Western Ontario, Manitoba and the Northwest Territories, has just returned to Edmonton, Alta., after a trip of inspection of the vessels on the Mackenzie river, Peace river and other adjoining waters. He travelled over 5,000 miles and inspected the 12 steamers and other vessels used in navigating these waters.

A new steamer named The Prospector has been launched at Edmonton, Alta., for Twiss Bros. The Prospector is a stern-wheel, wooden steamer, having the following dimensions: length, 70 ft.; breadth, 12 ft.; depth, 4 ft. The wheel is 8 ft. wide and 9 ft. 6 in. diameter, and is driven by a 32-h.p. engine. With 10 tons of coal on board the steamer will have a draught of 12 in., which will be increased one inch for each additional ton. The steamer will provide for a number of passengers, for whose accommodation there is a sitting room 16 ft. by 12 ft.

B.C. and Pacific Coast Shipping.

The Puget Sound Navigation Co. proposes having built a new steamer, 250 ft. long, to run between Victoria and Puget Sound ports.

The Pacific Coast Steamship Co.'s str. Ramona ran into the str. New England at Vancouver, Sept. 2, doing damage to the extent of several thousand dollars.

A number of boats and barges are being built at Victoria for the Pacific Cable Board's cable str. Iris; for use in connection with the cable repair work at Bamfield Creek and Fanning Island.

The steamers of the Dollar Steamship Co., of Victoria, are to be placed on a regular route from Puget Sound ports to Hong Kong, Shanghai and other Oriental ports, returning via San Francisco.

Press reports to the effect that the C.P.R. str. Princess Victoria will extend her run so as to include Tacoma, Wash., are denied by the officials at Vancouver. The steamer will continue on the Vancouver-Victoria run and will, as soon as trade warrants, make two trips a day each way.

The Pacific Coast Steamship Co. is reported to be negotiating with the C.P.R. for the purchase of the str. Charmer, now running between Vancouver and Victoria. If the purchase is made it is proposed to place her and the Ramona on a run between Vancouver and Seattle, Wash., giving a daily service.

Press reports from Seattle, Wash., state that the C.P.R. has in contemplation the starting of a line of steamers to run from Vancouver to San Francisco, calling at Victoria, and that the Princess Victoria will be the pioneer steamer. The Princess Victoria is now on the Vancouver-Victoria run.

The str. Princess Beatrice for the C.P.R. Pacific coast service, was launched at Esquimalt, B.C., Sept. 9. The Princess Beatrice is the largest steamer ever constructed in a B.C. yard, her dimensions being: length, 212 ft.; breadth, 36 ft.; depth, 25 ft.; tonnage, — gross, 1,500 tons, net, 900 tons. The hull is of wood, and she is to be fitted with two smoke stacks and one pole mast. Her engines are of the triple expansion type, and are expected to develop 4,000 h.p. She will be fitted to carry 100 first-class passengers and a large number of intermediate passengers, and 700 tons of cargo. The Princess Beatrice is intended for the run between Vancouver and Alaskan ports.

The initial trip of the C.P.R. str. Princess Victoria, from Victoria to Vancouver, was made recently, the time occupied being 3 h. 48 min., beating the previous record of 4 h. 1 m., held by the Moana, of the Canadian-Australian line. The C.P.R. entertained a company of representative men on board for the trip, and after luncheon Capt. Troup gave some particulars regarding the history of the company's connection with the route. He said in 1892 the C.P.R. had tried to build, and did build, a steamer for the people of Victoria for service with Vancouver. Then the company received a round robin from the merchants of Victoria threatening dire consequences if the steamer was placed on the route, and yet the people of Victoria wondered why the C.P.R. had not been kinder to them. After that experience Sir Wm. Van Horne, the then President, would have nothing further to do with a service to Victoria. Then, in 1898, the company decided to put a car ferry service on between the mainland and Victoria, but the fact that the principal shareholders of the C.P.N. Co. being Victoria people, the company refrained from doing so. Then in 1901 the C.P.R. acquired the C.P.N. stock *holus bolus*. Then Sir Thos. Shaughnessy decided that the service between Victoria and Vancouver was not sufficient, and the present steamer was decided upon. The steamer, so far as her internal fittings and decorations are concerned, is not completed, but so much has been done, that ample accommodation will be provided for the regular traffic. The work of completing the decorations will be carried on as quickly as possible, the steamer meanwhile keeping up the regular daily service.

The C.P.R. has arranged to operate a line of steamers between St. John, N.B., and Annapolis, the first sailings to be early in Dec.

The Allan Line is having built in Belfast a new steamer, to be ready in Aug., 1904. She will be a seventeen knot steamer, 12,000 tons gross, and have accommodation for 250 saloon, 250 second cabin, and 1,000 steerage passengers.

The high cost of repairs to vessels in Canada is given as the reason for the removal, after temporary repairs had been made, of the str. Manchester Trader to Great Britain, for complete repairs. The Manchester Trader had been ashore near Quebec.

One of the steamship companies in which Sir Chris. Furness is interested is reported to be considering the possibilities of establishing a line of steamers to Hudson's Bay. The company, it is reported, would utilize on the new line steamers that are out of date on its Atlantic lines.

The Lacoste ship brake was given a test at Montreal Sept. 10, for the benefit of the officers of the British and French men-of-war in port. The test was a successful one, and the two Admirals stated that the invention would be brought before the notice of their respective governments.

The C.P.R. str. Empress of India, on a recent trip to Hong Kong, ran down and sunk a Chinese cruiser. The C.P.R. liner, which was somewhat damaged by the collision, rescued 170 of the crew of the warship. It was estimated that the repairs to the Empress of India would cost over \$20,000.

A subsidy of \$133,333.33 a year for 10 years has been voted by the Dominion Parliament to establish a regular steamship service between Canada and France. It is proposed to make 24 round trips a year, and that four steamers, each of 4,000 tons capacity, will be put on the route. The service will be commenced April 1, 1904.

A press report from Liverpool, Eng., states that the White Star, Dominion and American Lines, controlled by the International Mercantile Marine Co., will shortly cease to be operated as independent lines. The amalgamation will be under the White Star flag. The American line runs its steamers from New York into Southampton, and the other two have their British terminal at Liverpool, operating from New York, Boston, and Montreal and Halifax.

The committee of Lloyd's Register of Shipping has issued its new rules for the building and classification of steel, wood and composite yachts. To aid them in revising the rules the committee invited suggestions from yacht builders in Canada and the U.S., as well as from Great Britain, etc. A new scantling basis has been adopted for all types of yachts in which the length of the bilge diagonally has been introduced, in order to insure that the finer yachts shall have a smaller scantling than those of the fuller form. Not only has the basis of the yacht rules been modified, but considerable additions and extensions have been made both in regard to the details of requirements as well as in the tables for the various descriptions. For survey and classification of yachts the society's surveyors number 300, and are stationed at the principal ports in England and abroad.

Among the Express Companies.

A. K. Cox has been appointed agent Western Ex. Co. at Houghton, Mich., succeeding W. D. McIntosh, promoted.

H. Sanford, vice-President of the Adam's Express Co., died at Bridgeport, Conn., on Sept. 6, from the effects of a stroke of apoplexy which he suffered while at his summer home at Newcastle, Ont.

W. D. McIntosh, heretofore agent Western Ex. Co. at Houghton, Mich., has been appointed route agent in charge of offices on Duluth, South Shore and Atlantic Ry., and on the Minneapolis, St. Paul and Sault Ste. Marie Ry., east of St. Paul, Minn., succeeding T. E. Foard, who resumes the agency at Sault Ste. Marie, Mich. Office, Marquette, Mich.

Speaking of the B.C. Ex. Co., the Express Gazette says, the present company was established in 1864 and from that date to 1871 was known as "Barnard's Cariboo Express." The headquarters for the stages from 1871 to 1884 were at Yale, at that time the head of navigation on the Fraser river for steamers from Victoria. Reconstruction of a bridge across the Thompson river at Ashcroft being completed in 1886, it was selected as a desirable point for stage headquarters. In 1871 the name was changed to the "British Columbia Express Company." It is probably the oldest and longest stage line in operation on the continent of North America. The entire distance of the road is 287½ miles, or 575 miles for the round trip from Ashcroft to Barkerville and back. The stage line requires 80 head of horses to operate it, and 50 rigs; seven or eight drivers are required to meet the traffic demands. The record time on the trip was made a year or two ago by a mem-

ber of the Provincial Government then in power, who, with special stages and drivers, made the round trip and back in 74 hours' actual travelling. In this time 575 miles were covered, and the record has never yet been beaten. The company runs a number of branch stage lines also, such as the Lillooet, Ashcroft Road, the Dog Creek, and other lines upon which a regular stage line is operated. Only H.M. mails, passengers and express freight are carried by the B.C. Express Company.

Telegraph and Cable Matters.

The Commercial Cable Co. has declared a quarterly dividend of 2%, payable in New York Oct. 1.

The cost of operating the British telegraph service for 1902-3 was £4,317,371. This was £593,506 more than the receipts. If interest

on the £10,867,644 spent in acquiring the service was added, the deficit would be £892,305.

The number of telegraph offices in Canada on Aug. 1 was stated to be 2,608, distributed as follows: British Columbia, 109; Manitoba, 167; New Brunswick, 129; Northwest Territories, 112; Nova Scotia, 184; Ontario, 1,211; Quebec, 696.

A cable 3,000 ft. in length has been laid between Brier island and Westport, N.S., and gives telegraphic and telephonic connection between the island and the mainland. The shore connection is maintained over the Westport and Digby telephone line.

The Western Union Telegraph Co. proposes to operate a district messenger service in connection with its lines, and free call boxes will be fitted up in offices, etc. The service will be put in operation in connection with the company's office at Halifax, N.S.

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Mica Fire-Proof Coverings

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Boilers, Flues, Furnaces, Heaters, Steam and Hot and Cold Water Pipes.

COLD STORAGE INSULATION
The Highest Non-Conductor in the World.

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MICA COVERING, is a Canadian invention, and a purely Canadian industry, as all the mica is procured from Canadian mines, and the material used in the manufacture of the Covering is made in Canada.

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The Direct Line

To New York, Philadelphia, Atlantic City, Baltimore, Washington and the South. The Grand Trunk Railway in connection with the

LEIGH VALLEY RAILROAD

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

ROUTE OF THE

"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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Asst. Gen. Pass. Ag't, New York. Gen. Pass. Ag't, New York.
G. R. CHESBROUGH,
West'n Pass. Ag't, Buffalo, N. Y.

When You Stop to Think

How much the success of your business and the comfort of your household depend on communication with others, you will appreciate the fact that telephone service is worth a great deal more than it costs.

METALLIC CIRCUIT SERVICE
EFFICIENT, RAPID, CONSTANT.

THE BELL TELEPHONE COMPANY
OF CANADA.

STEEL, PEECH & TOZER, LIMITED,

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A beautiful new hotel just built by the Canadian Pacific Ry., in connection with their new passenger station. The building occupies an entire block and the style of architecture is that of the Chateau period of the French Renaissance. The hotel faces the Viger Gardens, and is thoroughly up-to-date in all its appointments. American tourists will find the Place Viger a most delightful hotel home.

RATES: \$3 UPWARDS.

Special arrangements with large parties and those making prolonged stays. For further information address, Manager, Place Viger Hotel, Montreal.

IMPERIAL BANK OF CANADA.

Capital authorized - - - \$4,000,000
Capital paid up - - - 2,983,896
Rest - - - 2,636,312

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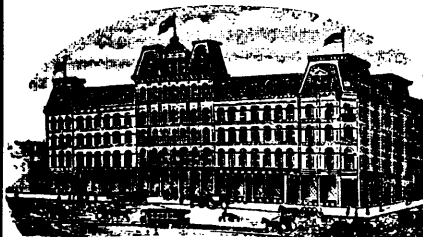
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The International convention on wireless telegraphy held recently in Berlin, Germany, declared that "coast stations are obliged to receive and transmit telegrams going or returning from ships without distinction as to the system of wireless telegraphy employed by the ships."

The act providing for the establishment of a special news cable service between Canada and Great Britain has been passed by the Dominion Parliament. A suggestion is made that a special cable will in time be laid so that there will be Canadian controlled cable connection with Great Britain.

It is reported that the terminal charges both in Canada and Australia in connection with the all-British trans-Pacific cable are too high, and should be reduced. Lord Strathcona interviewed Sir Wm. Mulock, the Postmaster-General, in connection with the matter, with a view of having Canada make representations to the Pacific Cable Board.

The U.S. Government proposes to lay 1,050 miles of cable between Seattle, Wash., and Juneau, Alaska; 206 miles of cable from Sitka to Juneau, and 150 miles of cable to connect the Sitka line with the Seattle-Juneau cable. The work is to be completed this fall. This will bring up the mileage of telegraph lines and cables in Alaska to over 3,000 miles.

In the British House of Commons, recently, the Chancellor of the Exchequer said he had ascertained that the Pacific Cable Boards' accounts showed a total net expenditure, charged to the Exchequer grant up to March 31, 1902, of £91,437 4s. 11d., which covered interest and also the working expenses of the cable so far as they exceeded the traffic receipts. The charge covered nothing for sinking fund, as the first instalment of the annuity for repayment of the money borrowed for construction did not become payable till December. The share due from the contributing colonies in respect of the expenditure up to March 31 was £65,374 5s. 4d., payment of which would be claimed from the Colonies as soon as the Board's accounts were received.

As early as 1840 an eminent electrician had published his opinion that a submarine cable from England to France was a feasible undertaking. The first such cable was laid in 1842 from Governor's Island to the Battery in New York. In 1850 one was laid across the English Channel, and in 1851 it was replaced by a greatly improved service. In 1853, many miles of sub-marine cable were laid, and the feasibility of transatlantic telegraphy became a matter of capital and enterprise. For these the world is indebted to the indomitable efforts of the late Cyrus W. Field, the first message having been transmitted in 1858. As in other phases of the march of scientific improvement, the "fairy tales" of ocean telegraphy have long since become the "commonest commonplace."—Globe.

Referring to the recent press reports that the Western Union Telegraph Co. was negotiating with a view to absorbing the Great North-Western Telegraph Co., H. P. Dwight, President, has made the following official statement: "I beg to say that no such action has been contemplated by either of these companies. The recent visit of Western Union officials to Canada was solely for the purpose of consultation with reference to improvements in the service in the mutual interests of the companies, between which there is an exclusive connection. The Great North-Western Telegraph Company, while intimately connected with the Western Union Telegraph Company in its business relations, will remain, as heretofore, a distinctly Canadian institution."

Signor Marconi stated, on his arrival in Montreal, Sept. 11, that there were no insuperable difficulties in the way of making his system a commercial success. There had

been a great deal of criticism and some opponents had tried to belittle his invention, claiming priority, but the only thing that remained was to make arrangements with the several countries which have made contracts in order to get it working on a profitable basis. He expressed the hope that his stations across Canada would be soon under way. He also confirmed the report that his company had signed a contract with the British Admiralty, whereby the Marconi system will be installed on all the ships of His Majesty's navy. Signor Marconi afterwards went to Glace Bay, N.S.

General Telephone Matters.

The Bell Telephone Co. has installed long distance lines to St. Bruno, St. Hubert, Ste. Julie and St. Anicet, Que.

The Bell Telephone Co. has made arrangements with the River du Lievre, Que., Telephone Co., for an interchange of communications.

The Bell Telephone Co. has agreed to interchange communications with the local telephone system serving East Templeton, Wallingford, Blackburn, and Perkins Mills, Que.

The Bell Telephone Co. has extended its long distance lines in Manitoba, so that they now include Manitou, Pilot Mound, Darlingford, and La Riviere on the Pembina branch of the C.P.R.

The Bell Telephone Co. has completed a line from Buckingham, Que., through the townships of Buckingham, Portland and Bowman to High Falls, thus placing that district in communication with Ottawa.

Some citizens of Hamilton, Ont., are not satisfied with the new contract entered into between the city council and the Bell Telephone Co., and propose to take action to have the by-law approving the agreement declared invalid.

Seabright, on St. Margaret's Bay, N.S., has been placed in telephonic communication with Halifax and the rest of the province. The six mile line has been constructed by public subscription, and has been carried through Tantallon and French village.

A number of residents in the vicinity of Gracefield and the Desert, Que., have formed a co-operative telephone exchange. Each subscriber buys his own instrument, and aids in putting up the poles and wires, and pays \$3.50 a year to a man to look after the making of repairs.

An effort is being made in St. John, N.B., to obtain 1,000 subscribers to a proposed new telephone exchange. The promoters of the concern propose to charge an average rate of \$22 a year. The present rates charged by the New Brunswick Telephone Co. in the city are \$40 for business houses and \$23 for residences.

The Chatham, Ont., city council proposes to give the Bell Telephone Co. an exclusive franchise for five years at \$500 a year, the company to furnish the city with free 'phones, give half rates to hospitals, charge no more rental to subscribers than is paid in cities of equal size and importance in Canada, and give subscribers the right to use any other subscriber's 'phone without charge.

The Bell Telephone Co. has not less than twenty-seven miles of conduit in Montreal containing 648,266 ft. of duct, besides another 100,000 ft. of duct in the branches leading into lanes and other points of distribution. The cost of laying a conduit is five times as much as the cost of poles and wires, but the cost of maintenance is 15% that of overhead lines, owing to the immunity from storms and other sources of danger existing above ground.

The Bell Telephone Co. has submitted a further offer to the Ottawa city council for an

exclusive franchise. The rate for business houses is to be \$45, and for residences \$23, and the company will accommodate the wires of the fire alarm telegraph on its poles and supply 50 telephones to the city free of charge. This reduction of \$5 in rates of house telephones and the free service supplied the city buildings, the company proposes to offer in lieu of an annual cash payment to the city treasury, which heretofore has been \$1,500 a year. The proposed term of the contract is five years. The city council has not come to any decision regarding the proposal.

The Bell Telephone Co. purposes making a large expenditure in Montreal in improvements. The new building in course of erection on Hospital st. will, says the Montreal Witness, receive the complete new apparatus and equipment and common battery type known as the main exchange district. The ultimate capacity of the switchboard will be 9,600 lines. In addition to providing for local subscribers, the apparatus will provide a new switchboard for long distance service. In the portion of the city known as the East exchange a new building will be provided, and this is now in course of construction on St. Andre st., near St. Catherine st. The switchboard in this exchange will also have an ultimate capacity of 9,600 lines. It is estimated that it will require at least eighteen months to construct these boards. The company will have to change every subscriber's telephone set to conform with the new apparatus. This work will be followed by similar changes and improvements in the other city exchange districts. There are at present connected with the telephone system in Montreal nearly 14,000 lines, and provisions are being made in the new system for an expansion to 50,000. Switchboard provision will also be made for 100 long distance operators. At the present time about 20 operators are engaged in this special line of work. The work is being done under the supervision of T. J. Baylis, electrical engineer of the company, and the apparatus is being manufactured by the Northern Electrical Manufacturing Co., of Montreal, and the aerial and underground cables by the Wire and Cable Co. of Montreal.

The Bell Telephone Co. in Toronto.

The Ontario Court of Appeal has given judgment in the case of the city of Toronto against the Bell Telephone Co. The original action was tried in 1902 before Justice Street, who decided that the Company "have no rights to carry any poles or any wires (whether such wires be above or under ground) along any street in the city of Toronto without first obtaining the consent of the municipal council." The Company appealed, and the present decision is a reversal of that judgment. Chief Justice Moss and Justices Osler, Macleannan and Garrow held unanimously that Justice Street was in error in regard to the powers of the Dominion Parliament; that a work or undertaking such as that of the defendants fell under clause 29 of sec. 91 of the British North America Act and that Parliament had jurisdiction to give the powers which it purported to give by 43 Vict., ch. 67, and properly exercised those powers. The court also held (Justice Macleannan dissenting) that the Provincial statute had no qualifying effect—that the powers given by the Dominion could not be affected by Provincial legislation. Justice Macleannan said that the Dominion Parliament might have contented itself by merely incorporating the Company and leaving them to apply to the different Provinces for the right to erect their lines. Parliament went further and gave the Company absolute power to interfere with property and civil rights. The Company, however, apparently not certain of their position, applied to the Legislature, and by this

The Purchasing Agents' Guide

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Canadian Ry. Accident Ins. Co.	Ottawa, Ont.	James Cooper	Montreal.	The Saxon Engine Works, Chemnitz, Germany	
Travelers' Insurance Co.	Montreal.	Door Signs		Matches	
Aerated Waters		Acton Burrows Co.	Toronto.	The Hudson's Bay Company	
E. L. Drewry	Winnipeg.	Dry Goods		Milepost Numbers	
Air Brakes & Fittings		The Hudson's Bay Company		Acton Burrows Co.	Toronto.
Westinghouse Mfg. Co.	Hamilton, Ont.	Electric Car Route Signs		Mohair	
Ales		Acton Burrows Co.	Toronto.	The Hudson's Bay Company	
E. L. Drewry	Winnipeg.	Electric Cranes		Nails, Wire	
Anchors		Dominion Bridge Co.	Montreal.	Dominion Wire Manufacturing Co.	Montreal.
Rice Lewis & Son	Toronto.	W. H. C. Mussen & Co.	Montreal.	Numbers	
Axles		Enameled Iron Signs		Acton Burrows Co.	Toronto.
James Hutton & Co.	Montreal.	Acton Burrows Co.	Toronto.	Nuts, Cold Pressed	
Jas. W. Pyke & Co.	Montreal.	Engines, Stationary & Marine		John Morrow Machine Screw Co. (Ltd.), Ingersoll	
Rhodes, Curry & Co.	Amherst, N.S.	Polson Iron Works	Toronto.	Oakum	
Babbitt		Engraving		Rice Lewis & Son	Toronto.
Rice Lewis & Son	Toronto.	Acton Burrows Co.	Toronto.	The Hudson's Bay Company	
Blankets & Bedding		Toronto Engraving Co.	Toronto.	Oils	
The Hudson's Bay Company		Expanded Metal		Galena-Signal Oil Co., Franklin, Pa., & Toronto.	
Block & Tackle		Expanded Metal and Fire-Proofing Co.	Toronto.	The Queen City Oil Company	Toronto.
Dominion Wire Rope Co.	Montreal.	Express Office Signs		Office Signs	
Rice Lewis & Son	Toronto.	Acton Burrows Co.	Toronto.	Acton Burrows Co.	Toronto.
Boat Fittings & Hardware		Fencing		Packing	
Rice Lewis & Son	Toronto.	Canadian Steel and Wire Co.	Hamilton, Ont.	The N. L. Piper Railway Supply Co.	Toronto.
Boiler Covering		Dominion Wire Manufacturing Co.	Montreal.	Pinch Bars	
Mica Boiler Covering Co.	Montreal.	Page Wire Fence Co.	Walkerville, Ont.	The Hiram L. Piper Co.	Montreal.
Boilers		Fire-Proofing		The N. L. Piper Railway Supply Co.	Toronto.
Polson Iron Works	Toronto.	Expanded Metal and Fire-Proofing Co.	Toronto.	Pipe Covering	
Boiler Tubes		Rice Lewis & Son	Toronto.	Mica Boiler Covering Co.	Montreal.
B. J. Coghlin & Co.	Montreal.	The Hudson's Bay Company		Plushes	
Jas. W. Pyke & Co.	Montreal.	Flour		The Hudson's Bay Company	
Bolsters		The Hudson's Bay Company		Porter	
Simplex Railway Appliance Co.	Montreal.	The Ogilvie Flour Mills Co.	Montreal.	E. L. Drewry	Winnipeg.
Bolts		Foghorns		Rice Lewis & Son	Toronto.
Rice Lewis & Son	Toronto.	Rice Lewis & Son	Toronto.	Printing	
Bolts, Boiler Patch		The Hudson's Bay Company		The Hunter, Rose Co.	Toronto.
John Morrow Machine Screw Co. (Ltd.), Ingersoll		Gates		The Mail Job Printing Company	Toronto.
Brake Beams		Page Wire Fence Co.	Walkerville, Ont.	Pumps	
Simplex Railway Appliance Co.	Montreal.	General Supplies		Rice Lewis & Son	Toronto.
Brass and Copper Cloth		The Hudson's Bay Company		Railway Supplies	
The B. Greening Co.	Hamilton, Ont.	Grain Elevators		The N. L. Piper Railway Supply Co.	Toronto.
Brass Castings		John S. Metcalfe Co.	Chicago, Ill.	Rails (New)	
St. Thomas Brass Co.	St. Thomas, Ont.	Groceries		James Cooper	Montreal.
Bridge Numbers		The Hudson's Bay Company		Drummond, McCall & Co.	Montreal.
Acton Burrows Co.	Toronto.	Hardware		J. J. Gartshore	Toronto.
Bridges		Rice Lewis & Son	Toronto.	Rails (for relaying)	
Dominion Bridge Co.	Montreal.	The Hudson's Bay Company		James Cooper	Montreal.
Buoy Lighting		N. L. Piper Railway Supply Co.	Toronto.	J. J. Gartshore	Toronto.
Safety Car Heating and Lighting Co., New York		Hose		T. A. Morrison & Co.	Montreal.
Cables, Electric and Feeder		Rice Lewis & Son	Toronto.	W. H. C. Mussen & Co.	Montreal.
E. F. Phillips Electrical Works, Ltd., Montreal.		Illustrations		Rice Lewis & Son	Toronto.
The Wire and Cable Co.	Montreal.	Acton Burrows Co.	Toronto.	Jas. W. Pyke & Co.	Montreal.
Car Couplers		Interlocking Plants		Roof Trusses	
Latrobe Steel and Coupler Co., Philadelphia, Pa.		Montreal Steel Co.	Montreal.	Dominion Bridge Co.	Montreal.
Car Heating		Iron		Rope	
Safety Car Heating and Lighting Co., New York		Rice Lewis & Son	Toronto.	Rice Lewis & Son	Toronto.
Car Jacks		Iron Signs		The Hudson's Bay Company	
James Cooper	Montreal.	Acton Burrows Co.	Toronto.	Screws, Milled Machine	
W. H. C. Mussen & Co.	Montreal.	Japans		John Morrow Machine Screw Co. (Ltd.), Ingersoll	
Car Lighting		McCaskill, Dougall & Co.	Montreal.	Semaphore Arms	
Safety Car Heating and Lighting Co., New York		Journal Bearings		Acton Burrows Co.	Toronto.
Carpets		Jas. W. Pyke & Co.	Montreal.	Semaphores	
The Hudson's Bay Company		St. Thomas Brass Co.	St. Thomas, Ont.	The Hiram L. Piper Co.	Montreal.
Cars		Lager Beer, &c.		The N. L. Piper Railway Supply Co.	Toronto.
Rhodes, Curry & Co.	Amherst, N.S.	E. L. Drewry	Winnipeg.	Shafting	
Car Wheels		Lamps & Lanterns		Rice Lewis & Son	Toronto.
Jas. W. Pyke & Co.	Montreal.	The Hudson's Bay Company		Shipbuilders' Tools & Supplies	
Rhodes, Curry & Co.	Amherst, N.S.	Rice Lewis & Son	Toronto.	Rice Lewis & Son	Toronto.
Castings		The Hiram L. Piper Co.	Montreal.	Ship Lamps	
Montreal Steel Co.	Montreal.	N. L. Piper Railway Supply Co.	Toronto.	The Hiram L. Piper Co.	Montreal.
Rhodes, Curry & Co.	Amherst, N.S.	Launches		The N. L. Piper Railway Supply Co.	Toronto.
Cement Machinery		Polson Iron Works	Toronto.	Ships	
Jas. W. Pyke & Co.	Montreal.	Life Insurance		Polson Iron Works	Toronto.
Chains		Travelers' Insurance Co.	Montreal.	Shovels	
Rice Lewis & Son	Toronto.	Lights, Contractors and Wrecking		James Cooper	Montreal.
Coal Haulage Ropes		James Cooper	Montreal.	The Hudson's Bay Company	
The B. Greening Co.	Hamilton, Ont.	W. H. C. Mussen & Co.	Montreal.	Rice Lewis & Son	Toronto.
Concrete Mixers		Linoleum and Floor Coverings		Side Bearings	
W. H. C. Mussen & Co.	Montreal.	The Hudson's Bay Company		Simplex Railway Appliance Co.	Montreal.
Contractors' Plant		Locomotives (Compressed Air)		Signal House Numbers	
James Cooper	Montreal.	American Locomotive Co.	New York, N.Y.	Acton Burrows Co.	Toronto.
T. A. Morrison & Co.	Montreal.	Baldwin Locomotive Works	Philadelphia, Pa.	Signals	
W. H. C. Mussen & Co.	Montreal.	Locomotive and Machine Co. of Montreal		The Hiram L. Piper Co.	Montreal.
Cotter Pins		Locomotives (Electric)		N. L. Piper Railway Supply Co.	Toronto.
Dominion Wire Manufacturing Co.	Montreal.	American Locomotive Co.	New York, N.Y.	Signs	
Cross Arms, Top Pins & Side Blocks		Baldwin Locomotive Works	Philadelphia, Pa.	Acton Burrows Co.	Toronto.
The Firstbrook Box Co.	Toronto.	Locomotive and Machine Co. of Montreal		Snow Ploughs	
Crossing Gates		Locomotives (Reack)		Rhodes, Curry & Co.	Amherst, N.S.
The N. L. Piper Railway Supply Co.	Toronto.	American Locomotive Co.	New York, N.Y.	Spikes	
Curtains		Baldwin Locomotive Works	Philadelphia, Pa.	Rice Lewis & Son	Toronto.
The Hudson's Bay Company		Locomotive and Machine Co. of Montreal		Springs	
Cuts		Locomotives (Steam)		B. J. Coghlin & Co.	Montreal.
Acton Burrows Co.	Toronto.	American Locomotive Co.	New York, N.Y.	Montreal Steel Co.	Montreal.
Derrick Ropes		Baldwin Locomotive Works	Philadelphia, Pa.		
The B. Greening Co.	Hamilton, Ont.	Locomotive and Machine Co. of Montreal			
		W. H. C. Mussen & Co.	Montreal.		
		The Saxon Engine Works, Chemnitz, Germany.			

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