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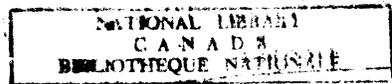
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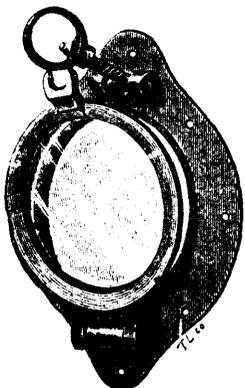
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## RAILWAY FINANCE, MEETINGS, &c.

**Atlantic & Lake Superior.**—It is said the Dominion Government is considering the advisability of leasing this line & of granting assistance for the improvement of the Paspebiac terminus.

**British Columbia Southern Ry.**—It is said that at the next session of the B.C. Legislature some of the members opposed to the Government will attack the validity of the land grant to this Co. It is contended that the Co., having received a Dominion as well as a Provincial charter, the land grant, which the Provincial charter carried with it, should in consequence of the Co. having received a dual charter, revert to the province. The B. C. S. R. Co. made such arrangements with the C.P.R. Co., as enabled the latter to proceed with the construction & completion of the Crow's Nest Pass Ry. The land grant, or a considerable portion thereof, which the original charter carried with it, went to the C.P.R. During the negotiations which were carried on between the Dominion Government & the C.P.R., amongst other concessions asked by the Government from the Co., & which were agreed to, was the alienation to the Government of 50,000 acres of coal lands. Those controlling the B. C. Southern charter & the land grant retained a considerable portion of the grant, containing what are believed to be some of the best coal lands in Kootenay. The contract with the B.C.S.R. Co. was made during the time of the Turner administration in B.C., & it is said that the succeeding administration, of which Mr. Semlin is Premier, has issued a Crown title for at least a large percentage of the land in question to the companies interested, so that it is difficult to see what can now be done in the matter, & there is no reason to fear that the companies' titles are in the slightest respect insecure, though judging by what ex-Attorney-General Martin, of B.C., has done in the past, he would not hesitate to attempt repudiation if he thought he could make any political capital by so doing. Fortunately for the sake of the province, the matter is one that, if pushed, will have to be decided by the Courts, & not by the Legislature.

**Calgary & Edmonton.**—Net earnings for Oct., \$11,108.00 against net earnings of \$8,476.18 for Oct., 1898.

**The Canada Atlantic Co.** recently sued the village of Rockland, Ont., for a declaration that the Co. was entitled to the bonus benefit granted them by the village by by-law, & was entitled to the issue of \$6,000 worth of debentures thereunder, & for a mandamus. It was held by Judge Rose on the evidence, that the railway was not built & completed to the village within the two years required by the by-law, & the action was dismissed with costs, with a stay for 30 days.

**Canadian Pacific.**—In preparation for the 12-year's interest, due Jan. 1, on the 4% debenture stock of this Co., & on the 4% debenture Stock of the New Brunswick Ry. Co.,

the transfer books were closed Dec. 1, & will reopen Jan. 2.

C.P.R. stock has been bought steadily by investors of late. It is stated that there is now more stock in the names of Canadians than at any time in the history of the Co.

**Coast Ry. of Nova Scotia.**—T. Robertson, M.P.P., President of this Co., says there is no truth whatever in the report that the line has been sold to the Dominion Atlantic Ry.

**Dominion Atlantic** net earnings 10 months to Oct. 31, \$643,425 against \$538,564 for corresponding period.



JAMES GUTHRIE SCOTT.

Secretary & Manager of the Quebec & Lake St. John Railway & of the Great Northern Railway of Canada.

**Duluth, South Shore & Atlantic.**—President Shaughnessy, of the C.P.R., confirms the report that arrangements have been made between this subsidiary Co. & the Chicago, Milwaukee & St. Paul Ry., providing for a connecting train service between points in the mineral range section of the D., S.S. & A. line & the south. Arrangements have also been effected whereby the C., M. & St. P. trains will use certain sections of the D., S.S. & A. line, leading into Marquette, Mich., thus avoiding the necessity of a double service. D., S.S. & A. stock has advanced as a result.

**The Port Erie Ferry Ry. Co.'s** annual meeting will be held at Fort Erie, Ont., Dec. 20.

**Intercolonial & C.P.R.**—A press despatch of Nov. 11 said.—“Sir Wilfred Laurier had a long conference to-day with the Minister of Railways & General Manager Pottinger, of the I.C.R., when it is understood that the relations of the I.C.R. to the C.P.R. & the winter port question were discussed.”

**The Kaslo & Lardo-Duncan Ry. Co.** gives notice of application to the Dominion Parliament for an act to extend the times limited for the construction & completion of its works, & to authorize the Co. to convey or dispose of its railway & works. This Co. is a subsidiary of the Kootenay Ry. & Navigation Co. & will probably be merged in the latter.

**Manitoba Southwestern Colonization Ry.**—Blake, Boissevain & Co. recently announced that the coupon due Dec. 1, on this Co.'s 1st mortgage bonds, would be paid by them on & after that date in London, Eng., at the rate of 4s. 1½d. per dollar, or in New York, at the agency of the Bank of Montreal, at the option of the holders. This line is operated as a branch of the C.P.R., which Co. owns all its capital stock.

**Northern Pacific Right of Way.**—At Spokane, Wash., recently, Judge Prather rendered an oral decision in the matter of the N.P. R.'s claim to 200 ft. on each side of the track as its permanent right of way. The case involves the title to real estate, the value of which is said to aggregate millions. The claim of the Co. rests on the contention that, once granted 200 ft. on each side of its track through the public domain as right of way, no part of this property could ever be taken up or disposed of. The decision of the court is in effect that except for a strip of land actually needed for the railway's right of way, the public can acquire full title to the remainder by adverse possession, if the railway fails to make use of it. Just how much would reasonably be held to be necessary for the safe operation of trains, the court did not decide, but it held that the entire 400 ft. could not be presumed to be necessary. The Co. will appeal to the Supreme Court.

**Northern Pacific Bonds.**—Notice is given that \$98 of the general 1st mortgage \$5,000 registered bonds, or a total par value of \$4,490,000, have been drawn for the sinking fund in accordance with the requirements of the Trust Mortgage. All the outstanding bonds (both coupon & registered) issued under the mortgage have been called for redemption. The bonds so designated will be paid at 110 & accrued interest on presentation at the office of the Central Trust Co., of New York, interest to cease Jan. 1, 1900. This payment is important to stockholders & bondholders alike, to the stockholders because, the redemption being from the proceeds of land sales, there will be a large saving in fixed charges; to the bondholders because, with the retirement of these old 1st mortgage issues, the new bonds created at the time of the reorganization become substantially the only liens on the whole system, excepting only the 182 miles of the old St. Paul & Northern Pacific. In other

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The Canadian Roadmasters Association.

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NEXT ANNUAL MEETING at Montreal, Oct. 17 & 18, 1900.

### Canadian Ticket Agents' Association.

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PRESIDENT, J. N. McNamara, Walkerton, Ont.; 3rd  
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Hope, Ont.; J. W. Tierney, Arnprior, Ont.; C. C.  
Young, London, Ont.

NEXT ANNUAL MEETING at Hamilton, Ont., Oct. 10,  
1900

### Canadian Marine Engineers' Association.

HONORARY PRESIDENT, O. P. St. John, Toronto;  
PRES., H. Parker, Toronto; 1st VICE-PRES., A. J. Wood-  
ward, Toronto; and VICE-PRES., D. F. Campbell, To-  
ronto.

COUNCIL, T. W. Good, W. Harwood, R. Binch, To-  
ronto; P. J. Carr, Port Dalhousie; J. E. Kane, King-  
ston.

TREASURER, H. Brownley, Toronto; SECRETARY, S.  
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### Track Supply Association.

PRESIDENT.—F. E. Came, Montreal.  
FIRST VICE-PRESIDENT.—R. J. Davidson, Hillburn,  
N.Y.

SECOND VICE-PRESIDENT.—W. H. Frisby, Three Riv-  
ers, Mich.

HON. SECRETARY-TREASURER.—Acton Burrows, 33  
Melinda Street, Toronto.

NEXT ANNUAL MEETING at Montreal, Oct. 16, 1900.

words, the \$90,000,000 of prior lien 4% will now  
be straight 1st mortgage on all but 182 miles  
of road, & the general lien 3% a 2nd mort-  
gage. As the bonds to be retired are 6%, the  
reduction in fixed charges through the reduc-  
tion will be about \$270,000 a year. The N.P.  
has been enjoying great prosperity of late.  
Inducements were offered the old 1st mort-  
gage bondholders to exchange their obliga-  
tions for the new issue, & the bonds not re-  
tired in this way have during the last two  
years been redeemed from land sales, until  
now, a final call disposes of the whole amount.

Qu'Appelle, Long Lake & Saskatchewan.  
—Net loss in operating for Oct., \$79,49,  
against net loss of \$1,976,85 for Oct., 1898.

Quebec & Lake St. John earnings for  
Sep., \$7,255 more than for Sep., 1898.

Quebec Central gross earnings for Oct.  
\$44,924.60, against \$40,404.67 in Oct., '98;  
working expenses \$28,726.50, against \$24,-  
637.58; net earnings \$16,198.30, against  
\$15,767.09.

Gross earnings 10 months to Oct. 31 \$430,-  
325.48, against \$385,854.72; working ex-  
penses \$275,677.30, against \$253,828.21; net  
earnings \$154,648.18, against \$132,026.51.

The London, Eng., Stock Exchange com-  
mittee has ordered the Co.'s £200,000 4%  
debenture stock to be quoted in the official  
list.

The Salisbury & Harvey Ry., which runs  
from Salisbury, N.B., on the I.C.R., to Albert,  
45 miles, which has been in financial difficul-  
ties for some time, has, according to press re-  
ports, been sold, the names of A. McElwee,  
Major Catlin & J. R. McDonald, of New  
York, & M. Lodge, of Moncton, N.B., being  
mentioned as among the buyers. Mr. Mc-  
Elwee is said to be interested with others in  
mining in Albert county & in the development  
of the Shale property at Baltimore, N.B., & it  
is said to be likely that the line will be extended  
to Moncton & that a branch will be run to the  
Baltimore Shale property. (Sep., pg. 257.  
See also "Baltimore Coal & Ry. Co., Oct.,  
pg. 320.)

The Temiscouata Ry. Co.'s annual meet-  
ing was held Dec. 5, when the following were  
elected:—President, C. Riordan; Vice-Pres-  
ident, F. Grundy; General Manager, T.  
Crockett; other directors, W. Cook, J. N.  
Greenshields, A. H. Cook, J. H. Walsh;  
Secretary, D. B. Lindsay.

The United Counties Ry. has, it is said,  
been secured in the interest of the Rutland  
Ry. The U.C. extends from Sorel, Que., on  
the St. Lawrence River, via St. Hyacinthe, to  
Iberville, 66 miles, & has running powers over  
the Montreal & Atlantic Ry. (C.P.R.) from  
Yamaska to Sorel, 10 miles. Of the mileage  
owned, but 61 miles, from St. Robert Jct. to  
Iberville, is operated. Last year an extension  
of about 22 miles was built under the name of  
the East Richelieu Valley Ry., from Iberville  
to Noyan Jct., where connection is made  
with the Canada Atlantic. The U.C.R. was  
built for political purposes, & its financial  
position became so involved that it passed into  
the hands of the Bank of St. Hyacinthe. The  
Manager has recently been in England endea-  
vouring to make some arrangement in regard  
to its bonds, & since then a new company has  
been formed which is to take over the rail-  
way, with headquarters in Montreal. The  
Rutland R.R. is understood to have a major-  
ity of representatives on this board. The  
Rutland Ry. has for some months had under  
construction a line from Burlington, Vt., to

Rouse's Point, N.Y., & an extension is to be  
built at once from Alburg, Vt., under the  
name of the Rutland & Noyan, to connect  
with the U.C.R. at Noyan Jct., & to give a  
through service between Sorel & New Eng-  
land points. This is expected to augment the  
Canadian export trade by way of Boston, &  
it is said an agreement has been reached with  
the Dominion Government by which Boston  
freight originating on the Intercolonial is to  
be sent by the new route.

Wabash.—On account of increased earn-  
ings the directors have decided to pay 3% in-  
terest on the \$3,500,000, series A bonds. The  
last interest payment on them was in July,  
1896. It is expected the earnings will also  
provide for some distribution on the B bonds,  
of which \$26,000,000 are outstanding.

White Pass & Yukon receipts—3rd week in  
Oct., \$64,822; last 10 days Oct., \$8,188; 1st  
week Nov., \$11,178.

### C.P.R. Earnings & Expenses.

Gross earnings, working expenses, net  
profits and increases over 1898, from Jan. 1,  
1899.

Earnings.	Expenses.	Net Profits.	Increase.
Jan. \$1,864,570.36	\$1,247,036.50	\$617,533.86	\$101,906.27
Feb. 1,753,382.82	1,153,681.34	599,701.48	176,034.12
Mar. 2,109,667.58	1,280,772.01	828,895.57	75,662.06
Apr. 2,196,312.40	1,276,008.91	920,303.49	203,212.80
May 2,402,151.29	1,359,392.68	1,032,758.61	106,096.30
June 2,362,278.67	1,339,218.47	1,023,060.20	205,664.83
July 2,385,625.47	1,412,663.84	972,961.63	242,272.84
Aug. 2,474,076.85	1,455,205.13	1,018,871.72	135,804.84
Sept. 2,649,785.37	1,502,899.82	1,146,885.55	54,371.89
Oct. 3,084,604.55	1,673,588.61	1,411,015.94	155,170.45

\$23,282,415.36 \$13,710,467.31 \$9,571,948.05 \$1,456,196.40

Approximate earnings for Nov., \$2,941,000,  
against \$2,457,000 in Nov., 1898; increase,  
\$484,000.

### SUBSIDIARY LINES.

DULUTH, SOUTH SHORE & ATLANTIC.—  
Approximate earnings for Nov., \$217,889;  
increase over Nov., 1898, \$84,893.

Net earnings for 9 months to Sep. 30:  
\$653,458, as against \$459,761 for correspond-  
ing period.

MINERAL RANGE, HANCOCK & CALUMET.—  
Approximate earnings for Nov., \$53,490;  
increase over Nov., 1898, \$17,890.

MINNEAPOLIS, ST. PAUL & SAULT STE.  
MARIE.—Approximate earnings for Nov.,  
\$517,102; increase over Nov. 1898, \$34,536.

Net earnings for 2 months to Aug. 30,  
\$382,863, against \$236,080 for corresponding  
period.

### Canadian Pacific Railway Land Sales.

	Acres.		Amount.	
	1899	1898	1899	1898
Jan. ....	14,718	22,044	\$ 46,411.35	\$ 72,024.83
Feb. ....	13,747	20,650	43,371.00	66,399.00
Mar. ....	24,045	33,421	74,430.00	109,010.00
April. ....	36,626	43,145	116,835.00	140,276.00
May. ....	39,573	43,148	125,862.00	137,835.00
June. ....	54,225	49,203	169,234.00	160,200.00
July. ....	47,402	39,514	149,546.00	123,010.00
Aug. ....	35,214	19,448	119,705.00	63,911.00
Sept. ....	25,517	18,007	83,719.70	56,936.43
Oct. ....	30,473	17,026	99,429.09	55,570.67

\$321,540 \$305,604 \$1,019,543.14 \$986,072.93

Land Commissioner Hamilton announces  
that the Co. will offer to Manitoba farmers,  
who wish to go east this winter on the Chris-  
tmas excursion rates & succeed in selling any  
of the C.P.R. lands, \$10 for every 160 acres  
disposed of. In previous years farmers have  
been instrumental in selling the Co.'s lands &  
this year any work they do in this respect  
will receive recognition. Maps of each mun-  
cipality are being prepared for their use.

### Grand Trunk Earnings, Expenses, &c.

The following statement of earnings sup-  
plied from the Montreal office, includes the  
G.T. of Canada, the Chicago & G.T., & the  
Detroit, Grand Haven & Milwaukee Rys.:

	1899	1898	Increase	Decrease
Jan....	\$ 1,956,281	\$ 1,916,332	\$ 39,949	.....
Feb....	1,824,434	1,674,453	149,981	.....
Mar....	2,186,359	2,048,970	137,389	.....
April...	1,942,543	1,918,477	24,066	.....
May....	2,039,239	1,940,980	98,259	.....
June....	2,062,137	1,880,402	181,735	.....
July....	2,105,403	1,860,884	244,519	.....
Aug....	2,391,559	2,002,802	388,757	.....
Sept....	2,488,829	2,261,148	227,681	.....
Oct....	2,500,581	2,260,573	240,008	.....
Nov....	2,426,992	2,190,079	236,913	.....
	\$23,924,357	\$21,955,100	\$1,969,257	.....

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

GRAND TRUNK RAILWAY.

Revenue statement for Sep., 1899:

	1899	1898	Increase	Decrease
Gross receipts.....	£427,600	£383,580	£44,020	.....
Working expenses.....	253,200	228,396	24,804	.....
Net profit.....	£174,400	£155,184	£19,216	.....

Aggregate for 3 months, July 1 to Sep. 30, 1899:

	1899	1898	Increase	Decrease
Gross receipts.....	£1,180,247	£1,025,603	£154,644	.....
Working expenses.....	750,015	654,557	95,458	.....
Net profit.....	£430,232	£371,046	£59,186	.....

CHICAGO AND GRAND TRUNK RAILWAY.

Revenue statement for Sep., 1899:

	1899	1898	Increase	Decrease
Gross receipts.....	£63,800	£62,091	£1,709	.....
Working expenses.....	55,600	49,985	5,615	.....
Net profit.....	£8,200	£12,106	.....	£3,906

Aggregate for 3 months, July 1 to Sep. 30, 1899:

	1899	1898	Increase	Decrease
Gross receipts.....	£187,655	£175,203	£12,452	.....
Working expenses.....	159,472	142,635	16,837	.....
Net profit.....	£28,183	£32,568	.....	£4,385

DETROIT, GRAND HAVEN AND MILWAUKEE RY.

Revenue statement for Sep., 1899:

	1899	1898	Increase	Decrease
Gross receipts.....	£20,000	£18,946	£1,054	.....
Working expenses.....	12,400	14,445	.....	45
Net profit.....	£7,600	£6,501	£1,099	.....

Aggregate for 3 months, July 1 to Sep. 30, 1899:

	1899	1898	Increase	Decrease
Gross receipts.....	£61,304	£55,661	£5,643	.....
Working expenses.....	39,011	38,410	601	.....
Net profit.....	£22,293	£17,251	£5,042	.....

DETAILS OF G.T.R. RECEIPTS JULY 1 TO OCT. 31, 1899.

	1899.	1898.
Passengers, number.....	2,763,468	2,757,432
amount.....	£ 498,727	£ 421,485
Immigrants, number.....	3,882	5,122
amount.....	£ 3,464	£ 2,930
Mails, express, &c.....	74,219	71,506
Freight, tons.....	3,521,877	3,031,750
amount.....	£ 983,878	£ 869,617
Miscellaneous receipts.....	£ 44,383	£ 42,327
Total receipts.....	£1,604,671	£1,407,865
Increase.....	£ 196,806	.....

TRAFFIC RECEIPTS OF THE SYSTEM.

Traffic receipts, July 1 to Sept. 30.

	1899.	1898.	Increase.	Decrease.
Grand Trunk.....	£1,604,671	£1,407,865	£196,806	.....
Chicago & G.T....	258,033	238,882	19,151	.....
D., G. H. & M....	80,437	74,228	6,209	.....
Total.....	£1,943,141	£1,720,975	£222,166	.....

Alberta Railway & Coal Company.

The annual meeting was held in London, Oct. 25, when the report of the directors for the year ended June 30 was presented, as follows:—

The coal sales during the year were 184,764 tons, against 143,797 during the previous year. The cash earnings, apart from coal traffic, of the Montana Ry. were \$76,745.71, against \$64,383.77. The balance of profit, after providing for the interest on 4% prior lien debenture stock, is £7,275 10s. 10d., which, with the balance of £16 9s. 8d. from last year's accounts, the auditors have certified as payable to the "A" debenture stockholders in virtue of their resolution passed April 1, 1896. The directors regret to say that owing mainly to the capital requirements of the Co. during the

year, rendered necessary through increased business, having exhausted the above balance, there is at present no money available with which to pay the "A" holders, & that to provide the necessary funds & additional working capital, it is proposed to utilize the £25,000 of 4% prior lien debenture stock remaining unsold. Since June 30 last the volume of the Co.'s business, both in coal sales & in railway traffic earnings, has been larger than during the same period of last year. The Co. has commenced to transport Crow's Nest coke to Montana for use in the smelters there. The demand for this article, which is carried by the Co. over its entire railway between Lethbridge & Great Falls, is, in the opinion of the President, very likely to increase, and if so the Co.'s traffic receipts should correspondingly improve. The irrigation works on the lands sold by the Co. & by the Lethbridge Land Co., are proceeding satisfactorily. The Canadian North West Irrigation Co. expects that the entire main canal system up to Lethbridge will be finished early in 1900. The directors are of opinion that the efforts of the Irrigation Co. towards improving & settling the lands will have a satisfactory effect on the business of the Alberta Co.

REVENUE ACCOUNT YEAR ENDED JUNE 30, 1899.

RECEIPTS.	
Balance on following accounts:	
Railway & colliery.....	£18,439 2 0
House rents & water privileges.....	719 6 5
	£19,158 8 5

EXPENDITURE.	
General expenses in Canada.....	£4,088 11 5
Expenditure in London.....	836 4 10
Taxes.....	1,108 9 4
Trustees' remuneration.....	200 0 0
Directors' fees.....	900 0 0
Land grant expenses.....	523 15 4
Exchange on cheques & bank charges.....	225 16 8
Interest on prior lien debenture stock.....	4,000 0 0
Balance carried to balance sheet.....	7,275 10 10
	£19,158 8 5

ASSETS.	
Lethbridge-Great Falls Ry., colliery, coal lands, plant & buildings, 230,301.54 acres of farm lands, & old rails & rolling stock removed from Dunmore-Lethbridge Ry.....	£1,110,754 6 2
Bonds of Lethbridge Land Co., £130,410 12s. 6d. at 80%.....	104,328 10 0
Stocks, Colliery (including coal on hand).....	7,708 5 11
Railway & general stores.....	7,518 4 8
Railway motive power.....	1,932 8 9
Office furniture.....	624 7 6
Debts owing the Company:	
Lethbridge Land Co. Interest—Suspense account.....	53,384 10 9
Sundry debtors.....	22,565 13 3
Bills receivable.....	336 15 9
"B" Debenture Stock Redemption Fund, Cash in hands of Trustees.....	5,946 10 5
Cash in hand & in bank.....	4,176 7 2
	£1,265,891 9 7

LIABILITIES.	
Shares & debenture stock.....	£1,010,101 0 0
Sundry creditors.....	22,471 0 8
Revenue account.....	7,292 0 6
	£1,265,891 9 7

The report and accounts were adopted, & the directors were re-elected as follows:—President, E. T. Galt, Lethbridge, Alta.; Vice-President, Col. K. R. B. Wodehouse, London, Eng.; other directors, W. Burdett-Coutts, M. P., E. Crabb, Hon. T. C. Farrer, E. Waterhouse, London, Eng.; Sir R. W. Cameron, New York; W. M. Ramsay, H. Joseph, Montreal.

**Pullman Co.**—At a stock-holders' meeting at Chicago, Dec. 5, the action of the directors in buying the property of the Wagner Palace Car Co. was ratified. The capital was increased from \$54,000,000 to \$74,000,000, & the name of the Co. changed from Pullman's Palace Car Co. to the Pullman Co. The number of directors was increased from 7 to 11. The new directors are: W. K. Vanderbilt, J. P. Morgan, F. W. Vanderbilt & W. S. Webb. The old directors are: M. Field, R. T. Lincoln, N. B. Ream, J. W. Doane, O. S. A. Sprague, H. C. Hulbert, H. B. Reed.

Grand Trunk Betterments, Etc.

The new station at St. Hyacinthe, Que., has been opened.

The Victoria Jubilee bridge, having been finally completed, was further opened on Dec. 1 for foot passenger & vehicle traffic. A scale of tolls has been established under which foot passengers pay a cash toll of 5c. or 6 tickets for 25 cents. Bicyclists pay 10c. cash, the other fares ranging up to 75c. for 3 or more horses & vehicle loaded. The completion of the bridge is a great public convenience as heretofore the only crossing has been by ferry, which has been liable to interruption in the spring & fall. Notwithstanding this some people are complaining of the tolls charged & the matter has been brought under the notice of the Minister of Railways, who stated that in granting a subsidy towards the building of the bridge no provision was made for government control of tolls. There was no mention made of anything more than provision for other railways to secure entrance to Montreal. There was no clause in the general railway act which would cover the case in question. Personally he was not aware of what rates were being charged for pedestrians or vehicles; but it did seem to him that they would be arranged on a scale to invite rather than to drive away probable traffic. Further than this there was nothing that he could say. He had not in his possession the schedule of charges for crossing by the ferryboat, but considering that the bridge is almost two miles in length, he did not incline to believe, so far as a glance at the situation showed him, that 5c. or 6 tickets for 25c. was excessive.

The yard at Trenton, Ont., is being raised and otherwise improved. At Gananoque the station is being moved so as to provide a better location for yard accommodation.

The yards at York, near Toronto, which are being remodelled, are expected to be completed by the end of Dec. The accommodation is being increased from a capacity of 500 cars to 1,500. (Oct., pg. 291.)

A third track, to facilitate the passing of freight trains, is being built between Mimico & New Toronto, on the Toronto-Hamilton line.

Correspondence has recently taken place between Brantford city authorities & General Manager Hays, respecting the running of the Co.'s through Detroit & Niagara Falls trains via Brantford so as to place that city on the Main Line. Mr. Hays said in a letter to the City Clerk: "This question has been before the management in previous years, & while the advantage to our mutual interests in the change referred to has been conceded, the Co. has been deterred from taking action relative thereto owing to the hard times & consequent financial stringency existing. The season is now too far advanced for us to undertake anything in the direction desired this year, but we will be glad to again take the matter up for consideration & we may later on be able to lay before you a plan for consummating the change desired & asking your co-operation to that end. Should such a plan receive a favorable reception I have no doubt that I would be able to obtain the necessary authority to complete the work next year."

In regard to locating the freight station at Brantford on the south side of the tracks, instead of on the north as at present, & utilizing the old car shops for freight sheds, Mr. Hays said that the old car shops were unsuitable, & that better facilities could be acquired at but little greater cost by erecting a building specially adapted for freight purposes.

Owen Sound citizens recently petitioned the Co. to extend its line down the bank of the river to Division-Frost St. bridge, & received a reply from Superintendent Jones expressing the Co.'s willingness to comply with the request if the right of way could be secured

from the town. The matter is now before the town council. It is probable that the line will only be extended to Dunn's boat house, & not as far as first proposed.

The extension from Port Huron, Mich., to the Jenks shipbuilding yard, which has been referred to as a branch, is only a side track to hold a few cars, & is likely to be built by the Jenks Co.

During 1899, 13 miles of second track have been laid between Montreal & Toronto, which leaves only about 46 of single track from Port Hope to Port Union. A surveying party is on this section, & if business is good it will be double tracked in the near future. The second track from Hamilton to Niagara Falls is laid out, & the work will be proceeded with next season. As we have already announced, it has been decided to double track the line from Port Huron to Chicago in the near future, & 10 miles of grading from Port Huron west are about completed. On the main lines 315 miles have been laid with 80 lbs. steel rails, while 285 miles of these rails, replaced by the 80 lbs., have been laid down on the branch lines, the latter being from 72 to 79 lbs., & replacing in turn rails of from 56 to 60 lbs. So it will be seen that 60 miles of the lines have been greatly strengthened & improved. From Portland to Chicago there are now laid 720 miles of standard 80 lbs. rails, while the steel in the balance of the main line between those points average from 72 to 79 lbs. During 1899, 1,826,857 ties have been put in, 1,344,374 being cedar, purchased in Canada. The Co. has put down this year 321 miles of gravel & 50 miles of cinder ballast, 123 miles of fencing, & 63 miles of yards & sidings.

Some additional information as to improvements on the system, received too late for insertion here, will be found further on in this issue.

### C.P.R. Betterments, Construction, Etc.

**Windsor St. Station, Montreal.**—It is expected to continue work throughout the winter with some 150 men cutting stone & preparing the iron & steel work. (Aug., pg. 233.)

**Ontario Car Shops.** London is pressing a claim for the location of these proposed shops, relying on a clause in an agreement with the West Ontario Pacific Ry. Co., which built the line between London & Woodstock, & leased it to the Ontario & Quebec Ry., the lease being assigned to the C.P.R. The clause reads:—"That the companies will, in the event of their building at any time, car & machine shops, or either of them, for the manufacture of cars or locomotives, on any part of the division of their line of railway between Toronto Jct. & the River Detroit, or the River Detroit & the Niagara frontier, locate & build & maintain the same in the city of London." In reply to a communication from Sir Jno. Carling & others, President Shaughnessy said:—"Whenever circumstances make it necessary to provide additional car or locomotive building shops in Ontario, the claims of London will not be overlooked." No definite announcement has been made that the shops in question are to be built, but the impression prevails that if they are it will be in Toronto. (Nov., pg. 323.)

**Owen Sound Branch.**—A recent trip of some of the Co.'s officials over this branch gave rise to a press report that the proposed reduction of the grades would be gone on with at an early date. We are informed that nothing has been decided on in regard to the matter. (Aug., pg. 233.)

**Hochelega Foundry.**—A contract has been let for building an addition.

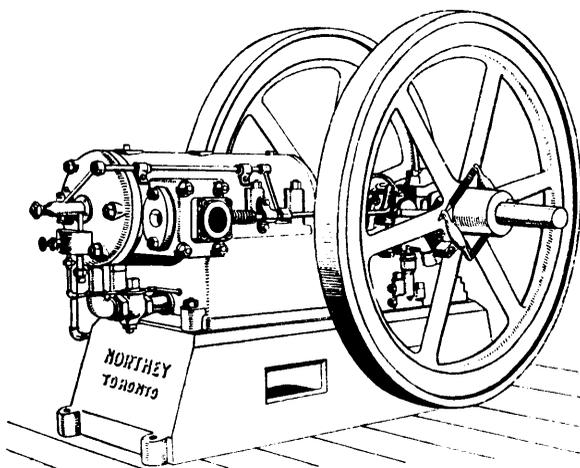
**Montreal to Fort William.**—Upwards of 100 miles of heavy rails have been laid this

year, & a good deal of ballasting has been done.

**Ottawa Connecting Line.**—The Co. is evidently in earnest in regard to the proposal to secure a direct connection between its main transcontinental line at Ottawa & the Montreal-Ottawa short line. It is proposed to improve the grades between Carleton Jct. & Ottawa, the object being to handle the large increase in traffic from the Northwest passing through Ottawa to Montreal by the M. & O. line. By forming a connection the already over-burdened line between Smith's Falls & Vaudreuil will be relieved. Practically the whole right of way from the Co.'s Sussex St. station to the Ottawa central station has been secured. C.P.R. officials were induced to acquire this independent right of way through the failure of negotiations with the Canada Atlantic for the use of that Co.'s line between the Central station & the C.P.R. track, near Mechanicsville. At all events options were secured upon property lying between the Montreal & Ottawa right of way near the Rideau & the canal, opposite the mouth of Patterson's Creek, along the north side of the creek to Bank St., thence westward to Concession, Bell & Preston streets, near the point of the C. A. crossing of the C.P.R.'s Prescott line. Then, these options maturing, the C.P.R. people decided to purchase rather than forfeit the amounts of the options. The C.P.R. is now in a position to construct the link without expropriation. The right of way secured would carry the C. P. R. track across the city about 100 yards south of the C. A. line, necessitating a second level crossing on Bank St. This the City Council wants to avoid, & the members are trying to get the two companies to agree to a joint use of the C. A. tracks as above mentioned, or else to get the C.P.R. to build immediately alongside the C. A. Manager

# The Northey Gas or Gasoline Engine.

*In Connection with Pumping Machinery for Tank Duty.*



"BUILT FOR HARD WORK."

Railway Officials will find the Northey Engine to be a marked improvement over steam or other forms of power for this duty. It is simple of construction, and easily managed, necessitating only the turn of a fly-wheel to start, while it can be going at full speed in a few seconds and be shut down on the instant. Needs no engineer to look after it, the station hands can do all that is required, while it will run for hours at a time with little or no attention. The Engine is compactly built and of the best materials; it uses either gas or gasoline for fuel, and its safety and economy with either have proved it to be the most satisfactory power in the market.

We will cheerfully send Booklet and every information upon request.

The Northey Mfg. Co., Limited, <sup>1032</sup>KING ST. SUBWAY, Toronto, Ont.

Tait says the C.P.R. offered to pay the C.A. one-half the interest on the original cost of the line, & a wheelage percentage on the cost of maintenance. (Nov., pg. 324.)

**Fort William.**—When at this division point recently General Superintendent Osborne said the Co. contemplated further improvements in the yards. (Oct., pg. 292.)

**Fort William to Winnipeg.**—Surveys for the double tracking of the line between these points have been completed as far as Dexter, 372 miles from Winnipeg. (Nov., pg. 324.)

**The Bonnet Lake Branch.** from the main line at Molson, 45 miles east of Winnipeg, has been graded for about  $3\frac{1}{2}$  miles. On Dec. 4 we were informed that grading was then going on, owing to favorable climatic conditions, & that work would be continued as long as necessary this winter. It is not expected any rails will be laid before spring. (Nov., pg. 324.)

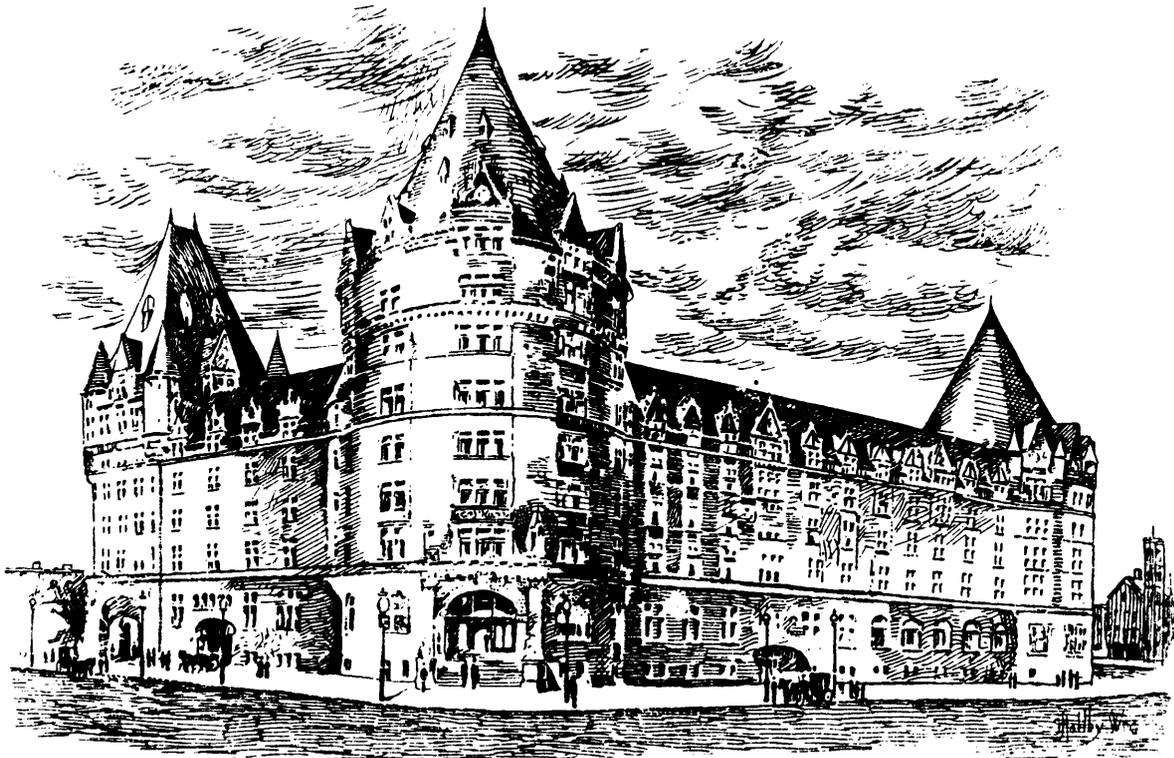
**Winnipeg Terminals.**—The illustration on this page is from a rough preliminary perspective sketch of the proposed hotel & station

the importance of Main st. These steep grades are made necessary by the intersection of Fonseca & Sutherland streets, which would be blocked if the bridge approaches were made longer. The approaches might be made longer & allowed to cross these streets if the side streets were also raised to meet the approach. That would not, however, be quite satisfactory, unless Main st. & the two cross streets were permanently raised to their full width. With reference to the subway, the grades are much easier than on the bridge, & he considers that the subway would be the least obstruction to traffic, both in the subway & on the portions of Main st. alongside of it. The approximate cost of the subway, exclusive of the railway tracks, ties, etc., he estimates at \$73,000. The portion of the subway covered by the tracks, a distance of 148 ft., would have to be furnished with lights during the day. There might also be occasions when the water in the river would rise sufficiently to flood the deeper part of the subway. If a subway is adopted provision should be made to cross the tracks on the surface temporarily, to

**Souris, Man., Locomotive House.**—A 3 or 4 stall building is to be built at this point on the Southwestern Branch.

**Pipestone Branch.**—On Nov. 30 track was reported as being laid to the North Antler Creek, over which a large bridge was being built. (Nov., pg. 324.)

**Crow's Nest Pass Ry.**—H. S. Holt, of Montreal, who went over this line recently, said on his return: "It is a well-built road, & can be made as good as the older portions of the C.P.R. with a little effort, & this will be done as circumstances justify. Part of the work has been very heavy, yet, no doubt, a great deal of freight will be carried over this road, & the heavy outlay will be amply justified. The heavy sections no doubt cost \$50,000 a mile, & I believe the entire line from Lethbridge to Kootenay Lake will, when finished, have cost \$30,000 a mile." The development of the coal & coke industry was alluded to, Mr. Holt saying that the Crow's Nest Coal Co. had 108 ovens at work, & were erecting 80 more. They cannot, in fact, begin to supply the demand for coke, which is sent to the



PROPOSED CANADIAN PACIFIC RAILWAY HOTEL AND STATION FOR WINNIPEG.

building, shown by President Shaughnessy in Winnipeg recently. On Dec. 2 we were officially informed that the plans were still in the architects' hands and that they had not been finally decided on, so that the design as shown in the illustration may be varied. It is said that the architects have recommended the use of white stone & white brick, but some of the officials favor red sand stone & Bonnet Lake brick. The Co. has not yet secured all the land it requires for hotel & yard purposes. It is said one owner is asking a very large price for his property & that he disputes its being expropriated for an hotel site. The question of expropriation has been submitted to the Minister of Railways.

Winnipeg's City Engineer has reported to the Council on his examination of the plans of the overhead bridge on Main st. & the subway proposed for this crossing. He does not think that the overhead bridge as proposed would be found satisfactory on account of the grade on the south side approach, which is 9.1 per 100 ft. The north approach at 6.8 per 100 ft. he considers too steep for a street of

avoid the possibility of obstruction to traffic by high water. (Nov., pg. 324.)

**The Snowflake Branch,** which runs from the first siding on the Pembina Mountain branch, 118 miles southwest of Winnipeg, to Snowflake, 17 $\frac{1}{2}$  miles, has been completed & opened for traffic. A grain elevator & warehouse have been erected at Snowflake, also an elevator at Purvis, about 7 miles from Snowflake. The country through which the line runs is well settled with prosperous farmers. (Nov., pg. 324.)

**The Deloraine-Waskada Branch,** 18 miles, has been completed & opened for traffic. Grain elevators are being built at the midway station, Goodlands, & at Waskada. (Nov., pg. 324.)

**The McGregor Varcoe Branch,** from McGregor, on the main line, 22 miles west of Portage la Prairie, to Varcoe, on the G.N.W.-C.R., had, on Dec. 4, been graded about 22 miles. No track had then been laid & we were informed that it was unlikely, taking into account the advanced stage of the season, that any track would be laid this year.

smelters at Trail, Northport, & at Great Falls, Mont., & the fact of the Canadian article being able to compete with the U.S. at the last named point, speaks for its quality. As a matter of fact, the smelters claim it is the best coke made, while the cost of smelting ore has been reduced from \$11 to \$6 a ton. (Nov., pg. 325.)

An unconfirmed press report credits the Co. with the intention of building a branch from Bruce's Point, on the C.N.P. line, to Golden.

There appears to be no doubt that the construction of the section of this line between Nelson & Balfour on Kootenay Lake will be gone on with at an early date. Between Nelson & Five Mile Point, 4.3 miles, the ground is pretty well covered by the Spokane & Northern Ry., whose track is close to the lake shore almost the entire distance, leaving scarcely room for another line. It is thought the C.P.R. will endeavor to secure running powers over this section. Tenders have been received for building between Five Mile Point & Balfour, & an announcement is daily expected in regard to them. (Nov., pg. 324.)

The B.C. Southern Ry. Co., under whose charter the Crow's Nest Pass Ry. is being built, gives notice that it will apply to the Dominion Parliament next session for an act authorizing it to complete at any time before the end of 1904 its western section, which is to run from Kootenay Lake to a favorable place for crossing the Fraser River, to New Westminster, thence to Burrard Inlet, & shall include a branch line to Nelson via Salmon River; also to extend the time for the construction of a branch line from or near the forks of Michel Creek by way of Michel Creek to Morton Creek. (Nov., pg. 324.)

When at Nelson recently President Shaughnessy stated that the Co. had decided to make it a division point & that the re-arrangement of the yard would be at once proceeded with. This would embrace extensive improvement along the water front, including the building of shops, an improved station & another wharf. He had looked over the ground & appreciated the inconvenience which had been occasioned during the high water of 1894, & in the re-arrangement contemplated such provision would be made as would prevent a re-occurrence of the difficulty. General Superintendent Marpole has since been in negotiation with the Council, & it is understood the following arrangement will be made. Instead of the city taking a deed to the present recreation grounds, a five-years' lease of the grounds to be taken, in return for which the Co. will give the city a deed to 40 acres to be selected from the land of the Co. adjoining Addition A. The Co.'s shops & other improvements to be exempted from municipal taxation for 10 years, the blind ends of Vernon, Baker, Victoria & Slocan streets to be condemned & turned over to the Co. It is inferred that the Co. does not intend to close Baker st. at the intersection of Railway st., but to grade the street from this point & use it as the approach to the new station & freight shed.

**Kaslo Wharf.**—A press despatch reports that a strip of waterfront 80 to 100 ft. wide & 250 ft. long, at the C.P. landing at the foot of Front st., sank out of sight Dec. 11. The water is now 120 ft. deep where teams backed up to receive freight from the floating wharves. All the piling which the C.P.R. has been driving for the past season, on which to build its wharves, & which would have been completed in a few weeks, dropped out of sight without a moment's notice. Two wharves were being built side by side, that of the C.P.R. having about 100 ft. of work done upon it, while the Kaslo & Slocan Ry. Co.'s was about all completed. The last pile was being driven when

the collapse occurred. This is the second time Kaslo has suffered damage of this nature.

**Arrowhead & Kootenay Lake Branch.**—Grading has been completed for 15 miles from Lardo, the southern terminus, & work has been opened up for 20 miles further. Owing to the impossibility of getting rails this fall, work has been closed down until spring. (Nov., pg. 325.)

The A. & K. Ry. Co. gives notice of application to the Dominion Parliament for an Act declaring its works to be for the general advantage of Canada, & to extend until the end of 1905 the period within which it may complete its works.

**Columbia & Western Ry.**—One survey has been completed for the proposed branch to Sophie Mountain. The line as run will be 15 miles long & will have a 1% grade as far as the summit of Sophie Mountain, & a 3% grade down the west side of the mountain to the Velvet mine. There will have to be a switch on the west side of Sophie Mountain, & a new survey will probably be made to get rid of this. The surveyed line goes from the end of the spur to the War Eagle mine, & from there along the side of Red Mountain. From Red Mountain it skirts along the side of O.K. Mountain, thence to Record Mountain, & along its side & the side of Sophie Mountain to its summit. Then it goes down the west slope of Sophie Mountain to the Velvet mine, which is likely to be the terminus for the present. Doubtless, if built, it will be extended to other properties in that section when they have reached the shipping stage. (Nov., pg. 325.)

On the extension from West Robson to Midway, work is being pushed on the Bull Dog tunnel which is 3,000 feet long, & it is expected to be in operation by March. The mountain is now crossed by switchbacks.

A daily train service has been established between Rossland & Greenwood, via West Robson, the road having practically been taken over from the contractors & with the exception of the tunnel already referred to, only ballasting remains to be done. Both freight & passenger traffic are satisfactory. The passenger travel is increasingly heavy & the quantity of freight already exceeds expectations. Chief Engineer Tye says he thinks it probable the traffic to Midway will soon attain to much greater proportions than present appearances suggest, since the development of many mineral claims in the mining camps of the West Fork & other tributaries of the Kettle River, those of Camp McKinney & too, those of Myers Creek & other mineral sections across the line, will largely swell the

volume of transportation the new railway will be required to provide for.

On Dec. 2 we were informed that track-laying would be continued from Greenwood to Midway, as soon as track-laying had been completed on the 22 miles of spur lines, over half of which had then been done. (May, pg. 139. Nov., pg. 324.)

H. S. Holt, of Montreal, who recently went over this line says: "We travelled over this road from Robson to Greenwood, & although it is the most costly piece of road I have ever passed over, either in Canada or the U.S., it is certainly the best built. The heaviest portion is laid with 73 lbs. rails, & the outlay of the first 100 miles will certainly not be less than \$40,000 or \$45,000 a mile. All this has been done without the aid of one cent a mile from the Government. The C.P.R. has spent \$14,000,000 in B.C. alone this year, & I consider its policy both a wise & plucky one. In the U.S. mining regions the mine-owners have generally had to make their own connections with the trunk lines, but in B.C., wherever there is a probability of a camp becoming a producer, the C.P.R. lays down branches, & thus the mines are placed in immediate touch with the country's railway system, as well as with the different smelters on both sides of the boundary line."

There seems to be little doubt that the management has about made up its mind that the proposed route for the continuation of the line from Midway by way of Penticton to the main line at Hope is not desirable & that the route mentioned in our last issue will be followed instead. This would be from Midway, via Keremeos, to near Princeton, through Otter Valley, down Quilchena Creek, near Quilchena; westerly to Nicola Lake, skirting the left bank of Nicola River which it will probably cross somewhere near the Twenty-two Mile House & then follow the right bank to Spences' Bridge on the C.P.R. main line. Two engineering parties are at work on this route, one working from Nicola Valley towards Spences' Bridge, the other from Nicola Valley towards Princeton & Keremeos. It is said that the new route, in addition to avoiding the almost impossible crossing of the mountains at Hope, will tap the rich mineral belts of the Similameen, Otter Flat & the Nicola Valley, run through the coal fields which are very extensive & valuable, & traverse extensive grazing country. Chief Engineer Tye, of the C. & W.R. has recently been over the route. (Nov., pg. 325.)

A full report of Mr. Shaughnessy's remarks on this question before the Vancouver Board of Trade will be found in our Nov. issue, pg. 332.

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The Victoria Colonist thinks the adoption of the route above outlined means the indefinite postponement of the proposed line from the Coast to the Interior south of the Fraser River & says: "With such a line in operation there will be very little inducement for any company to build through the Hope mountains for the sake of establishing connection with the Coast. We ought to realize that there is no reasonable prospect that Victoria will have any connection with the C.P. system or highway of traffic into Yale & Kootenay except by way of Vancouver. This is something which the people of Victoria ought to be very careful to understand."

**Vancouver Terminals.**—Work has commenced on the erection of a station in the east end of the city at Heatley Ave. crossing. (Sep., pg. 267.)

A recent press despatch from Vancouver stated that the Co. was about to connect Stimson's wharf & that of the Union Steamship Co., making a wharf of about half a mile in length, that the work would cost \$30,000 & that a shed 350 ft. long would be built. We are informed that this work is simply the continuation of the improvements covered by the conditions of the exemption by-law, particulars of which were given in our May issue, pg. 142. The work now in hand is an extension of the wharves easterly 500 ft., with a 300 ft. warehouse thereon, & from this a connection by trestle will be made with the so-called Stimson's wharf. The present work involves an expenditure of about \$50,000. (Sep., pg. 267.)

The question of building a bridge over the yard tracks from Abbott to Carrol streets is before the City Council.

**Westminster-Vancouver Loop Line.**—As mentioned in our last issue the Co. has given notice of application to the Dominion Parliament for power to build from its main line at New Westminster to Vancouver. In a recent interview General Superintendent Marpole said: "It is the intention to build a line connecting the two cities, but as to when it will be built & route to be followed I can at present say nothing. These matters will be settled after the charter has been obtained & much will depend upon the character of that charter. We may build the line next year, but I am not in a position to speak definitely." (May, pg. 140.)

**Condition of Main Line and Western Branches.**—Quotations have already been given from a recent interview with H. S. Holt, of Montreal. He also said, "I had not been over the main line for eight years, & the road, as seen the other day, is simply beyond recognition. The original rails of 56 lbs. have been replaced by 73 lbs. Solid embankments & stone & iron bridges are the rule rather than the exception. The C.P. is now practically a permanent railway from end to end, while the complete ballasting is also an important feature. When the central section, between Winnipeg & Calgary, was constructed, it was impossible to secure ballast of a permanent character, although the sections around Lake Superior & through the Rockies have long since been put in a first-rate condition. This work is now being done between Brandon & Calgary, & by the middle of next year the permanent ballasting of the C.P.R. will have been completed from end to end. This is a feat which no other transcontinental railway can boast of, although some of the Southern roads were built 25 years before the Canadian road. Eight years ago, when I was out to the Coast, the section of 214 miles, remembered as the Onderdonk work, was composed of grasshopper trestles. All this has been replaced by solid stone-retaining walls & permanently filled in, & the same will apply all along the line. The whole work is nothing short of a marvel, & no one who has not been to see can realise the wonderful transformation that has taken place from Montreal to Vancouver. We also

travelled through southern Manitoba, & where nothing but the open prairie existed 8 years ago, are now towns of 2,000 & 3,000 people, provided with electric light, waterworks, & all the accessories of thriving & modern communities. At every siding I saw 5, 6, & sometimes 7 elevators, & everywhere people appeared to be prosperous & satisfied with their lot. Winnipeg has made marked progress in the way of large & handsome buildings, as well as in greatly improved streets. The same can be said of Vancouver. On Granville St. there is a succession of banks & other buildings that would be a credit to any of our largest eastern cities."

**Mineral Range Ry.**—The Railroad Gazette states officially that this Co. has completed the Grasse Pointe extension from Arcadian Jct., Mich., to Arcadian Mill, 86 miles, with a 2 mile branch to Arcadian Mine. We think a mistake has been made in the statement of mileage.

### Surveys, Construction, Betterment, &c.

**The Alberta Railway & Coal Co.**, we are officially informed, is not at present considering the question of widening the gauge of its line between Lethbridge & the International Boundary, & of its subsidiary line, the Great Falls & Canada Ry., from the Boundary to Great Falls, Mont. (Aug., pg. 235.)

**The Canada Atlantic** has installed electric signals at the Concession, Le Breton, Division & Rochester St. crossings, Ottawa.

**Cape Breton Ry. Extension Co.**—On Nov. 29 we were informed by a Nova Scotia Government official as follows: "There is no contract in existence between the N.S. Government & the promoters of this line of railway, that I am aware of. On Jan. 22, 1895, an agreement was made between the Cape Breton Ry. Extension Co. & the N.S. Government for the construction of 30 miles of this railway, from Port Hawkesbury to St. Peters, in consideration of a subsidy of \$3,200 a mile, but nothing further was done. The contract is liable to forfeiture through lapse of time, as the construction was to commence in May, 1895, & the line was to be completed before Aug. 1, 1896. I understand the matter is now being revived; Col. Alton is the principal promoter in Nova Scotia. J. S. Armstrong, C.E., has a party of engineers making a location survey."

The operations are being carried on under the name of the Canso & Louisburg Ry. Co., with offices in Boston & New York City, & at Port Hawkesbury, N.S. The officers are: President, A. W. Mausur; Vice-Pres. & General Manager, H. Alton; Secretary, B. Wilkins; Treasurer, W. H. Dunlap; Chief Engineer, J. S. Armstrong. Surveys are being made. (Nov., pg. 325.)

**Canadian Northern.**—On Dec. 6 we were officially informed that on the extension from Cowan, last year's terminus, towards the Saskatchewan, 53 miles of track had been laid, & it was expected to lay altogether 75 miles before closing down for the season. Grading was going on & the track was being kept close up with the grading. On the branch from Dauphin into Gilbert Plains, 15 miles had been completed, & track laying was expected to begin immediately, as material was arriving. (Nov., pg. 325.)

A considerable addition is to be made to the car-shop at Dauphin.

**Central Vermont.**—Improvements in the road-bed are likely to be undertaken at an early date, & the double tracking of a portion of the line is rumored.

**Coast Ry. of Nova Scotia.**—President Robertson stated in Halifax, Nov. 29, that fairly good progress was being made with the 20 miles extension from East Pubnico to Barrington, track having been laid to the station grounds at Barrington Passage, & it was ex-

pected to run trains to that point by Christmas. The telegraph line had been completed, & also the stations except those at Barrington Passage & Shag Harbor. Mr. Robertson further said, "Our contract with the N. S. Government was originally to build a line from Yarmouth to Lockport. No action was taken by the Coast Ry. Co. to renew that contract because we were engaged in negotiations to build a line to Halifax. Now that the Nova Scotia Southern line is being constructed, our Co. has decided for the present to hold to the original contract between Yarmouth & Lockport. My business here is to ask for a renewal of the old contract on the old terms. The engineers are making preparations for starting of work on the next 10-mile section between Barrington Passage & Clyde. The rails for 7 miles of this section, as well as a large quantity of ties, etc., are already on hand. There is nothing whatever in the rumor about the sale of the Coast line to the Dominion Atlantic Ry. A proposition for a traffic arrangement between the two lines has been submitted. At present passengers over both lines, in order to make a transfer at Yarmouth, have to drive a distance of nearly a mile, & an arrangement would be of material benefit to both lines. I hope to see it carried into effect. Our business is increasing. The receipts average 30% over the same months of last year." (Nov., pg. 325.)

**The Cumberland Ry. & Coal Co.** has built a locomotive shed at Parrsboro, N.S.

**Dyea, Alaska, Yukonwards.**—L. D. Kennedy, of Seattle, Wash., who is interested in a scheme to build a railway from Dyea, with a tunnel through Chilkoot Pass, is reported to have recently said at Skagway, "The grading of a railway approach to the tunnel entrance has been begun, & is being pushed as rapidly as possible with the facilities at hand. We have 12 teams with scrapers, & would put on a larger force could we get all the scrapers we need. The grade will be extended from tide-water at Dyea to Canyon City, 9 miles, this fall. If the necessary equipment for grading can be secured, we can finish the work in 30 days, or before the frost fills the ground. The distance from tide-water to the tunnel entrance is 17 miles, but we shall not attempt to extend the grade that far this winter. If we get enough scrapers we shall run three shifts of workers daily. The road to the tunnel from the water will be an electric system." (Nov., pg. 236.)

Referring to the scheme, the Skagway Alaskan says: "It is rumored that New York capital, with an eye to the opening in Alaska for a railway from the coast to the Klondike country, has been looking over the Dyea route & the one from Haines, & has not fully determined which it prefers, but that the Haines route has been looked upon a little more favorably than the other. Those who have the matter in hand have sought to find which of the available courses might furnish the greatest local traffic or tap the most promising intermediate territory. With this end in view, it is said, the Haines route looks the most promising, for the reason it will lead through what is considered a rich copper country, & one that may furnish a good traffic in carrying minerals to tidewater. The only course that could be followed, it is argued, after crossing the Chilkoot Pass, to get into a productive country, would be to diverge to the northwest from Lindeman, & traverse that stretch of country lying a considerable distance to the West of Yukon."

**Edmonton, Alta., Bridge.**—The erection of the superstructure is going on, & it is expected to have the bridge completed by Feb. (Nov., pg. 326.)

**Great Northern of Canada.**—Some members of the management met in Montreal, Nov. 28, with Col. McNaught & other New Yorkers interested in this line, & discussed the building of an elevator at Quebec, to be

used for the grain that the G.N. will secure from the Canada Atlantic at Hawkesbury. It has not yet been decided whether the Co. will build an elevator, or if it will be undertaken by private enterprise similar to the proposition that has been made for Montreal. In any case the elevator, when erected, will have a capacity of 1,000,000 bushels, & it is said it will be started early in the spring & completed in time for the opening of the new route from Quebec to Parry Sound, in Aug. (Aug., pg. 235.)

Another matter that is to come up for decision shortly is the building of a branch line to Montreal from Joliette. The main line, however, is to be completed first.

The contractors' engineer reports that grading is all but completed on the two sections from Shawanegan, Que., west 53 miles to Montcalm, & from St. Jerome, west 35 miles to Hawkesbury. The middle section between Montcalm & St. Jerome, 28 miles has been practically rebuilt. Eight miles of rails are relaid, ties renewed, & culverts & trestles rebuilt. Track laying was begun towards the end of Aug., & including the renewed section, there are 60 miles of rails laid. The section between St. Jerome & Lachute is about completed. At the end of the season there will remain only the section between Lachute & Hawkesbury, & between the Maskinonge River & Riviere du Loup. About 16 miles of ballasting is completed east of Montcalm, & a regular train is running over the old line & to a point 14 miles beyond Montcalm. The superstructure of the Hawkesbury bridge will be begun about Dec. 15, & the contractors must have the false work removed before ice breaks up in the spring. Among the smaller bridges are those over the Maskinonge & Riviere du Loup, each 1,000 ft.; the East Yamachiche, 500 ft.; the Chicots, 350 ft., & the West Yamachiche, 250 ft. (Nov., pg. 326.)

**Intercolonial.**—The management finds it necessary to secure more room on the northern side of the yard at the St. John, N.B., station, & will be compelled to take possession of Lombard street. In doing this, of course, it will be necessary to make a new street, & to take properties now facing on the street. The operation will be an expensive one, as property has become valuable in that locality. Owners have been approached, but the prices asked are considered so high that expropriation proceedings may be resorted to.

**Interprovincial Bridge, Ottawa & Hull.**—It is now said that the erection of the super-

structure will be commenced this month. A track has been laid from the C.P.R. north shore line to the Hull end of the bridge, so that the material for the superstructure may be taken over it. (Nov., pg. 326.)

**James' Bay.**—Parry Sound townspeople fear that the 5 mile section from the Canada Atlantic to the town of Parry Sound may not be built as proposed. At a recent meeting of the Board of Trade, the Secretary said that Mackenzie, Mann & Co. asked the town to give a bonus of \$15,000, exemption from taxation for 21 years, right of way on town property & a grant of all water frontage owned by the town. The town made a counter proposal to give \$12,000 instead of \$15,000, but no reply was received. Later indications were not wanting that the Co. was seriously entertaining the idea of projecting a line from the vicinity of Maple Lake station north through the Balsam settlement, getting as near Dunchurch and Loring as possible, & on to French River, endeavoring to find a crossing over the French River nearer Lake Nipissing than Contin's Island. The Secretary was authorized to renew correspondence with Mackenzie, Mann & Co. (Nov., pg. 326.)

**Kootenay Ry. & Navigation Co.**—On Nov. 24 it was stated that this Co.'s subsidiary line, the Bedlington & Nelson, had been completed to within 2 miles of Kuskanook, its terminus on Kootenay Lake, & that it was expected the track would be laid on this short piece a few days thereafter. (Nov., pg. 326.)

**Manitoba & Southeastern.**—On Dec. 6 we were officially informed that track had been laid from La Broquerie, last year's terminus, to a point 103 miles from Winnipeg, & that the remaining 5 miles to the International Boundary was being graded. Grading from the International Boundary to War Road, Minn., at the southwest corner of the Lake of the Woods, had been completed, & it was expected to have track laid to War Road, 115 miles from Winnipeg, before Christmas. (Nov., pg. 327.)

**Midland of Nova Scotia.**—Track laying is proceeding between Truro & Shubenacadie River, 15 miles, & it is expected to be completed during Dec. Only the bridge over the Shubenacadie will then remain to be completed. (Nov., pg. 327.)

It is rumored that this line may be extended from Windsor to connect with the Nova Scotia Southern Ry., which is being built from New Germany to Shelburne, N.S. The M.R. Co.'s charter also provides for an extension

of the line from Truro to the Straits of Northumberland.

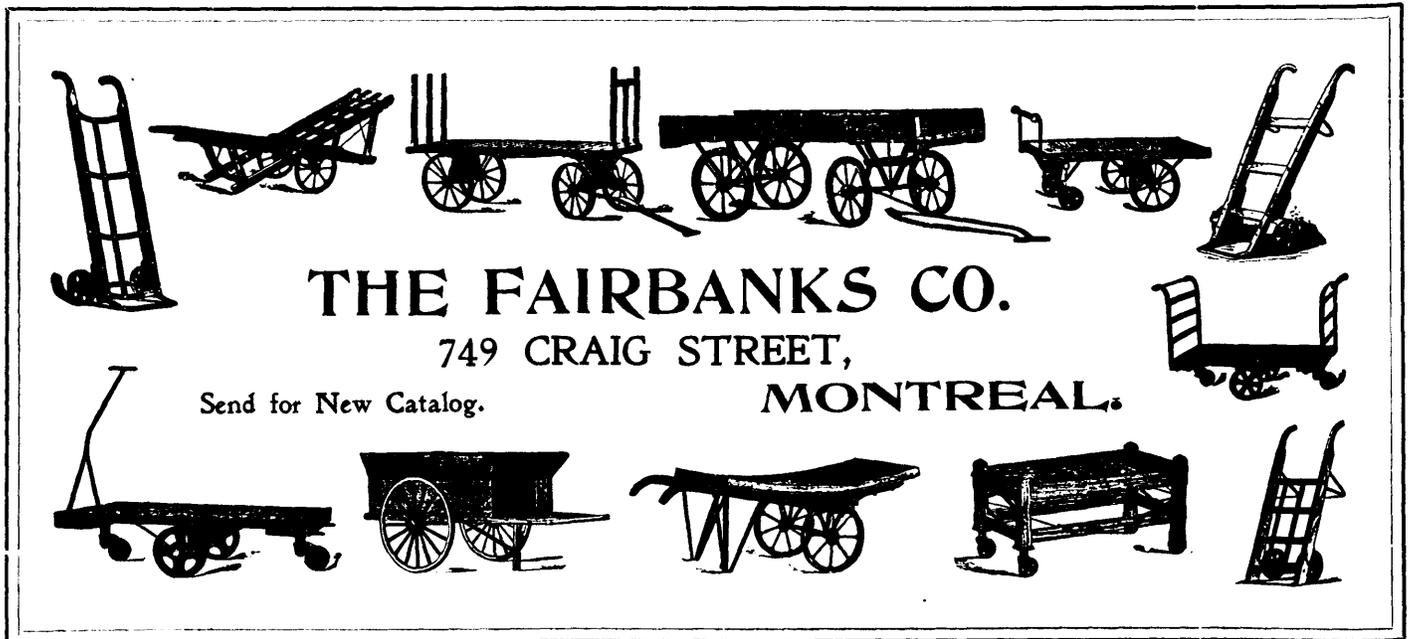
**Northern Pacific.**—The branch from Portage la Prairie, Man., northwesterly 20 miles, was opened for traffic Dec. 1, stations having been established at Horizon, Ridgeway, Youill & Beaver. On Dec. 4 the Co. gave a free trip to Winnipeg & return to the residents along the new line, about 1,000 availing themselves of the privilege. The branch from Portage la Prairie, Man., north towards Lake Manitoba, was also opened Dec. 1, stations having been established at Alpha & Town Line. (Nov., pg. 327.)

Interlocking apparatus is being put in at the points at which the N.P. crosses the C.P.R. & the M. & N.W.R., near Portage la Prairie.

It is expected the Co. will erect a large station at Portage la Prairie next year.

**Nova Scotia Southern.**—President R. G. Hervey favored us with the following information on Dec. 2:—"Outline, now under construction, is from Shelburne Harbor to a junction with the Central Ry. at New Germany, 76½ miles, & from Indian Gardens, a point midway between those towns to Liverpool, 19½ miles more. The contract for the construction of the line was let last January to C. B. Wilkins & Co., who commenced Feb. 1, & have prosecuted the work vigorously. They have laid about a mile of track, using 70 lbs. rails, from New Germany westward to the crossing of La Have River, where they are erecting a steel bridge of 4 spans, 2 of which are now in place, & the other 2 are expected to be finished within the next 10 days. Beyond this, they have 15 miles ready for track; & they are pushing the grading at the same time both from the Shelburne & Liverpool ends, & expect to complete the whole line next summer. Our chief engineer, A. Mitchell, is surveying the line from New Germany into Halifax."

The Chief Engineer reported to the President, Nov. 14, as follows:—"The heaviest portion now building is at the New Germany end, where, about a mile from the junction with the Central Ry., the line crosses the gorge through which flows the La Have River, & then cuts through the hills on the western side of the river. The track is carried over 4 steel spans on granite piers, 45 ft. high. Of this the sub-structure is completed & the spans are building. The track is laid from the Central Ry. to the bridge, & can be laid for 20 miles beyond as soon as the bridges, including 4 other spans between New Germany & Caledonia, are in place. The next heaviest section is the 9 miles beginning at Shelburne at



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the southern end & across the valley of the Jordan River. The earth & rock work on this section is about half done, & is being completed by Wheaton & Sons, who have a sub-contract for 15 miles. The entire work yet let is under contract to C. B. Wilkins & Co., to extend from the Central Ry. at New Germany, N.S., southwest to Shelburne, an ocean harbor, with a branch of 19½ miles to Liverpool. This branch is being built by Tupper & Minard, sub-contractors, who are vigorously pushing the grading."

The Act passed at the last session of the N.S. Legislature to revive this Co.'s charter has been put in force by proclamation, but we were informed on Nov. 30 that no contract had been entered into by the Government for payment of subvention. (Nov., pg. 327.)

Reference has already been made to a rumor that the Midland Ry. of N.S., will be extended to connect with this line, & that its charter authorizes it to also extend from Truro to the Straits of Northumberland. The Nova Scotia Southern will connect with the Coast Ry. of N.S., now being built from Yarmouth east, & the extensions of the Midland above mentioned would provide a through line from Yarmouth to the Straits of Northumberland. The Maritime Merchant says: "The amalgamation of these lines & an extension of the service to include a steamship service across the Straits to Prince Edward Island, would result in the building up of an important highway & a large traffic would no doubt be developed. As there already exists a frequent service of steamers between Yarmouth & Boston, this would open up a new route between the Island & Boston which would greatly facilitate travel."

**Ontario & Rainy River.**—On Dec. 3 we were informed as follows: "Track has been laid west from Stanley for 8½ miles, & it is proposed to lay 40 miles, if possible, this winter, the grading for which will be finished by the middle of Dec. The grading is well under way over the first 100 miles from Stanley & that distance will be finished early next spring. The Rainy Lake bridge will not be built this winter, but material for it will be got out." (Nov., pg. 327.)

D. D. Mann said in a recent interview at Port Arthur that he did not think the line would run into Fort Frances, but would probably be about 6 miles from it.

W. Mackenzie is credited with saying that the O. & R.R. will be completed by 1901, so as to give another through route to Winnipeg, with its connection the Manitoba & South-eastern.

After negotiations between Port Arthur Town Council & Messrs. Mackenzie & Mann, on behalf of the O. & R.R. Ry., a draft agreement has been prepared under which the Co. is to receive a bonus of \$50,000 & exemption from taxation (except for school taxes) for 21 years. In return the Co. will place all its lake terminal works there. Access to the water front is provided for at Arthur & Pearl streets. In an interview while the negotiations were on, Mr. Mann said: "Whatever we do here will be on a scale superior to any work the C.P.R. has done at this point. We expect to put on a line of boats in 1901 that will make 20 miles an hour." He declined to say where the eastern lake terminal would be.

**Ottawa & New York.**—An Ottawa despatch says: The Department of Railways & Canals has accepted plans submitted for protection to the piers of the O. & N. Y. R. bridge, under construction over the St. Lawrence River at Cornwall. The investigation following the accident to the piers revealed the fact that the bottom was solid enough to hold the weight, but owing to the depth of the water & the rapid current it was deemed advisable to reinforce the substructure. It is proposed to rip-rap the pier nearest the island with heavy stone blocks of half a ton or a ton each, piling up sufficient of them to protect

the concrete from ice action. The pier near the Cornwall canal is in deeper water, & to secure it an annular steel caisson will be built & sunk around the present crib several feet below the bottom of the river. This will be filled with concrete, & the new & old material knit together as far as may be to form one solid mass, the whole being tied with cables imbedded in concrete to insure perfect solidity. The work will involve heavy expense, but the railway management is determined to put up a bridge that will stand any possible strain & give absolute security to the travelling public. (Nov., pg. 327.)

**Pontiac Pacific Jet.**—Of the extension from Aylmer to Hull, Que., about 3 miles has been completed to Deschene. No more track will be laid till spring. The entrance of the railway to the Ottawa central depot from the Interprovincial bridge will entail a considerable amount of hard and expensive work, notwithstanding that the distance is less than a mile. Almost the entire way there is much rock work. Along the line by the Major's Hill park considerable stone work will be necessary, & it is hoped to have most of the foundation completed by the time frost stops this work. It is proposed to continue work all winter, & in order to facilitate operations rails have been temporarily laid from Dufferin bridge along the side of the park. The construction should easily be completed by spring, as heavy steam drills & a good-sized staff of men are now employed, & will be through the winter. (Nov., pg. 327.)

**Quebec Bridge.**—We are officially informed that nothing definite has yet resulted from the negotiations with one of the firms which put in a tender. (Oct., pg. 296.)

**Rutland & Noyan.**—See under "United Counties Ry.," pg. 346.

**Salisbury & Harvey.**—It is said to be the intention to extend this line to Moncton, N. B., crossing the Petitcodiac River near the Moncton bridge, & also to build a branch to the Baltimore shale property. (See pg. 346.)

**Tilsonburg, Lake Erie & Pacific.**—We are officially informed that this line will be extended from Tilsonburg, Ont., to either Ingersoll or Woodstock, & probably both places next spring, & that there is no truth in the report that the Baltimore & Ohio Ry. will operate it. (Oct., pg. 297.)

**The Toronto, Hamilton & Buffalo** freight sheds at Hamilton are, it is said, to be enlarged owing to the increase of business.

**White Pass & Yukon.**—The following official information about the section between the north end of Lake Bennett & White Horse Rapids, was furnished us under date of Nov. 14, "The route from Bennett lies along the east shore of Lake Bennett; the first 12 miles being very heavy rock work—precipitous mountain peaks running directly into the deep water of the lake. The other 15 miles of the 27 are along ordinary mountain-side, & are of more easy or average construction. At the north end of Lake Bennett, at what is known as Caribou Crossing, a bridge about 500 ft. long will be put in with a draw span so as not to interfere with the navigation of the lakes & river. From Caribou Crossing to a point on the river below White Horse Rapids, at the new townsite of Closeleigh, a further distance of 44 miles, the conditions are as follows: The first 13 miles cross a rolling sand-hill country with occasional marshes, being remains of old glacier lakes. Wherever the ground is covered with moss & timber the glacial ice is still encountered in the gravel at a depth of 2 ft. under the moss. Fifteen miles from Caribou Crossing 2 high bridges cross the canyon at the lower end of Lewis Lake. This lake was drained by an earth cut & lowered 75 ft. The road then passes along the east shore of Lewis Lake, crossing former islands & peninsulas, & is of quite remarkable location. At the upper end

of Lewis Lake we again get out into the Watson River valley by a series of deep gravel cuts. From Lewis Lake on there are several miles of nearly level grade & light work along the valley. The line then passes along the shores of Ruth Lake & Cougar Lake & approaches the banks of the Lewes River, in the vicinity of Miles' Canyon. The road is here in very heavy cuts & fills, passing through a series of knolls & deep depressions left by the former glaciers. Just behind the White Horse Rapids the road is placed on a bridge under a steep sand bluff for about ¼ mile, & then emerges on a broad level bench at Closeleigh, in the vicinity of the enormous copper mines which lie at a distance of about 2½ or 3 miles, in almost a semicircular form. The gradients on the line between Bennett & Caribou will be a maximum of 1½%, although



the line as first established will have a very few sections of 2% grade, to be taken out in the near future. Maximum curvature 10 degrees. M. J. Heney, of Bennett, B.C. is the contractor. At this writing about 30 miles of the work have been graded between Caribou & Closeleigh. Work will be continued all winter. Construction along the lake-side will be commenced by Nov. 20. One engine & work train are now on the track at Caribou. Track-laying will be commenced about Nov. 20, & continued for a distance of 17 miles this fall. The balance of the track will be laid when navigation opens in the spring. The work between Caribou & White Horse is expected to be finished & in operation by June 1. The section along the lake-shore will be put in operation some time in July next. In the meantime goods will be transferred by steamers between the ends of track, Lake Bennett being considered a long ferry." (Nov., pg. 327.)

**Canadian Pacific Equipment.**

In our Sep. issue we briefly referred to the two magnificent trains which the C.P.R. Co. had then just put on the fast limited run between Montreal & Ottawa on the Short line via Vaudreuil. The Atlantic type locomotives used on these trains were fully described & illustrated in our Oct. issue. They are giving good service, but have not yet had an opportunity of showing what they are capable of in the way of records. This is due to the fact that the schedule which was intended to be made with them is not yet inaugurated on account of improvements being made in the track. They are at present running between Ottawa & Montreal, 111.4 miles, & are scheduled to make the run in 2 hours & 25 minutes, but the down train from Ottawa is held 5 minutes at Ottawa on account of other sta-

tion work. They make 3 stops, slow down 3 times for diamond crossings, & run slow at Ottawa end about 2 miles, & at the Montreal end about 1 mile, & 6 miles in one place for curves. Extra stops are sometimes made, & they have a record of picking up 15 minutes' detention without any trouble.

Each train also comprises a baggage car, a combination 2nd class & smoker, a 1st class & a parlor car. They were built at the Co.'s Hochelaga shops at Montreal under the supervision of Master Car Builder Apps.

The parlor cars Temiskaming & Lievre are massive structures built on a model to emphasize a lofty ideal & display in detail the architectural perfection prevalent throughout the train. The style used in the ornamentation is the Empire. The large plate glass windows, crowned with bevelled plate lights, & the 6 oval windows set with cathedral glass in soft

tints give the cars a very imposing exterior appearance. A considerable amount of ingenuity has been used in planning out the interior, the whole object considered being the comfort of the travelling public. The entrance to the main parlor is along a gracefully curved passage, panelled flush in rich mahogany with inserted carved mouldings. The main parlor has a very striking appearance, being in carefully selected prima vera. The large windows are divided by richly carved panels, each having an inserted oval mirror. The windows, of which there are 12 in this room, are fitted with inside sashes, the plate glass being set in a brass frame hinged to the sash. This, while it adds richness to the window, is intended to facilitate the cleaning of the glass. Each window is fitted with the latest improved fixtures for operating the roller blinds. The whole is finished by rich silk lambrequins &

**C. P. R. LANDS.**

The Canadian Pacific Railway lands consist of the odd-numbered sections along the Main Line and Branches, and in Northern Alberta and the Lake Dauphin District. The Railway Lands are for sale at the various agencies of the company in Manitoba and the North-West Territories at the following prices:

Lands in the Province of Manitoba average \$3 to \$6 an acre.

Lands in Assiniboia, east of the 3rd meridian, average \$3 to \$4 an acre.

Lands west of the 3rd meridian, including the Calgary District, generally \$3 per acre.

Lands in Northern Alberta and the Lake Dauphin District, \$3 per acre.

**TERMS OF PAYMENT.**

The aggregate amount of purchase money and interest is divided into ten instalments, as shown in the table below; the first to be paid at the time of purchase, the second two years from the date of purchase, the third in three years, and so on.

Interest on the outstanding purchase money is payable in one year, except in case of an actual settler who breaks up at least one-sixteenth of the land within that time. No rebate of interest is allowed on hay or grazing lands.

The following table shows the amount of the annual instalments on a quarter section of 160 acres at different prices under the new conditions:

- 160 acres at \$3.00 per acre, 1st instalment \$71.00, and nine equal instalments of \$60.
- 160 acres at \$3.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.
- 160 acres at \$4.00 per acre, 1st instalment \$95.85, and nine equal instalments of \$80.
- 160 acres at \$4.50 per acre, 1st instalment \$107.85, and nine equal instalments of \$90.
- 160 acres at \$5.00 per acre, 1st instalment \$119.85, and nine equal instalments of \$100.
- 160 acres at \$5.50 per acre, 1st instalment \$131.80, and nine equal instalments of \$110.
- 160 acres at \$6.00 per acre, 1st instalment \$143.80, and nine equal instalments of \$120.

**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. of the amount paid in excess of the usual cash instalment.

Purchasers paying any instalment, or more, one full year before the date of maturity, will be allowed a discount on the amount of the instalment or instalments so paid at the rate of six per cent. per annum.

Interest at six per cent. will be charged on overdue instalments.

Write for maps and full particulars.

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**F. T. CRIFFIN, - Asst. Land Commissioner,**  
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**STEEL AXLES, TYRES, AND**  
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 "PHENIX" Loco. Spring Steel is the  
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Size 23 x 3½ inches. Oblong, figured ends, white ground, blue letters, lined & tipped:

- Waiting Room.
- General Waiting Room.
- Ladies' Waiting Room.
- Men's Waiting Room.
- Baggage Room.
- Dining Room.
- Lunch Room.
- Smoking Room.
- Ladies' Toilet.
- Men's Toilet.
- Agent's Office.
- Freight Office.
- Private Office.
- Telegraph Office.
- Ticket Office.
- No Admittance.

**NO ADMITTANCE**

Size 10 x 2¼ inches. Oblong, oval ends, white ground, blue letters, lined & tipped, hollowed:

- Exit.
- Fire Escape.
- Fresh To-day.
- Gentlemen.
- Ladies.
- Lavatory.
- Men.
- No Admittance.
- No Road.
- Office.
- Please Shut the Gate.
- Private.
- Refreshments.
- Women.

**STICK NO BILLS**

Size 18 x 3½ inches. Oblong, square ends, white ground, blue letters, lined & tipped.

Furnished Apartments. Smoking Prohibited. Please Shut the Door. Stick No Bills.

**PUSH · PULL**

Oval, size 2 x 3 inches, white ground, blue letters, tipped, hollowed, lettered **Push, Pull**, as above.

Oblong, size 3 x 1½ inches, white ground, blue letters, tipped, lettered **Push, Pull**, as above.

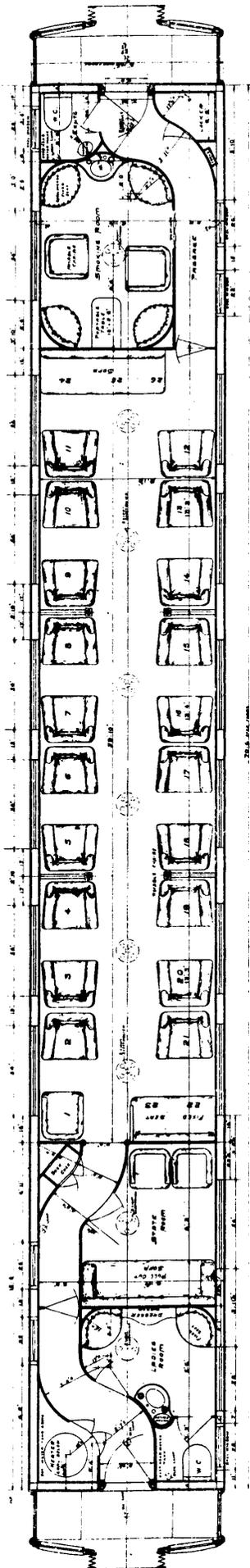
Perpendicular, square ends, size 12 x 3 inches, white ground, blue letters, lined & tipped, lettered horizontally or perpendicularly, **Push, Pull**.

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These signs last practically for ever, they never fade or tarnish, they are ever bright and attractive, they are absolutely impervious to heat or cold, they are the only signs that will withstand the effects of weather in all climates.

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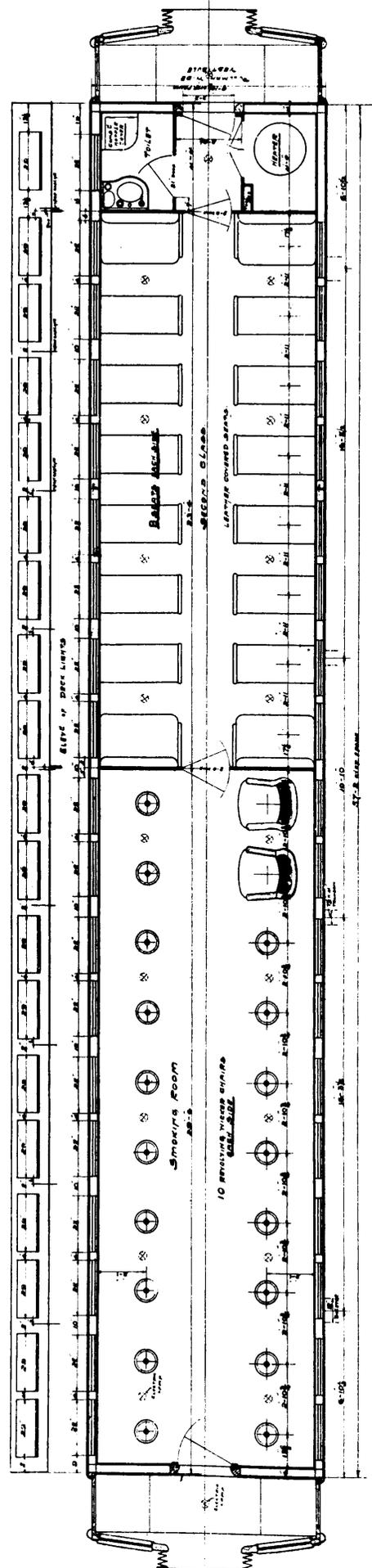


FLOOR PLAN CANADIAN PACIFIC RAILWAY PARLOR CARS, TEMISKAMING AND LIEVRE.

draped curtains. The parlor is divided into 3 parts by 2 gracefully constructed arches, which, with artistic brass inserted grills, richly carved columns & draped silk curtains, give a very striking rich effect. The parlor is furnished with 1 settee, 1 sofa & 21 chairs, all being richly covered & upholstered in the Turkish style of upholstery, the carpet having been especially designed for these cars. The lines of the ceiling are in Empire, with a dark olive green ground, ornamented in gold. The whole treatment of the ceiling adds richness to the appearance of the room. The centre ceiling is ventilated by 12 long oval top sashes set with cathedral glass of intricate Empire design. The state room is similar in design to the main parlor, excepting that the wall panels, above the dado, are covered with rich old gold silk. This room also has a large window treated in the same manner as in the main parlor. Rich cathedral glass in the passage partition, a sofa & 2 upholstered wicker chairs complete it. This room is intended for a family or small party. The Co. has made a departure in these cars, as heretofore the male passengers only were considered as entitled to have their separate assembly room in the smoking room. In these cars the Co. has provided a ladies' room, which is as richly decorated as the main parlor, & has a nickelene washstand, drinking cooler, a large mirror, dressing cabinet & 2 cosy seats upholstered in gold bronze plush. This consideration on the part of the Co. will, no doubt, be fully appreciated by ladies. Special mention must be made of the commodious smoking room. On entering this room the attention is at once attracted to the wall panels. These are veneered with a specially selected San Domingo mahogany, the best that could be obtained in the country. The panels are trimmed with carved moulding, & divided by finely carved pilastres, which pass from the floor to the roof. The passage side is relieved by a cathedral window in soft tints of mottled glass. The entrance is draped with a portiere of olive green velours. The room is finished with 4 corner seats upholstered in olive green plush, 2 wicker chairs & a nickelene washstand.

Next in order are the 1st class or day coaches, of which there are 4, which have some new features contributing alike to comfort & elegance. The exterior is similar to the parlor cars, having wide vestibules, steel platforms, mahogany finish & 6 wheeled trucks. The length is 57 ft. 2 in., total length, 65 ft. The inside vestibules at each end are finished in carefully selected mahogany. The main room, when illuminated by the electric lights, has a very elegant appearance. This room is sub-divided by 2 arches across the car, each having 4 fluted columns surmounted with carved capitals supporting the arch, the base of column resting on the seat backs. The bulkheads & side finish are tastefully paneled & embellished with carved pilastres & molding. The ceiling is in the Empire style & richly ornamented in olive green on a gold ground. All the woodwork is beautifully handpolished. The window roller blinds are fitted up with patent fixtures. The seats are of a new pattern, & upholstered in rich terra cotta plush, & the aisle is carpeted with Wilton carpet imported especially for these cars. The seating capacity of each car is 68 passengers. Toilet rooms for ladies & men are located at either end of the car.

The combination 2nd class & smoking cars are in most respects similar to the 1st class, having wide vestibules, steel platforms, & 6 wheeled trucks. The inside is divided into 3 parts, comprised of an inner vestibule, 2nd class compartment, & smoking room. The general design of the inside is similar to the 1st class, the entire car being finished in mahogany & beautifully hand polished. The inside vestibule has a toilet room fitted with a nickelene washstand, a mirror, & flushing



FLOOR PLAN AND ELEVATION OF C.P.R. COMBINATION SECOND CLASS AND SMOKING CARS.

hopper. The 2nd class compartment is furnished with 16 improved seats, upholstered in dark green leather. The smoking room is finished with 20 wicker chairs, upholstered in plush. These are arranged along the side of the car, allowing each smoker, as he is enjoying the weed, to view the scenery. As in the 1st class cars, the bulkheads & side finish is tastefully panelled & embellished with carved pilasters & moulding. The lines of the ceiling are of the Empire design, the ornamentation being elaborately carried out in shaded gold on a ground of terra cotta.

The entire train is lighted by electricity, each car generating its own current, steam heated, & equipped with the wide vestibules, standard steel platforms, 6 wheeled trucks, 40 in. steel tire wheels, & Westinghouse quick action high speed triple brakes & air signal. The metal finishings are in old gold made to special design. The method of electric lighting is unique. For emergencies, & in addition to the regular dynamo, under each car is located an auxiliary battery sufficient to light a dozen or more lamps in each car. The battery is connected with the main switch box, & when the dynamo is running is continually being charged, & is therefore ready for instantaneous use. Beside this, there is a connection between each car for use, should the dynamo give out, or the battery on one car become exhausted, whereby power generated on other cars will furnish the necessary lights.

On page 355 we give floor plans of the parlor cars, & of the combination 2nd class & smoking cars.

The Co. has commenced to discard the use of oil lamps in the passenger cars, substituting electric light. Under the system adopted each car has a dynamo attached underneath the car body & ingeniously connected with a belt to the truck axles. Although the light thus furnished is steady & brilliant, it is still in the experimental stage. A large amount of work is being done remodelling & modernizing the older passenger & sleeping cars.

Over 200 standard 30 ton box cars were turned out of the Perth shops during Nov. & they are now being completed at the rate of 11 a day.

No new work is being done at the Farnham shops at present as they are being worked to their fullest capacity on passenger & freight car repair work.

The Minneapolis, St. Paul & Sault Ste. Marie Ry. has ordered 600 box cars of 60,000 lbs. capacity. It is officially stated that the Co. is not in the market for locomotives.

**Railway Equipment Notes.**

The Canada Atlantic is building 50 flat cars at its Ottawa shops.

The Esquimalt & Nanaimo Ry. is having 200 box cars built, of 60,000 lbs. capacity.

No special orders for equipment were completed in any of the G.T.R. shops during Nov. Many of the locomotives are being fitted with steel snowplows.

An official statement by the management of the Algoma Central Ry. gives the equipment as follows: locomotives 4, passenger cars 10, freight cars 390. This probably includes orders placed & not delivered.

The Great Northern (U.S.A.) passenger cars over the entire system are to be painted olive green. The sombre brown that since the beginning has been the prevailing color is to be done away with & a color in contrast to any other now in use is to take its place.

The White Pass & Yukon Ry. is building more cars than were mentioned in our last issue. The order comprises 50 box, 30 stock & 50 flat cars. Superintendent Rogers is credited by a press despatch as stating that 4 locomotives, 2 compound & 2 simple, have been ordered for Feb. delivery.

During Oct. the Baldwin Locomotive Works broke all records of the establishment in the number of finished locomotives turned out. The product of the works for that month was 104, & as there were 26 actual working days in the month the output represented an average of 4 locomotives a day. The best previous record of the works was 96 in one month some years ago. This was nearly equalled by the output for Nov., when 92 locomotives were turned out. The works are being run to their utmost capacity, & the firm is making strenuous efforts to turn out 100 engines during Dec. A crane with a span of 158 ft. has recently been installed in the erecting shop. It will lift a 196,000 lbs. locomotive 40 ft. in the air, carry it 336 ft. & set it down again in 3 minutes & 36 seconds.

**Sydney & Louisburg Locomotives.**

Last month we gave an illustration of a large consolidation double end locomotive, recently added to the Sydney & Louisburg Ry.'s equipment, & mentioned that a double end mogul had also been added. An illustration of the latter is given on pg. 357. Following are its general dimensions:

Weight in working order.....	172,000 lbs.
"    "    on drivers.....	122,000 lbs.

Wheel base, driving.....	13 ft. 2 in.
"    "    rigid.....	13 ft. 2 in.
"    "    total.....	32 ft.
Diam. of cylinders.....	19 in.
Stroke of piston.....	26 in.
Outside diam. of first ring.....	62 in.
Working pressure.....	180 lbs.
Thickness of plates in barrel & outside of firebox.....	9-19 in., 1/2 in., 7-16 in. & 5-8 in.
Firebox, length.....	90 in.
"    "    depth.....	Front, 66 1/2 in.; back, 66 1/2 in.
"    "    crown staying.....	Radial stays, 1 in. diam.
"    "    stay bolts.....	7-8 in. & 1 in. diam.
Tubes, number of.....	236
"    "    length over tube sheets.....	12 ft.
Heating surface, tubes.....	1,472.49 sq. ft.
"    "    firebox.....	125.43 sq. ft.
"    "    total.....	1,597.92 sq. ft.
Grate.....	26.23 sq. ft.
Water capacity of tender.....	3,700 U.S. gallons
Coal.....	5 tons

**RAILWAY APPOINTMENTS, Etc.**

**Algoma Central.**—Following is the official organization of this line up to date: President, F. H. Clergue; Secretary, H. C. Hamilton; Treasurer, B. J. Clergue; General Manager & General Freight & Passenger Agent, E. V. Clergue; Auditor, C. P. Worthington; Purchasing Agent, A. M. Harnwell; Master Mechanic, W. H. Munro; Master Car Builder, Robert Lang; Master Car Painter, T. H. Baker; Foreman Repairs, H. Derrer; Chief Engineer, J. A. Wilde; offices, Sault Ste. Marie, Ont.

**Central Vermont.**—W. J. Robertson having resigned, Jas. Coleman has been appointed Master Car Builder; office at St. Albans, Vt.

J. A. Southard having resigned, the office of Division Freight & Passenger Agent at New London has been abolished. All reports & correspondence will hereafter be addressed to the undersigned, J. Pullen, General Freight Agent, and S. W. Cummings, General Passenger Agent.

F. W. Baldwin having resigned, C. E. Soule has been appointed Superintendent; office at St. Albans, Vt.

W. T. Sutphen, heretofore Chief Train Despatcher, has been appointed Assistant Superintendent of the Southern Division; office at New London, Conn.

S. B. Kramer has been appointed Chief Train Despatcher, vice W. T. Sutphen, promoted; office at St. Albans, Vt.

**Grand Trunk.**—G. F. Cotter, whose appointment as Chief Train Despatcher at Montreal we announced in our last issue, was formerly Chief Train Despatcher for the Illinois Central at Jackson, Tenn. B. D. Benson, heretofore with the Western New York & Pennsylvania at Buffalo, N.Y., has been appointed Assistant Chief Train Despatcher. Early in Nov. Jos. Robb, for many years

**THE BARRETT TRACK JACK.**

Recommended as a standard by the  
**Road Masters' Association of America.**

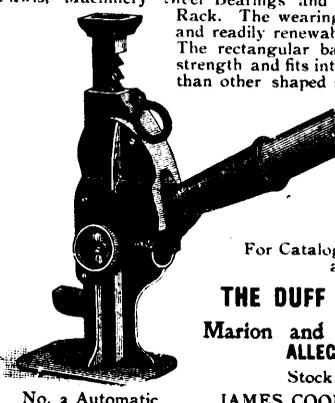
These Jacks are made with Malleable Iron Frames, Steel Pawls, Machinery Steel Bearings and Pivots, forged Steel Rack. The wearing parts are removable and readily renewable at slight expense. The rectangular base gives great lifting strength and fits into close quarters better than other shaped stands. Adaptable to either high or low set loads.

The Barrett Jack is the safest, best and strongest known to the railroad world to-day.

Lifting capacity 10 to 15 tons.

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Marion and Martin Avenues,  
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No. 2 Automatic Lowering.



No. 1 Trip.

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... AND ...  
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**CHOICE MALT FOR SALE.**

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foreman of the Brockville, Ont., shops, resigned, being succeeded by W. Marshall, of London, Ont., who was only able to hold the position a few days, owing to illness. J. McKay, of Stratford, has since been appointed.

**Intercolonial & P.E.I.**—J. B. Lambkin, District Passenger Agent, Halifax, & H. A. Price, District Passenger Agent, Montreal, have been appointed assistant general passenger agents, each with headquarters as at present. Mr. Lambkin will still attend to the duties of District Passenger Agent east of Dalhousie, N.B., & Mr. Price to the duties of District Passenger Agent west of Dalhousie, N.B., including Dalhousie.

W. H. Price, Chief Clerk in the General Passenger Department, has been appointed New England Agent, with headquarters at Boston, Mass., a new office. H. H. Melanson, Rate Clerk in the Department, has succeeded Mr. Price as Chief Clerk.

H. J. Scriver, who was mentioned in our last issue as having been succeeded as City Passenger Agent at Montreal by J. W. Bryson, has been retained as a clerk in that office.

**Spokane Falls & Northern.**—C. Shields, Vice-President & General Manager of this

### Mainly About People.

Jas. Ross, of Montreal, has succeeded the late Hugh McLennan as a director of the Bank of Montreal.

Sir Rivers Wilson, President of the G.T.R., & Lady Wilson, are spending some weeks at Brighton, Eng.

R. A. Ross, Consulting Electrical Engineer for the C.P.R., has returned to Montreal after making a tour of the world.

The Duke of Cambridge was recently the guest of Lord & Lady Mount-Stephen at Brockton Hall, Hertfordshire, Eng.

J. A. Cuttle has been appointed Manager pro tem. of the Montreal Transportation Co., in place of the late D. G. Thomson.

N. Tomney, C.P.R. Store-keeper at Moose Jaw, Alta., was run over in the yard there recently by a car & instantly killed.

It is said the office of the General Freight Agent of the Dominion Atlantic Ry. is to be removed from Halifax to Kentville, N.S.

Mrs. J. T. Craig, daughter of D. Brown, Assistant General Freight Agent G.T.R., Chicago, died there Nov. 29, aged 31.

C. McGrath, of Lethbridge, Land Commissioner of the Alberta Ry. & Coal Co., is to be married in Montreal, Dec. 19, to Miss Mabel Galt, daughter of the late Sir A. T. Galt.

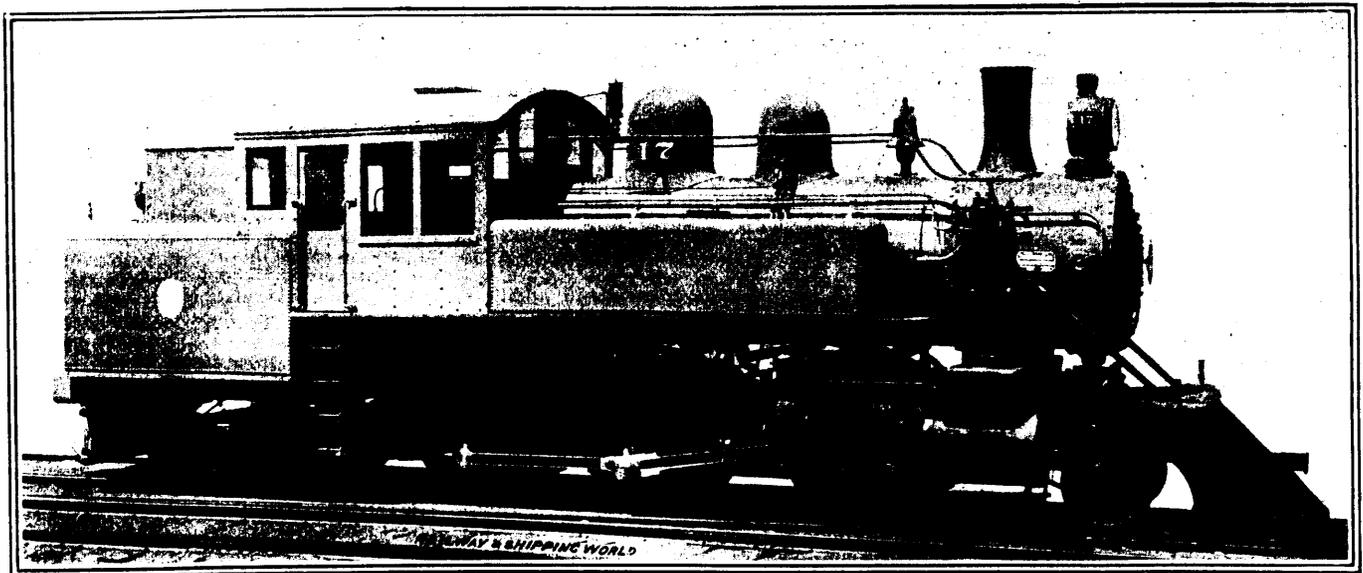
D. G. Sturrock has been appointed Manager of the Toronto office of the C.P.R. Co.'s Telegraphs, succeeding A. W. Barber, promoted to the Superintendency of the Ontario Division.

D. Budge, of Halifax, has been appointed General Superintendent on this side of the Atlantic of the Halifax & Bermuda Cable Co. & the Direct West India Cable Co., with quarters in Halifax.

Winnipeg Town Topics mentions a rumor that W. R. Baker, General Manager of the Manitoba & Northwestern Ry., & Mrs. Baker are contemplating a prolonged visit to the Southern States.

Just before the recent Manitoba elections, Hon. Hugh J. Macdonald resigned the solicitorship of the C.P.R. Land Department & retired from the firm of Macdonald, Tupper, Phippen & Tupper.

C. A. E. Huddart, midshipman on H.M.S. Doris, who was killed recently while fighting



DOUBLE END MOGUL LOCOMOTIVE FOR SYDNEY AND LOUISBURG RAILWAY.

line, & Assistant General Superintendent of the Great Northern (U.S.A.), has resigned. He was at one time on the Western Division of the C.P.R. P. T. Downs has succeeded him on the G.N., but we are not advised as to the filling of the S.F. & N. vacancy.

**Wabash.**—R. Doyle has been appointed Trainmaster of the Buffalo Division, with headquarters at St. Thomas, Ont., succeeding T. J. Costello, resigned.

**White Pass & Yukon.**—The officers are:—S. H. Graves, President, Chicago; E. C. Hawkins, General Manager; S. M. Irwin, Traffic Manager; E. B. Hussey, General Purchasing Agent; A. L. Berdoe, Auditor, all with offices at Seattle, Wash.; F. C. Elliott, Secretary; J. W. Probert, Treasurer, with offices at Chicago; J. H. Hislop, Assistant Chief Engineer; J. P. Rogers, Division Superintendent, with offices at Skagway, Alaska; F. P. Meyer, City Passenger & Freight Agent, Seattle; J. H. Greer, Commercial Agent, Victoria, B.C.; C. W. Cook, Agent, Tacoma, Wash.; C. W. Joynt, General Agent at Skagway; A. H. B. MacGowan, Agent, Vancouver, B.C.; S. P. Brown, General Agent, San Francisco; S. E. Adair, Agent, Dawson, Yukon.

Mrs. J. G. Hampton, wife of the Superintendent of the North American Telegraph Co., died at Deseronto, Ont., Nov. 20, aged 33.

A. Fairbairn, Paymaster of the Montreal St. Ry., has been appointed Comptroller of the West India Tramway Co. at Kingston, Jamaica.

W. Ellis, at one time Superintendent of the Welland Canal, died at St. Catharines, Ont., Dec. 15, aged 75. He was formerly a railway contractor.

The office of W. Kelly, Jr., General Passenger Agent of the Niagara Gorge R.R., has been removed from Buffalo, N.Y., to Niagara Falls, N.Y.

W. G. Ross, Comptroller of the Montreal Street Ry., has been elected Second Vice-President of the Street Railway Accountants Association.

It is said the General Passenger Agent & the General Freight Agent of the Intercolonial Ry. have each had their salaries increased from \$2,100 to \$2,400.

D. S. McKenzie, night chief of the C.P.R. Co.'s telegraph office at Vancouver, has been appointed Manager of the Government telegraph office at Dawson, Yukon.

at Graspan, South Africa, was a son of Jas. Huddart, who is well known in Canada in connection with the Canadian-Australian steamship service.

Capt. T. H. Browne, of Montreal, died recently at Havana, where he went as engineer for the electric railway. He was at one time engaged on the construction of the Montreal & Ottawa Ry., & afterwards became Dominion Government architect for the Province of Quebec.

B. S. Jenkins, recently appointed General Superintendent of the C.P.R. Co.'s Telegraphs west of Fort William, has been Superintendent of the Western Division since 1883. Then the Winnipeg office staff consisted of the manager, 2 clerks, 4 operators, & 3 or 4 messengers. To day it has 15 clerks, 40 operators & 30 messengers.

E. V. Holcombe, Superintendent of Sleeping & Dining Cars, Great Northern Ry. (U.S.A.), died suddenly in the street in St. Paul, Minn., Nov. 26, of heart disease. He was born in Cincinnati, Ohio, in 1834, was at one time a steamboat captain on the Mississippi & was afterwards Manager of the Winnipeg & Western Transportation Co. at Winnipeg.

A. W. Barber, recently appointed Superintendent of the Ontario Division of the C.P.R. Co.'s Telegraphs, was born in Toronto 45 years ago, & has been in telegraph work all his life. He was with the Montreal Telegraph Co. as a boy, then with the Dominion, & later was Manager of the Canadian Mutual Telegraph Co. Fourteen years ago, on the organization of the C.P.R. Co.'s Telegraphs, he entered its service.

Sir Geo. Kirkpatrick, who died at Toronto Dec. 13, was a director of the C.P.R. Co. & President of the Dominion Express Co. The body was taken from Toronto to Kingston, Ont., by a special C.P.R. train & was buried at Catarauqui Cemetery. Among the pallbearers were Sir Wm. Van Horne, T. G. Shaughnessy, E. B. Osler & W. D. Matthews, of the C.P.R. directorate; J. Cassells, Secretary of the Dominion Express Co., & Nicol Kingsmill.

W. J. Camp, recently appointed Superintendent of the Eastern Division of the C.P.R. Co.'s Telegraphs, was born in 1855, commencing his telegraph career with the Dominion Telegraph Co. in 1874, under C. R. Hosmer. He held various positions in the telegraph companies in Canada & the U.S. until 1886, when he entered the employ of the C.P.R. Co.'s Telegraphs as electrician, which position he held up to the time of his present appointment.

Jas. Kent, recently appointed Manager of the C.P.R. Co.'s Telegraphs, was born in Montreal, Jan. 15, 1854. He entered the service of the Montreal Telegraph Co. as messenger shortly after leaving school in 1868. He was promoted to the operating room as check boy, & after a short time became an operator. After working as such for five years, he was appointed night chief, & subsequently day chief for the same Company, which position he held until 1886, when he resigned to accept the position of chief operator of the C.P.R. Co.'s telegraphs at Montreal, which opened for business that year. In 1890 he was promoted to the superintendency of the eastern division of the system, & held this position up to the time of his present appointment.

James Guthrie Scott, whose portrait appears on pg. 345, of this issue, is the son of the late Hugh Erskine Scott, of Quebec, Manager of the Montreal & Quebec steamers. The ancestors of his mother, nee Margaret Chillas, who were of Scotch & Acadian stock, went to Quebec in 1759. He was born in Quebec City, Feb. 13, 1847, was educated at the High School there, & commenced his business life in the lumber trade, being con-

nected with the Montmorency & Three Rivers mills for a number of years. He entered railway service in 1875 as Secretary of the Quebec & Lake St. John Ry., of which he is now Secretary & Manager. In 1893 he became also Secretary & Manager of the Great Northern Ry. of Canada. He is a member of the Church of England, & politically is neutral. In 1863 he married Sophy Mary, daughter of the late Alfred Jackson, M.D. She died in 1892.

Hugh McLennan, President of the Montreal Transportation Co., died suddenly Nov. 21. He was born in Glengarry, Ont., in 1825, & received his education there. In 1842 he went to Montreal & entered the service of the line of steamers plying between Montreal & Kingston as purser. In 1850 he became wharfinger & freight agent for the company in Kingston, & in 1851 he removed to Montreal in the same capacity. In 1853 he & his brother John founded the firm of J. & H. McLennan, which carried on a grain & transportation business until John retired in 1867. The business was then enlarged, under the title of the Montreal Transportation Co., & Hugh McLennan was made its President, a position he held until his demise. He was also very largely engaged in the grain trade, & was one of the heaviest shippers from Montreal. He was at one time President of the Intercolonial Coal Co. & the Black Diamond Steamship Co., & was for some time the Board of Trade's representative on the Harbor Commission, besides holding other important offices.

**Chicago & Grand Trunk Ry.**—It was recently announced that the time for depositing the Co.'s 2nd mortgage 5% bonds with Glyn, Mills, Currie & Co., London, Eng., on behalf of the trustees, had been extended from Dec. 1 to 15.

**Grand Trunk Betterments.**—In addition to the work enumerated on pg. 348, a great many bridges have also been built, the number from Montreal to Island Pond being 35, with a total measurement of 2,966 ft., all of steel & masonry, & capable of carrying the very heaviest traffic that can possibly pass over the road. Between Montreal & Brockville, 1,071 ft. of bridging has been done, 206 ft. being double tracks at Ste. Anne, with 71 ft. at Suspension Bridge, N.Y. Masonry is also being completed for steel bridges at Ste. Anne, 1,330 ft.; Vaudreuil, 1,380 ft.; Isle Perrot, 142 ft.; and the Trent River at Trenton, 438 ft., making a total of 3,290 ft., all of which will be in position early in the new year. The G.T. has employed from 350 to 500 men in track laying during the last 3 months, & the force was

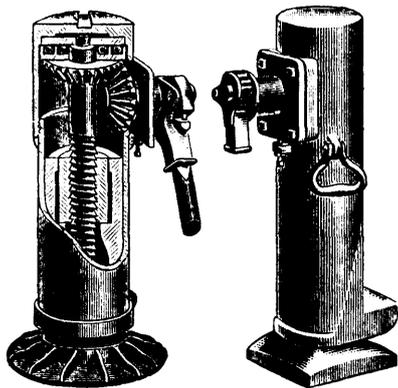
largely increased after the strike, to make up for the 5 weeks that had been lost. There have been from 4,000 to 4,500 men at work on maintenance of way, the line comprising 4,180 miles, 450 of which is double track.

**Fire Fighting by Railway Employees.**—The Ontario Deputy Commissioner of Crown Lands, as referee appointed by the High Court to decide a claim by O'Neil & Ferguson, railway contractors, against the St. Anthony Lumber Co., has handed out his decision. The contractors were constructing a section of the Ottawa, Arnprior & Parry Sound Ry. when a fire broke out in the St. Anthony Co.'s limits near Whitney. At the request of the Ontario bush rangers the railway men fought the fire, about 200 men being engaged on & off for a week. The contractors asked the St. Anthony Co. to pay the actual wages of the men for the time so employed. The request was refused, on the ground that the railway construction contributed to the fire, & that the bush rangers were not agents for the Co. There was a great bulk of evidence, & judgment was given against the St. Anthony Co. for \$653. Mr. White found that the rangers have power to call for assistance in the event of fire at the expense of the lessees. If his finding is sustained by the High Court, the decision will form a most important precedent.

**Manitoba & Northwestern Ry.**—The selection of M. & N.W.R. lands, made jointly by the Manitoba Government & the Co., under an act passed last session of the legislature, has been completed. The arrangement was that the Co. should transfer to the Government 542,000 acres of its land in settlement of claims against it. This has been selected—213,000 acres in Manitoba & the balance in the Territories. The inspectors who made the selection state that they found extensive tracts of the very finest agricultural lands northwest of Yorkton, & that Manitoba will have a valuable asset in the lands.

The M. & N.W.R. Co. gives notice of application to the Dominion Parliament for an act authorizing it to complete within 7 years from the passing of the act an extension of the main line from Yorkton to Prince Albert, an extension of the Shell River branch from Russell to the northern or western boundary of Manitoba, a branch from the main line between Portage la Prairie & Arden running northerly eastward of the Riding Mountains to the northern or western boundary of Manitoba, & a branch from the main line between Westbourne & Beautiful Plains northwesterly in the direction of Lake Dauphin or Duck Mountains.

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## RAILWAY PROJECTS.

**Alaska & Northwestern.**—Belcourt & Ritchie, solicitors, Ottawa, give notice of application to the Dominion Parliament, for the incorporation of a company to build & operate a railway from or near Pyramid Harbour, Lynn Canal or from or near the International Boundary in the vicinity of Lynn Canal, through the Chilkat Pass, & by the Dalton Trail to or near Fort Selkirk, Yukon, & with other powers.

**Atlin to Discovery, Etc.**—Langley & Martin, solicitors, Victoria, give notice of application to the B.C. Legislature to incorporate a company to build & operate a tramway from Atlin to Discovery, Cassiar District, & from either or both those places to any other places in Cassiar district, & with other powers.

**C.P.R. Projects.**—The C.P.R. will be very active at Ottawa next session. In addition to the applications enumerated in our last issue, pg. 325, & to applications for extension of time in connection with the completion of the Crow's Nest Pass, & Arrowhead & Kootenay lines, applications will be made as follows:—

For power to build, or acquire & operate a railway from or near Morden on its Pembina Mountain Branch, to, or near Miami, thence to or near Carman, Man.; also a railway from between Hartney & Souris, on its Souris branch, to between Boissevain & Ninga on the Manitoba & South Western Colonization Ry.

For power to construct, or acquire & operate a railway from Osborne on its Pembina Mountain Branch, to between Manitou & Morden on the said branch; also from Osborne to Carman & thence westerly & south-westerly to the line of the Manitoba South-Western Colonization Ry. between Cartwright & Boissevain; also from a point on its Souris branch, between Lauder & Monteith, easterly & north-easterly to between Glenboro & Treesbank on the Glenboro extension of that branch; & also from West Selkirk northerly & north-westerly direction to a point on the west shore of Lake Winnipeg about 60 miles, thence north-westerly to the Little Saskatchewan River.

**Cassiar Tramways.**—E. A. Jenks, solicitor, New Westminster, gives notice of application to the B.C. Legislature to incorporate a company to build & operate tramways & telegraph & telephone lines in Cassiar district, & with other powers.

**Fort Simpson, Teslin & Dawson Ry. Co.**—D. Scott, solicitor, Ottawa, gives notice of application to the Dominion Parliament to incorporate a company under this name to build & operate a railway from or near Fort Simpson, B.C., to Dawson, Yukon, via Teslin Lake, & with other powers.

**Grand Forks, B.C., to Republic, Wash.**—There has been a lot of talk lately about building a line between these points. First, rumor said it was to be done by the C.P.R., then the Great Northern (U.S.A.) was spoken of. When both these companies denied the impeachment, J. P. Graves, of the Grand Forks smelter, said, "If nobody else undertakes it, we are prepared to build it next year. No doubt our smelter at Grand Forks would receive considerable tonnage from the Republic mines."

A little later C. J. McCuaig, the Montreal mining broker, who is largely interested in mines in B.C. & in Washington, said, "If President Hill, of the Great Northern, who has held a charter for two years, authorizing the building of a line from Republic to the Boundary line, will not give assurances at once that he intends to go ahead without delay, I will undertake with my associates to build the road next summer. Connection will be made at the Boundary with a five-mile railway from Grand Forks. In this relation I am considering a project for the establishment of

a matting plant at Grand Forks for the B.C. mine & the Republic mine. A large quantity of the higher grade ore of the Republic camp would naturally seek the smelter at Grand Forks. The route between the two places presents no difficulties from an engineering standpoint. The water-grade of the Kettle River can be followed nearly all the way."

Next Mackenzie, Mann & Co. were mentioned by a Grand Forks correspondent, who said that Hugh Sutherland had been over the line in their interest. In an interview at Republic he was credited with saying: "Prosperity would, of course, come more expeditiously if you had proper transportation facilities, & I can speak with all assurance that if a U.S. railroad is not built into Republic from the south in the near future, a line will be built from the north. Further than this I am not at liberty to speak on the question."

A St. Paul, Minn., despatch says: "The Great Northern will not build its Republic line this year. This information comes from a high official of the Co., who added that Mr. Hill says further that when he does build into Republic it will not be up the San Poil River, but from a line he intends to construct into the Okanagan country. A business man who has mining interests in Republic camp, recently sounded Mr. Hill on the matter of his proposed line into Republic, & quotes the Great Northern chief as saying: 'I shall not build in there at present. The tonnage will not justify the extension. The ores there yield to local treatment, & those fellows need not expect me to build a railway to haul out nothing but gold bullion.'"

**The Grand Valley Ry. Co.** gives notice of application to the Dominion Parliament for an act to empower it to acquire & operate a line of ferry boats running from Port Dover, Goderich & other points to all points on the Great Lakes; to build & operate a railway from Goderich through the counties of Huron & Perth, passing through or near Leadbury, Milverton & Heidelberg, to Berlin, thence southerly through or near Blair, Preston, Galt, Ayr, Paris, Brantford, Waterford & Simcoe, to Port Dover, also branches running from Berlin to Listowel, to Elora, & to Stratford; to empower the Co. to connect with & enter into running arrangements with railways situate within a distance of 3 miles from any portion of its line; to authorize the Co. to build & operate telephone & telegraph lines for commercial purposes, & to sell & lease electricity; to change the name of the Co. to the Port Dover, Grand Valley & Goderich Ry. Co.; to increase the capital stock to \$2,600,000; to ratify & confirm the Ontario statutes, 1895, chap. 97, & 1896, chap. 102; to authorize the Co. to enter into agreements with the Michigan Central Ry. Co., & the Wabash Ry. Co., for connections & traffic arrangements; to have it declared that the Co.'s railway is under & subject to The Railway Act of Canada.

**Greenwood & Phoenix Tramway Co.**—G. R. Naden, D. Ross & G. H. Collins give notice of desire to form a company under this name, under the B.C. Tramway Company Incorporation Act, to build & operate a tramway running northerly & southerly through Greenwood, thence easterly to Phoenix; also from Greenwood westerly to Deadwood Camp; from Greenwood northerly to Long Lake Camp & from Greenwood to any point within a radius of 15 miles to which the Co. may wish to extend its tramway, also with power to build & operate telegraph or telephone lines in connection with the tramway, & with other powers.

**Greenwood & Vicinity.**—Leamy & Gray, solicitors, give notice of application to the B.C. Legislature for an act to enable the city corporation of Greenwood to build & operate a tramway from Greenwood to Phoenix Camp,

Deadwood Camp, Long Lake Camp, Central Camp, & any other point within 15 miles of Greenwood, & with other powers.

**Guelph to Goderich.**—At a meeting in Guelph, Ont., Dec. 14, there were 84 delegates representing Guelph, Goderich & the 23 municipalities through which the proposed line would pass. The extension of the C.P.R. westerly to Lake Huron seemed to be regarded as the most feasible scheme for supplying the desired railway facilities. The construction of this line would, it was estimated, involve an expenditure of about \$11,000 a mile, or a total of about \$1,000,000. There are no great engineering difficulties to be overcome. The Guelph Jct. Ry. Co.'s line from Guelph to Campbellville, 16 miles, would form the link from the main line. To the construction of this Guelph contributed \$200,000, & it now holds bonds of the Co. to that amount. At the time the building of the junction line was proposed, the intention was to go to Schaw, but the railway was carried to Campbellville, 5 or 6 miles further, on the strength of an alleged promise by Sir Wm. Van Horne, that eventually it would be extended to Goderich. The delegates were of opinion that in view of the large expenditure by the Dominion on Goderich harbor, the Dominion should be called upon to subsidize a project for giving that port more direct communication with the east. The views of the conference were embodied in a series of resolutions. One of these declared in favor of the extension of the Guelph Jct. Ry. to Goderich, in view of the great need of that section of Ontario for railway communication, & the fact that Goderich had been made a harbor of refuge, & was the natural outlet of that part of the province for trade with the Northwest. Another resolution requested Toronto's co-operation. A committee was appointed to further the scheme, Mayor Nelson, of Guelph, being Chairman, & W. E. Buckingham, of Guelph, Secretary.

**Horseshoe Bay to Alberni Canal, Etc.**—Bodwell & Duff, solicitors, Victoria, give notice of application to the B.C. Legislature to incorporate a company to build & operate a railway from Horseshoe Bay, Nanaimo district, Vancouver Island, north-westerly via Nanaimo Lakes, to the head of Alberni Canal, with a branch to the headquarters of Chemainus River, & with other powers.

**Johnston Strait to Upper Campbell Lake.**—Davis, Marshall & Macneill, Solicitors, Vancouver, give notice of application to the B.C. Legislature to incorporate a company to build & operate a railway from Johnston Strait, Vancouver Island, a short distance west of Chatham Point, to Upper Campbell Lake, with a line from the main line to Johnston Strait, a short distance east of Bear River; & a branch to the Salmon River, & with other powers.

**Kootenay & Yale Tramways.**—Macdonald & Johnson, solicitors, Nelson, give notice of application to the B.C. Legislature to incorporate a company to build & operate tramways, telegraph & telephone lines in Kootenay & Yale districts; to acquire the business, etc., of the Nelson Electric Tramway Co., & of the Rossland & Sophie Mountain Electric Ry. Co., & with other powers.

**Lake St. John Ry.**—There is a strong agitation in the northern part of Quebec for the extension of this line to James Bay.

**The Lindsay, Bobcaygeon & Pontypool Ry.** is projected to run from Bobcaygeon, via Lindsay, to the main line of the C.P.R. at or near Burketon, Ont. The promoters have been very active of late holding meetings in the towns & rural municipalities interested, & bonus by-laws are being submitted in several municipalities. The line, if built, will practically be an extension of the C.P.R. to Lindsay.

**The Pontiac Pacific Jct. Ry.** gives notice of application to the Dominion Parliament

for an act authorizing it to build & operate a railway from or near Quyon, or Shawville, Que., to Pembroke, Ont., & to construct branches of its railway not exceeding 30 miles. The P.P.J.R. runs from Ottawa 80 miles to Waltham, which is on the Quebec side of the Ottawa River, about opposite Pembroke. Quyon is 32 miles from Ottawa, & Shawville 46 miles, both being on the Co.'s line.

**Pyramid Harbor to Dawson.**—Logan, Jenks & Outhit, Solicitors, Amherst, N.S., give notice of application to the Dominion Parliament to incorporate a company to build & operate a railway from or near Pyramid Harbor, on the Chilcat Inlet, near the head of the Lynn Canal, or from the International Boundary line at or near Kluckwan, to Dalton's Post on the Dalton Trail, following the Dalton Trail to Fort Selkirk, thence to Dawson City, & with other powers.

**Vancouver & Lulu Island.**—Notice is given of application to the B.C. Legislature to extend the time for the completion of this line.

**Vancouver Island & the Mainland.**—The Victoria City Council has been presented with a largely signed petition, asking it to pass & submit to the ratepayers a by-law authorizing the city corporation to subscribe for stock not exceeding \$500,000 in any company incorporated for the purpose of acquiring & operating the Victoria & Sidney Ry., & of extending it into the business part of the city of Victoria, & to a convenient harbor north of Sidney; & for the purpose of establishing & operating a ferry system between such extension on the Saanich peninsula, & some convenient point on the mainland of B.C. south of the Fraser River, & also for building & operating a railway from such point on the mainland through Delta, Surrey, Langley, Matsqui, Sumas & Chilliwack, or such portion of the proposed undertaking or any alternative as may be deemed most in the public interest.

A. L. Belyea, Solicitor, has given notice of application to the B.C. Legislature to incorporate a company to carry out the scheme outlined in the above mentioned petition. (Nov., pg. 334.)

**Victoria to Eastern Boundary of B.C.**—Dumbleton & Anderson give notice of application to the B.C. Legislature to incorporate a company to build & operate a railway, with telegraph & telephone lines, from Victoria to the eastern boundary of the province, with branch lines from the main line to mining camps or coastal points, & with other powers.

**Kootenay Railway & Navigation Co.**—We are advised that the shareholders' meeting this year will be of a purely formal character. The Co. assumed possession of the property on Jan. 1 last, & as the books are closed in Canada on June 30 each year, there will be no report or accounts to submit to the shareholders until after June 30, 1900, when a period of 18 months will be covered.

### Railway Committee of Privy Council.

**Lake Erie & Detroit River Ry. & Michigan Central Ry.**—When the Dominion Parliament last session voted a subsidy for the extension of the L.E. & D.R. from Ridgetown to St. Thomas, Ont., it was provided that it should be payable only in the event of adequate running rights over the Canada Southern Ry. between the points mentioned not being granted to the L.E. & D.R., on terms to be approved by the Railway Committee. The case came before the Committee Nov. 7, when Z. A. Lash for the L.E. & D.R. intimated that that Co. would pay to the M.C. interest on the expenditure necessary to build a line from Ridgetown to St. Thomas, with other alternatives. He held that no advantage in the way of precedence in running rights should be given the M.C., as in that event the concession would be of no avail. Local communities & customers would inevitably be disappointed in the freight service to be furnished by the L.E. & D.R. line. Nothing short of precedence of its trains would answer the requirements of the district.

Nicol Kingsmill, Q.C., for the M.C., stated that that Co. objected to the granting of a bonus for the extension of the L.E. & D.R. The object of asking the bonus was to fill the gap that would interfere with its going to the Niagara River. The country between St. Thomas & Ridgetown had been made by the Canada Southern, which had received no bonus from the Dominion Government. The M.C., nevertheless, was ready to meet the L.E. & D.R. Co. half way, or was prepared to have it construct a line, but the M.C. objected to the Government bonusing a line that would be in opposition to the non-bonused Canada Southern. The L.E. & D.R. Co., he held, wanted the bonus & not the running powers. The M.C. would be ready to give the through passenger trains of the M.C. precedence, then the L.E. & D.R. through passenger trains, next the local passenger trains of the two companies to have equal rights; next the through freight trains of the M.C. with live stock or perishable freight, & finally the similar trains of the L.E. & D.R. Local trains to have equal rights, & special arrangements to be made for special trains. The L.E. & D.R. not requiring the use of M.C. terminals, the former line would not be compelled to use them & pay therefor.

Mr. Lash thought the proposed arrangement in respect of precedence of trains would be unsatisfactory.

The L.E. & D.R. Co., Mr. Kingsmill asserted, had offered an inadequate sum for the annual lease of the line. The part of the line referred to was worth about \$1,000,000, & the M.C. would accept \$25,000 a year for running rights. The cost of maintenance of the L.E. & D.R.'s own line would be about \$30,000 a year. The Minister of Railways having enquired if the rental asked was agreed on would the M.C. put down a second track, Mr. Kingsmill said 19 miles of this stretch

of the line was double tracked already, & if the Government would give \$3,200 a mile for the remaining 25 miles, the M.C. would certainly double-track it.

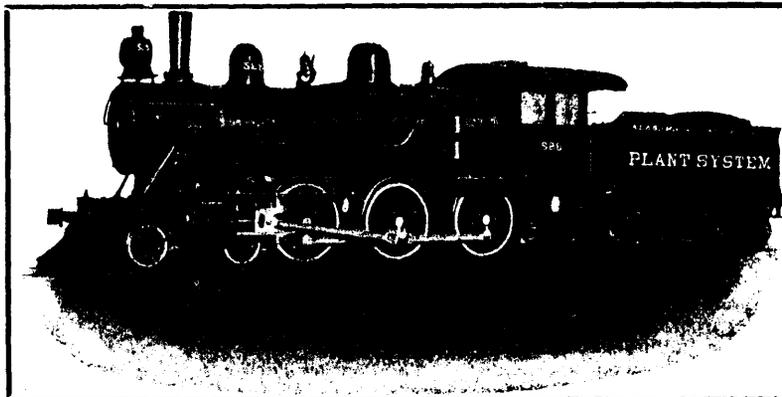
Judgment was reserved.

**Metropolitan Ry. Co. & C.P.R.**—An application to the M.R. Co., to connect its track with the C.P.R. by a switch on the west side of Yonge st., North Toronto, came before the Committee Nov. 7, B. B. Osler opposing for North Toronto & J. S. Fullerton for Toronto. Mr. Osler contended that the Committee had not jurisdiction to consider the application, sec. 173, defining the Committee's powers, not providing for the union of an electric railway with a steam road. Mr. Fullerton contended that the Committee had no power to direct the M.R. Co. to occupy any portion of Yonge st. without the consent of Toronto, W. Burwick, Q.C., for the M.R. Co., maintained that it was a railway within the meaning of the Act, the Co.'s charter including all the provisions of the Ontario Railway Act.

The matter was adjourned to Nov. 11, when a compromise was arrived at, Mr. Fullerton consenting for Toronto to an order being made without prejudice to the rights of other parties. Mr. Osler, for North Toronto, asked the Committee first to refer the case to the Supreme Court to settle the question of jurisdiction to unite the two railways, & suggested that if freight trains were to be permitted to pass over the M.Ry., it should be on a time schedule, so that the public might know at what hours Yonge st. would be safe for vehicular traffic.

After the Committee had consulted, it was announced by Mr. Blair that in the matter of jurisdiction the members were unanimously of opinion that they could act on the case. There did not appear to be sufficient reason why they should delay action or refuse to make an order in this case. It was therefore made as follows:

"The Metropolitan Ry. Co. having applied to the Railway Committee for permission to connect its tracks with the tracks of the C.P.R. by means of a switch in the city of Toronto, & the Committee having heard counsel for the applicant, the city of Toronto, the town of North Toronto, the County of York, & the C.P.R., respectively, & having duly considered the evidence submitted, & counsel on behalf of the city of Toronto consenting thereto, hereby approves of the applicant connecting its tracks with the tracks of the C.P.R. by means of a switch in the city of Toronto on the following conditions, that the connection is to be made on the east, not the west, side of Yonge st.; the applicant to pay all the cost of the change of location up to \$2,500. Should the cost exceed this amount the excess is to be borne by the applicant & the city of Toronto, so that the city shall not be liable for more than one-half of such excess. The point where the line of the applicant shall connect with the tracks of the C.P.R. to be on the property of the C.P.R., between its present northerly track & the southerly building north



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of said track. The applicant shall not run freight trains of more than 3 cars, exclusive of the motor, on Yonge st., & shall not run freight trains at a greater speed than 6 miles an hour through the towns, unincorporated villages, the unincorporated village of Thornhill, & that part of Yonge st. south of North Toronto, or on any other part of Yonge st., at a greater speed than 15 miles an hour. The applicant shall not operate its railway by any other power than electricity on Yonge st., & in its operation shall be subject to such agreements as may be or have heretofore been entered into between the County Council of York & the applicant. This order is subject to the reservation of the right by the Committee, & the recognition of said right by the applicant, to make such orders as may hereafter be deemed expedient respecting the time & mode of running freight cars & trains. Truck cars run in connection with a passenger car or cars shall not be considered freight cars within the meaning of the order."

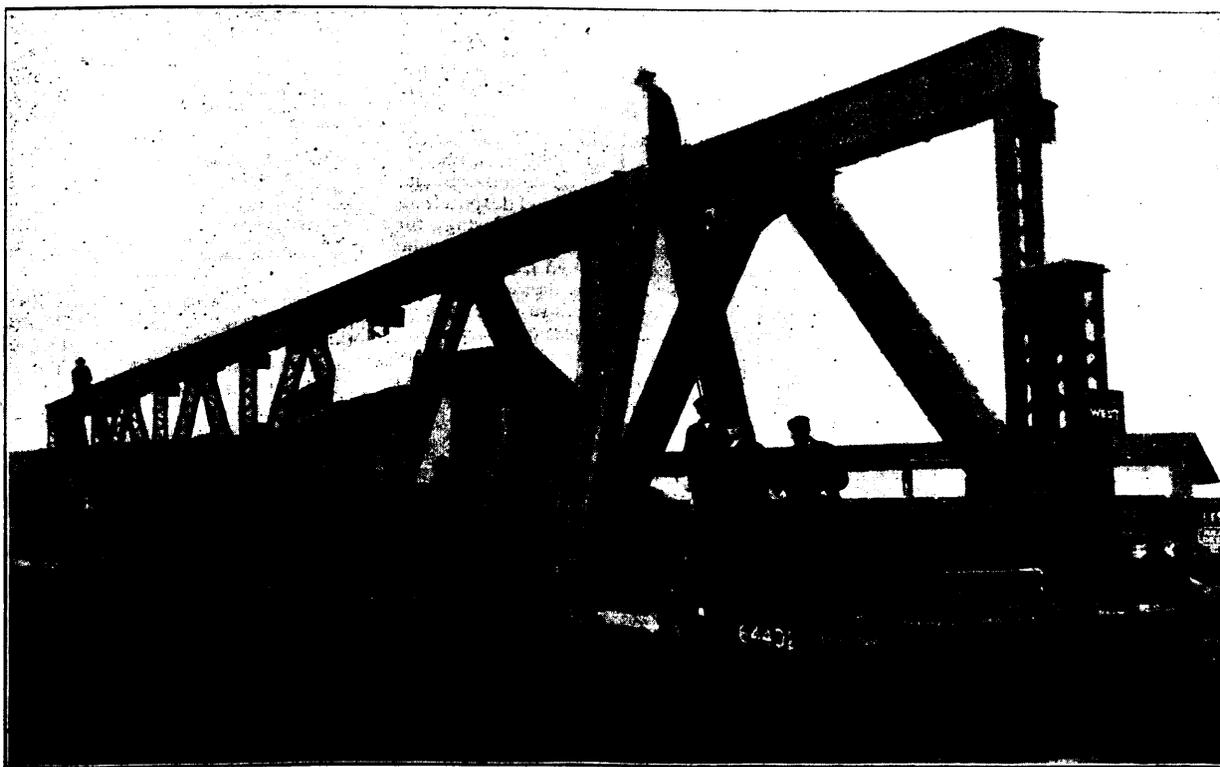
Notwithstanding that this order was agreed

was made from the railway siding to within a couple of feet of the street line. The whole question is now before the courts. The M.R. Co. has applied for the order of the Railway Committee to be made an order of the court, & the Toronto Ry. Co., under fiat from the Attorney-General of Ontario, has entered suit to test the legality of the Railway Committee's order.

**Lansdowne Avenue Crossing, Toronto.**—The application of the City of Toronto for a crossing over the C.P.R. & G.T.R. tracks at Lansdowne Avenue, came before the committee Nov. 7, & a few days later an order was issued directing that the city "may have a temporary crossing at rail level, for foot passengers only" over the railway tracks, "up to & including Feb. 20, 1900, on condition that the city shall, at its own cost, provide & keep a watchman at the crossing day & night, & shall make the approaches & crossing safe for the travelling public before the crossing is used for traffic. The Committee further directs, that after Feb. 20, 1900, all crossing

of the Railway Committee to build a subway, that it could not build without first obtaining permission under the Ontario Government municipal act, & that the plans submitted by the City showed that the construction of a temporary crossing would be a work of much expense. The City based its power to build the crossing upon sec. 14 of the Railway Act, & upon sec. 11, sub-section Q, which provides that whenever the Railway Committee find it necessary that streets should be laid across the tracks of a railroad they shall apportion the costs. On Nov. 30 the Chancellor enlarged the case for two weeks, leaving it in statu quo until the G.T.R. brings its appeal against the decision of the Railway Committee before the Governor-in-Council. In the meantime there will be no level crossing.

**The Brotherhood of Locomotive Engineers** is said to have decided to select a site in Cleveland, Ohio, for permanent headquarters. The land & building will cost \$300,000.



THE LARGEST BRIDGE TRUSS THAT HAS BEEN.

to on behalf of Toronto by the corporation counsel, in the presence of a deputation of three aldermen, the arrangement was repudiated by the Mayor & Council, & Mr. Osler was retained to test the jurisdiction of the Railway Committee in the matter. North Toronto followed by applying for an injunction restraining the M.R. Co. from using Yonge St. as a branch railway for the passage of heavy freight cars & motors to & from the C.P.R., & to restrain the M.R. Co. from converting the highway into a railway right of way, notwithstanding any order to the contrary of the Railway Committee. On Nov. 25, acting on the authority of the Railway Committee's order, the M.R. Co. put a force of men at work with horses, scrapers, etc., to make the connection, but they were stopped by force by the Toronto police, & on the application of the city counsel the Chancellor granted an injunction stopping further work till after the hearing. The workmen were then set at work upon the C.P.R. property on the east side of the street, & the necessary excavation

at the said place shall be discontinued, unless the city shall prior to such date elect to construct a permanent subway in lieu of such crossing, & shall satisfy the Committee that bona fide & reasonable progress is being made in the construction of the subway; in which event the Committee will grant an extension of time for the continuance of the temporary crossing while the construction of the subway is being prosecuted with such despatch as shall be satisfactory to the Committee. The detail plans of subway & the works of construction thereof to be approved by the Chief Engineer of Government Railways, & the cost of subway, including all consequential damages, costs, charges, & expenses in connection therewith, to be borne one-half by the City & the other half by the two companies equally."

The G.T.R. at once entered suit to prevent the City from making a temporary crossing, basing it upon three grounds, that the City had no right to erect such a crossing while it was undecided whether to accept the order

**A Large Truss for the C.P.R.**—The illustration on this page shows one of two latticed trusses just used by the C.P.R. in the reconstruction of its bridge over the Credit River, near Streetsville, Ont., & which are said to be without doubt the largest single pieces of structural work ever shipped. Each measures 126 ft. in length over all, by 15 ft. deep, has 5½ panels, weighs 80,000 lbs., & stands when loaded on specially low & heavy cars, 19½ ft. from top of rail to top of truss. The trusses were hauled to the siding at Streetsville, where, after being connected by bracing into a complete span, the latter was loaded on cars & hauled about ¼ of a mile to the bridge site, where the span was lifted off the cars by 2 sets of the heaviest block & tackle ever used in Canada, hung from 2 high gantries. The cars were then run out from under the span & the old bridge, a single span deck Howe truss, was moved to one side, after which the iron span was let down into position. We are indebted to the Hamilton Spectator for the use of the illustration.

**Railway Operating Notes.**

All G.T.R. stations are being equipped with new standard clocks.

The Canada Atlantic will shortly put in effect the standard train rules of the American Ry. Association.

Increased pay is said to have been granted to a number of Intercolonial station agents, operators & despatchers.

Arrangements are being made to install the electric train staff system on the C.P.R., between St. Anne's & Vaudreuil, Que., & it may also be put in on the freight track between Western Jet. & St. Luc Jet.

During Nov. a series of conferences were held in Montreal between the G.T.R. management & representatives of the conductors & trainmen, at which differences which had arisen were settled to the mutual satisfaction of both sides.

A recent press item stated that preparations were being made to use coke on the passenger locomotives of the I.C.R. This is probably a premature statement. We understand that experiments in the use of coke are being made on two locomotives, but it is too early to give results.

The Minneapolis, St. Paul & Sault Ste. Marie has abandoned the plan put in force several years ago, in which the locomotive drivers were allowed to hire their own firemen, & which created considerable comment at the time. Hereafter the Co. will hire the firemen & will assign them to duty wherever they are needed.

The G.T.R. has made a change in the numbering of its through trains. Hitherto, for instance, when a train left Chicago for the east it received a number as it left the station, but at different points it got another number. In future the number the train receives at the starting point will be retained until it gets to its destination. The numbers of local trains will remain the same.

The Canada Atlantic now operates the Pembroke Southern Ry. under the title of Pembroke Division. What was formerly

known as the Eastern Division of the Ottawa, Arnprior & Parry Sound Ry. is now operated as the Middle Division of the C.A.R., & what was formerly known as the Western Division of the O. A. & P. S. Ry. is now operated as the Western Division of the C. A. Ry.

The Ontario Court of Appeal has confirmed the judgment in the case of Barclay vs. the Lake Erie & Detroit River Ry., an action for damages for negligence which had been before a jury. The court upheld the finding of the jury that the Co. should have a man stationed at crossways to warn passengers. In this case shunting was done on the high-ways, & was dangerous to pedestrians, as citizens were not acquainted with the procedure of making up trains.

A number of very heavy engines, not heretofore used, of the consolidation compound class, are now in service on the Ontario & Quebec Division of the C.P.R. south of Montreal, giving most satisfactory results as to increase of tonnage, amounting to about 50% per train, & also as to better time. Improvements in through freight service from New England points to the west & northwest have been effected, whereby from 12 to 14 hours is gained in the through run, on account of the improved method of handling & better train service on the route south of Montreal.

It has been rumored lately that the C.P.R. despatcher's office at Fort William will be removed to Rat Portage, but no definite conclusion has been arrived at. A local despatching office has been established at Rat Portage for the Rat Portage section, the despatchers who handle it having been removed from Rat Portage to Winnipeg. The headquarters of the Superintendent & despatchers of the Medicine Hat, Crowfoot & Calgary sections & connecting branch lines, have been removed from Medicine Hat, Assa., on the Pacific Division; the despatchers for the Kootenay lines have been moved from Trail to Nelson.

Rhodes, Curry & Co., Amherst, N.S., are reported to have contracts on hand for railway work amounting to over \$700,000.

**Piece-work in Railway Shops.**

Some months ago we published a circular issued by Mechanical Superintendent Joughins, in reference to the adoption of piece-work in the Moncton shops, its adoption or not being perfectly voluntary with the men. It is said that the men who have adopted it have, as a rule, done well, in proof of which the Moncton Transcript publishes the following details from pay-sheets. The names are withheld for obvious reasons, but the class of work is specified and the amount named was that received for the month in addition to the regular monthly wages :

Class of Work.	Profits.
Boiler-maker.....	\$ 8 95
Bushes & hose.....	6 90
Blacksmith (one man & helper).....	26 10
Foundry (one man & three helpers).....	21 50
Blacksmith (one man & helper).....	26 10
" " " ".....	44 80
" " " ".....	25 30
" " " ".....	38 40
" " " ".....	33 43
" " " ".....	27 31
" (two men & three helpers).....	70 60
" (two men & two helpers).....	67 23
Pilots.....	8 82
Boxes, etc., etc. (two men).....	26 92
Leads.....	4 50
Nuts.....	9 93
Steam pipes.....	9 84
Curtains.....	5 37
Screwing bolts.....	13 95
Bolt makers (two men).....	30 20
Tinsmith.....	9 72
Cabs.....	9 28
Motion turning, etc.....	10 25
Turning wheels.....	18 22
Engine trucks.....	17 31
Cleaning trucks.....	4 01
Cleaning tenders.....	10 55
Coupling pins & piston rods.....	11 84
Blacksmith (one man & helper).....	32 73

**Improving Northwest Stock.**—Land Commissioner Hamilton, of the C.P.R., has notified the Northwest Government that as most of the thoroughbred stock which was recently sent from Ontario was distributed in Manitoba, eight car loads of thoroughbred bulls will be given free transportation from Ontario to the Territories. It is understood that the Territorial Government is arranging with breeders to send buyers to Ontario to pick up animals.

**MANITOBA**

Population..... 200,000.  
Number of Farmers... 27,000.

**Look Up Its Advantages**

**Before Going Elsewhere.**

CROP OF 1895. A Favorable Season.	CROP OF 1896. An Unfavorable Season.
Average yield per acre.	Average yield per acre.
WHEAT..... 27.86 bushels	WHEAT..... 14.33 bushels
OATS..... 46.73 "	OATS..... 28.25 "
BARLEY..... 36.69 "	BARLEY..... 24.80 "
FLAX..... 16.08 "	FLAX..... 12.30 "

Over 10,000,000 acres in Manitoba that have never been cultivated. Price of land from \$2.50 to \$6.00 per acre. On easy terms.

Settlers coming to Manitoba should always

**DROP OFF AT WINNIPEG**

for a few days, and secure reliable information about settlements, free homesteads and lands for sale, from the heads of departments located in Winnipeg. For latest information and maps, all free, address

**THOMAS GREENWAY,**

Minister of Agriculture and Immigration.  
WINNIPEG, MANITOBA.

Or

**C. H. JEFFERYS,**

Manitoba Immigration Agent,  
30 York St., Toronto, Ontario

**THE FAVORITE ROUTE**  
To **New York** and  
....**Philadelphia**  
**GRAND TRUNK RAILWAY**  
in connection with the  
**LEHIGH VALLEY RAILROAD**

Route of the "Black Diamond Express," handsomest train in the world.

Leaving **Toronto** daily (except Sunday) at 9 a.m., **Hamilton** 9.55 a.m., arrive **New York** 10.08 p.m.

Fast Night **New York** and **Philadelphia** Express, leaving **Toronto** 6 p.m. daily, arrive **New York** 9.13 a.m., **Philadelphia** 8.56 a.m.

Pullman Sleepers from **Toronto**, **Hamilton** and **London** to **New York** and **Buffalo** to **Philadelphia**.

Call on Grand Trunk Ticket Agents for tickets and further information, or address

**Robt. S. Lewis**  
Canadian Passg'r Agent, 33 Yonge Street  
Toronto.

**Chas. S. Lee**      **A. A. Heard**  
Gen'l Passg'r Agt.      West'n Passg'r Agt.  
New York.              Buffalo, N.Y.

**All C.P.R. Agents in**

**MANITOBA,  
ASSINIBOIA,  
ALBERTA and  
BRITISH COLUMBIA**

sell through tickets to the Old Country, cheaper than if passengers bought railway tickets to New York or Montreal, and then re-booked.

They also sell prepaid tickets to passengers coming from the old country, cheaper than the rate obtainable in Europe, and on favorable terms.

Apply to any agent Port Arthur and west, or to

**WILLIAM STITT,**

**C.P.R. Offices,  
WINNIPEG.**

### Lubrication of Cars.

At a recent meeting of the Central Railway Club the following report on lubrication of freight & passenger equipment was presented:

All boxes on passenger equipment cars should be re-packed at least once a year, the re-packing to commence about May 1 each year, using  $\frac{1}{2}$  old &  $\frac{1}{2}$  new packing, taking the better portion of the old & turning the balance over to freight car use if considered to be in fair condition. Cars should be suitably marked on the trucks, showing the date re-packed. All passenger equipment cars going through the shops for overhauling should be entirely re-packed, & where wheels & axles are renewed, new brasses should be used. Particular attention should be paid to the condition of the trucks, close attention being given to the equalizing bars & pedestals, also to the renewal of dust guards if defective. Oiling of cars to be done only at ends of road, unless cars are put in train at an intermediate station; no oiling to be done other than the above unless made necessary by reason of hot box or other cause of like nature. All boxes should, however, be opened at main line inspection points & examined as to their condition.

All freight cars should be re-packed whenever stopped for repairs, using the old packing turned over from passenger equipment with the addition of such new packing as may be necessary. Trucks should be put in proper condition, particularly dust guards & oil box covers, also boxes re-packed where wheels & axles have been renewed—new brasses to be used in such cases. Packing that is removed, if in good condition, should be put to soak for at least forty-eight hours, & may then be used again under freight cars. Oiling to be done similar to passenger. Close attention should be given to cars received in interchange, & such quantities of packing used as may be deemed necessary to put car in good condition to run safely over the line. In cases of hot box would suggest the use of saturated waste instead of oil. Great care should be taken in all cases of cars re-packed to see that it is done in a manner to insure the proper lubrication of the journals.

The Committee suggests the use of an oil equal in quality to the Galena car oils; the use of lighter oil in winter than in summer; that all packing be allowed to soak at least 48 hours before using; that all shops & inspection points be instructed as to a uniform manner of packing the boxes; that the use of cooling compounds or patented packing is unnecessary; that boxes be examined at least every 200-miles run; that the use of oil cans by train crews be abolished, crews to be supplied with saturated waste instead.

**The Albert Southern Ry.**, which runs from Alma, on Chignecto Bay, to Derry's Corners, N.B., with a branch of 3 miles to Harvey, is reported in a press despatch to have been sold to the purchasers of the Salisbury & Harvey Ry., referred to on page 346. The A.S. connects with the S. & H. at Albert. The road was opened June 15, 1892, & was sold Dec. 6, 1892, at sheriff's sale, since which it has been operated by W. A. Trueman, as trustee, in the interest of the creditors. For the year ended June 30, 1898, its gross earnings were \$3,106.96, & its net earnings \$564.36.

**Port Arthur, Duluth & Western Ry.**—The Master-in-Ordinary at Toronto on Dec. 18 dismissed the motion of D. F. Burk, of Port Arthur, by which he preferred a claim to \$155,000 bonds of this Co., which is in liquidation. The judgment was founded on the fact that the ownership of the bonds is now the issue of a suit in the higher court. The bonds are in the possession of the Toronto General Trusts Co., in trust for the estate of the late J. Lee, A. B. Lee, & the Canadian

Bank of Commerce. Mr. Burk's claim is on the grounds of money advanced & services rendered.

Superintendent.—“Were the sleeping cars on fire when you passed the wreck?”

Conductor.—“I did not see any sleeping cars, sir. When we got there they were all smoking cars.”

### SHIPPING MATTERS.

#### Suspension of Coasting Laws.

So far the formal announcement of the Dominion Government's future policy in regard to the suspension of the coasting laws has not been made, & as a result there is a great deal of uncertainty & anxiety in shipping circles, which the Government should take steps to remove without further delay. In this connection it will be well to bear in mind Sir Wilfrid Laurier's reply to the deputation which waited upon him in Ottawa on Nov. 22, when he practically admitted that a mistake had been made, & that it would not be repeated, & that if the coasting laws were to be again suspended it would only be after parliamentary action. Sir Wilfrid said:—

“The main question, I believe, is to keep our coasting laws for Canada & for Canadian shipping. We are anxious to do that, but it was represented to us that our Canadian upper lake fleet was inadequate for the increased trade, & there appeared to be some reason for so believing. The blue books show that in so far as Ontario is concerned her shipping is declining. Of course, Capt. Gaskin showed that a great deal of the Province's shipping is registered at Montreal. This weakens the statement that the blue books made. Another question is, is the shipping adequate? Can it take all the grain from Fort William in the autumn? It was represented to us that it could not. The Montreal Board of Trade said so two or three years ago, & passed a resolution asking us to allow U.S. ships to load there for export. The Winnipeg Corn Exchange asked the same thing, & we had reason to suppose that they were correct. You say that they were not. One thing that forcibly strikes me is that only one U.S. vessel was chartered, & it inclines me to think that your ideas are largely right. The Government will not lose sight of what Mr. Osler said in opening. If the new system be continued it will be by legislation, & I may say further that unless Parliament amends the coasting laws this Order-in-Council will not be repeated. It was not our intention to make it a permanent part of our policy. We believed that if what we heard was true it would have a stimulating effect on Canadian shipping. We believed that we would either have to build more or let the U.S. shipowners help usin moving our vast crop. We did it most reluctantly, & we believe that this action will convince everybody that we Canadians all want Canadian trade to be carried in Canadian bottoms.”

Unless a definite announcement is received from the Government at an early date, the Toronto Board of Trade, which has been especially active in connection with the matter, will do well to press for one, so that vessel owners may know just where they stand. Should an adverse decision be given, steps must be taken to thoroughly arouse the country on the question & to bring it before Parliament next session. The crisis in the shipping industry is such that a committee of the House of Commons, or failing that a committee of the Senate, should be appointed to consider the causes of the decadence & to secure testimony from all parts of the Dominion.

The Marine Review, of Cleveland, Ohio, ventures the opinion that “Canada's coasting regulations will probably hereafter be a dead letter on the lakes during the grain-shipping

season, though they will remain on the statute books & be enforced at other times.” It is of vital importance that no effort should be spared to prevent the fulfilment of this prediction.

The feeling of shipping men is indicated in a letter from J. H. G. Hagarty, Managing Director of the St. Lawrence & Chicago Steam Navigation Co., who, in referring to a report that the Conners syndicate, which has recently obtained concessions in the Montreal harbor, had secured options upon the Rosedale, Algonquin & other Canadian vessels, says: “To those who are acquainted with the marine business on the lakes, this may seem too absurd to require any reply, but as there are some who may not understand it, I would like to say that, while I know nothing of the Conners syndicate further than that it has not secured options upon the Rosedale or the Algonquin, I presume it is composed of business men, & is not likely to desire to do so. No one in his sane senses would purchase a Canadian steamer at the present time, or until the question of giving the coasting trade away to the Americans is finally settled.”

#### Montreal Elevators & the St. Lawrence Grain Trade.

The most important event of the month in transportation matters has been the agreement entered into between the Montreal Harbor Commissioners & what is known as the Conners syndicate. On Nov. 28 the Commissioners invited proposals to be sent in within two days from people willing to erect grain elevators at Montreal Harbor. W. J. Conners, Buffalo, N.Y.; Hon. R. Harcourt, Treasurer of Ontario; A. Brunet, Montreal, & Elias Rogers, Toronto, put in a definite proposition on Nov. 30. J. R. Booth, of the Canada Atlantic Ry., wrote that it was impossible to prepare a proposition in the short time allowed, that his Co. would require, at least, 1,500 by 100 ft., with additional space for extension, as sites for elevators & warehouse accommodation both in the west & east ends of the harbor, that the probable size of elevator to be erected would be of 1,500,000 bus. capacity. The Prescott Elevator Co., which a year ago offered to erect elevators if the same privileges were given it as asked for by the Conners syndicate, wrote that it had given up the idea when it seemed likely that the Government would furnish the funds to do the work. It considered the time allowed by the Commissioners too short for the matter to be taken into consideration. The Montreal Warehousing Co. wrote asking that nothing be done until it had a chance, H. & A. Allan asked for a lease of one of the new piers for 50 years in consideration of which they would erect an elevator for the common use of all the inland carriers, rates to be subject to the approval of the Harbor Board. The Montreal Transportation Co. wrote that it was ready to furnish the Board with a proposition for the erection of an elevator. The Montreal Terminal Railway Co. requested that the Board would not commit itself until the Co. had an opportunity to make a proposition.

The Commissioners promptly decided to deal with the Conners syndicate, & after a lot of negotiation & a number of meetings, entered into an agreement. The Commissioners' decision met with considerable opposition from a considerable section of the press, from members of the Montreal Corn Exchange & from one of the Commissioners, Jno. Torrance, who dissented from it. A member of the Corn Exchange applied for an injunction to prevent the Commissioners accepting the Conners' offer, but this was refused by the court. The agreement is summarized as follows:

The Commissioners allot to the syndicate for 40 years 1,170 ft. of the lower portion of Windmill Point pier lying between Windmill Point basin or slip, or the canal & canal basin;

& 1,500 by 275 ft. of the opposite southerly side of Windmill Point slip or basin, on the wharf intended to be constructed. The syndicate agrees to erect on the 1st named site a 1st-class modern steel or combination elevator of 3,000,000 bus. capacity & 1st-class modern warehouses, so that the full space will be actually used in their operation, the cost of such improvements to be not less than \$1,000,000, & on the 2nd named site similar 1st-class elevator or elevators & freight warehouses of not less than 3,000,000 bus. capacity, utilizing the whole space, & costing not less than \$1,350,000. The Commissioners also allot for 40 years space for at least one large elevator & freight warehouse on or in connection with one of the already constructed or proposed piers, or on shore, in the portion of the harbor below St. Mary's current, to cost at least \$1,350,000. Rights of way over the sites necessary for the trade of the port are reserved. Construction of the elevator & warehouses on the 1st named site is to be commenced forthwith, & on the other sites as soon as their condition permits, the work of construction to be prosecuted as fast as practically possible. Plans & specifications of structures to be subject to the approval of the Commissioners & of the Governor-in-Council. Every vessel or barge, by whomsoever owned, shall have its regular turn at the wharves or elevators, & equal privileges in the use of the facilities for handling freight shall be extended to all carriers. Rates for unloading, storing & loading grain & for handling at least the principal other commodities shall be reasonable & subject to the approval of the Commissioners & the Governor-in-Council.

In the 1st season after 18 or 20 ft. of water is provided at Port Colborne, on a sufficient area to allow large lake vessels to tranship cargoes, there will be transported to Montreal & handled through the elevators & facilities of the syndicate at least 25,000,000 bus. of wheat or the equivalent in weight of other grain, flour or meal, & in each season thereafter 35,000,000 bus. of wheat or the equivalent in weight of other grain, flour or meal, subject to the breakage of canals, act of God & public enemy, & causes beyond the control of the syndicate or its successors, & to the extent prevented thereby. Should the syndicate in any three consecutive years after the 1st year in which it is bound to handle through its elevators & facilities 35,000,000 bus. of wheat annually or its equivalent, fail to handle for three years an aggregate of 105,000,000 bus. of wheat or its equivalent, the agreement shall be null & void, & the sites, together with the elevators, warehouses & appurtenances thereunto belonging, shall revert & belong to the Commissioners without payment to the syndicate, & clear of all in-

cumbrances & adverse claims. The syndicate to have the preference of renewal of the allotment on terms to be agreed upon with the Commissioners, the Commissioners to have the right on giving one year's notice to have the right to take over the buildings, plant & business carried on at the various sites at their then actual values to be agreed on, or settled by arbitration. The syndicate to furnish the Commissioners \$50,000 security for the performance of the contract.

While the negotiations were pending in Montreal Mr. Conners was frequently interviewed by the daily papers, & made a number of important statements. He says the syndicate intend to build up a port at Montreal that will give employment on the wharves & piers to between 2,000 & 3,000 men, instead of about 700 as at present; that it will bring from 1,600 to 2,000 vessels to Montreal during the navigation season, instead of about 800 as at present. Now two-tenths of the grain of the Canadian West reaches Montreal; the rest goes to the railways & New York, Boston & other ports have the benefit of it. The syndicate hopes to take the other eight-tenths to Montreal. Traffic can be handled more cheaply in Montreal than in New York. The syndicate will have its own steamers to take the grain from the lakes to Montreal. Mr. Conners said: "Our object is not to compete with New York or any route; it is the railways that we mean to compete with. We believe that we can utilize the splendid waterways you have in such a way that we can beat the railways in competition for the grain traffic. We do not say, of course, that we will get it all, but we shall get a big share." At Chicago Mr. Conners stated that the steamships to be built by the syndicate will be employed in the winter both in the coast trade & in carrying grain to Liverpool. In another interview Mr. Conners said: "Some day in the future most of the grain of the continent will come down this Canadian waterway from the West, to one of the islands in the mouth of the St. Lawrence. Here an extensive system of elevators will be erected, within 1,800 miles of Europe. Long tows of barges will come to this grain depot all the way from Chicago. Huge ocean steamers will carry it quickly to the other side. This may take some time, but my prediction will some day be realized."

R. A. Waite, architect, Buffalo, has been appointed to take charge of the elevator & dock work at Montreal & Port Colborne, Ont., the syndicate proposing to build a 1,500,000 bush. elevator there, for transshipping purposes. Mr. Waite says he proposes that the Montreal elevators shall give a panoramic effect to the port, rather than be a series of eyesores, as is the case at Buffalo & other

grain centres. In outline they will be similar to a large office building. One will be a three-decker, measuring 230x600 ft., while the second will be a two-decker, 700x275 ft.

Mr. Conners states that the syndicate will build a fleet of about 15 steamships for the grain train, that they will be of the most modern type & superior to any now on the inland waters. They will be 245 ft. long, 42 ft. beam, 14 ft. draught, 80,000 bush. capacity, with a speed of about 14 miles. Each steamship will have two barges as tow, the barge capacity to be 100,000 bush. each. It is said orders have been placed for some of them already to be built in Toronto & on the Tyne & that it is possible some may be built at Collingwood.

The attitude of the two principal railway companies towards the contract is shown in the following interviews, which were given early in Dec. President Shaughnessy said: "The C.P.R. Co. has not so far taken up any definite position with regard to the Conners elevator scheme. As a private citizen I may say that I should be delighted to see the large quantity of grain & the additional ships, which the syndicate has promised to bring to Montreal. The interests of the port, however, would need to be very carefully guarded in making a bargain with this Buffalo syndicate. The agreement would have to be very strictly supervised in order to see that it did not confer privileges on the syndicate not intended to be given by the Harbor Commissioners. Speaking for the Co., I may say that the C. P. R. will always expect a sufficiently extensive area for terminal facilities to enable it to

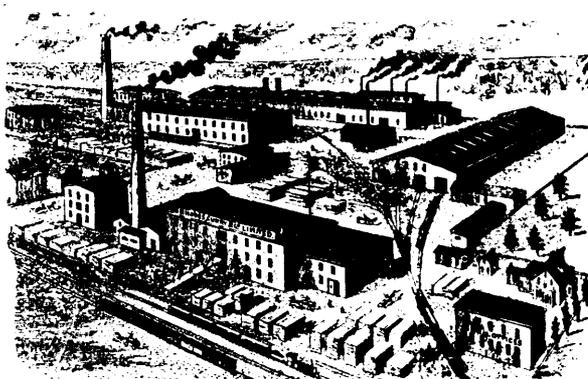
**NOTICE:** The Canadian Pacific Railway Company will apply to the Parliament of Canada at its next session for an Act authorizing the Company to construct or acquire, and to operate a railway from Osborne on the Pembina Mountain Branch of the Company's railway; south-westerly to a point between Manitow and Morden on the said Branch; also a railway from Osborne westerly to Carman, and thence westerly and south-westerly to some point on the line of the Manitoba South Western Colonization Railway between Cartwright and Boissevain; also a railway from a point on the Souris Branch of the Company's railway between Lauder and Menteith easterly and north-easterly to a point between Glenboro and Treeshbank on the Glenboro Extension of said Branch; and also a railway from West Selkirk in a northerly and north-westerly direction to some point on the west shore of Lake Winnipeg, about sixty miles, thence north-westerly to a point on the Little Saskatchewan River, with power to issue in aid of the construction and equipment of each of the said railways, bonds which will be a first lien and charge thereon with the same effect as if it were being built by the Company as a branch line within the meaning of Section One, Chapter Fifty-one of the Statutes of 1888, or in lieu of such bonds Consolidated Debenture Stock conferring on its holders equal rights in all respects, and a rank pari passu with holders of such Consolidated Debenture Stock as the Company has been heretofore authorized to issue; and for other purposes.

By Order of the Board.

CHARLES DRINKWATER,

MONTREAL, 13th December, 1899.

Secretary.



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Ltd.,

### Railway and Street Cars

of all descriptions.

Special Cars for Coal, Ore,  
\* Lumber, &c., with Ball-  
\* Bearing Wheels. \* \*

Car Wheels, Castings, Forgings, &c.  
AMHERST, NOVA SCOTIA.

#### To Los Angeles and Southern California.

Every Friday night, at 10.35 p.m., a through Tourist Car for Los Angeles and Southern California leaves the Chicago, Milwaukee & St. Paul Railway Union Passenger Station, Chicago, via Omaha, Colorado Springs and Salt Lake City, for all points in Colorado, Utah, Nevada and California.

In addition to the regular Pullman porter, each car is accompanied by an intelligent, competent and courteous "courier," who will attend to the wants of passengers en route. This is an entirely new feature of tourist car service and will be appreciated by families or by ladies travelling alone. Particular attention is paid to the care of children, who usually get weary on a long journey.

These tourist cars are sleeping cars supplied with all the accessories necessary to make the journey comfortable and pleasant, and the berth rate (each berth will accommodate two persons) is only \$6.00 from Chicago to California. Ask the nearest ticket agent for a tourist car folder, or address A. J. Taylor, Canadian Freight and Passenger Agent, 8 King Street East, Toronto, Ont.

**All Cuts** used in the RAILWAY  
AND SHIPPING WORLD,  
and owned by the Publishers, are

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handle its business. When this is refused it will have to go elsewhere. The Harbor Commissioners propose to give immense concessions to this syndicate. About a quarter of a mile of harbor frontage is involved. The Connors syndicate, from the immense power which it will wield, might easily become extended into something in the future, which is not contemplated or apprehended at present. One thing which has struck me in connection with this Connors elevator scheme is that it may be the entering of the thin edge of the wedge to secure, by Americans, the abrogation of Canadian coasting laws. It is very possible that there are American interests behind this syndicate which control large numbers of American bottoms. These may see a chance to profitably engage in Canadian trade & run between Canadian ports. Of course this must be guarded against. No such thing should be permitted to happen unless through a reciprocal arrangement between the two countries. The C.P.R. will be delighted to see this huge grain traffic pass through Montreal if the interests of the port can be satisfactorily safeguarded. It will take, however, a very careful supervision of the contract to ensure this."

Traffic Manager Reeve said: "The G. T. R. supports the claims of the Montreal Warehousing Co. in the matter of supplying the port of Montreal with elevator facilities. This Co. has the requisite charter for engaging in operations of this kind. We also support the claims of the Canada Atlantic Ry. This road should be given one of the best sites in the harbour, instead of having its claims summarily disposed of in the manner in which they were treated by the Harbor Commissioners. The C.A. has shown more interest in the grain trade than any other factor in the trade. It could come in over our line & go right to the elevators. About the Connors elevators scheme, well, I'm suspicious of it myself. If the tendency of the syndicate is not to decrease the charges it will drive the C.A.R. to Quebec & the G.T.R. to Portland. Connors is acting for a combine of big American grain dealers; I do not care to give the names of those interested. If Connors has arranged the combine upon which he told me he was engaged, he will force every one of the Montreal grain dealers out of the business. They may give up and take a holiday to South Africa. The success of this Connors scheme would not, in my opinion, be a good thing for the port of Montreal. If the Harbor Commissioners are going to give away these valuable concessions, let them be given to interests bound up in the port of Montreal—to corporations locally interested. It is true that the Harbor Commissioners offered the C.A.R. a site for an elevator, but it was near coal shoots, where it would never do to handle grain. There would be too many claims for damages to pay."

**Canadian Shipping Statistics.**

An appendix to the annual report of the Department of Marine recently issued shows that the total number of vessels remaining on the register books of the Dominion on Dec. 31, 1898, including old & new vessels, sailing vessels, steamers & barges, was 6,643, measuring 693,782 tons register tonnage, being a decrease of 41 vessels & a decrease of 37,972 tons register, as compared with 1897. The number of steamers on the registry books on the same date was 1,909, with a gross tonnage of 267,237 tons. Assuming the average value to be \$30 a ton, the value of the registered tonnage of Canada, on Dec. 31 last would be \$20,813,460.

The number of new vessels built & registered in Canada during last year was 278, measuring 24,522 tons register tonnage. Estimating the value of the new tonnage at \$45

a ton, gives a total value of \$1,103,490 for new vessels.

Lindsay, Ont., & Dawson City, Yukon, were established ports of registry during last year.

No. of vessels & no. of tons on the registry books of Canada, Dec. 31, 1898:

	No. of Sailing Ships & Steamers.	No. of Steamers.	Gross Tonnage Steamers.	Net Tonnage Sailing Ships & Steamers.
New Brunswick	903	117	9,858	89,257
Nova Scotia	2,167	146	19,747	262,176
Quebec	1,378	322	75,349	144,447
Ontario	1,452	924	99,419	134,180
P. E. Island	178	21	4,043	15,979
British Columbia	444	299	52,129	40,304
Manitoba	121	80	6,692	7,439
<b>Total</b>	<b>6,643</b>	<b>1,909</b>	<b>267,237</b>	<b>693,782</b>

New sailing ships & steamers built & registered in Canada during 1898:

	Number.	Net Tonnage.
New Brunswick	31	790
Nova Scotia	67	4,962
Quebec	51	4,139
Ontario	46	1,872
Prince Edward Island	5	372
British Columbia	72	12,228
Manitoba	6	159
Yukon	—	—
<b>Total</b>	<b>278</b>	<b>24,522</b>

The tonnage of all the maritime states of the world for 1898-99 is:—steamers, no., 14,725; gross tonnage 19,379,361, net tonnage, 11,866,476; sailing vessels, no., 29,844, net tonnage, 8,731,613; total net tonnage, 20,598,089. Canada ranks seventh in order of net tonnage. The figures for the states having a net tonnage of over 100,000, are as follows:

	Steamers.	Sailing Vessels.	Total Net Tonnage.
British, including Canada and the Colonies	7,654	8,220	9,760,043
United States	534	3,762	1,837,729
German	1,095	1,208	1,572,665
Norwegian	734	2,617	1,545,822
French	754	1,614	801,164
Italian	475	1,609	730,953
Canadian	—	—	693,782
Russian	453	2,415	676,540
Spanish	426	1,145	506,455
Swedish	589	1,568	502,557
Dutch	251	546	373,711
Danish	398	899	363,993
Grecian	118	1,152	326,041
Japanese	464	255	344,789
Turkish	87	1,349	299,445
Austrian	192	161	230,432
Brazilian	229	344	162,262
Chilian	48	155	100,674

**Inland Marine Insurance.**

The marine insurance companies doing a cargo & hull business on the inland waters have had a most successful year, & have all made money. Insurance on ordinary risks, that is, propellers & wooden craft, expired at noon Nov. 30, & the insurance companies absolutely refused to extend the policies, no matter what premium was offered. The craft affected by the expiration of the policies, which always expire on the last day of Nov., were those plying mostly on Lake Erie & Lake Ontario & the St. Lawrence River. The big steel boats running on Lake Superior to Buffalo, such as the big Toronto freighters, the Rosedale & Algonquin, had insurance up to Dec. 5, which meant that it was Dec. 10 before their insurance expired, for if they are out of port when the contracts expire the insurance companies carry them till they reach their port of destination. The present season is in direct contrast to last year, when some very heavy losses were made by the insurance companies, many of them just at the last of the season & due to having renewed contracts. On Nov. 30, this year, the marine insurance

companies knew they were away in pocket as a result of the season's operations, & they took no chances by extending the insurance. In fact, it is said that the three companies having offices in Toronto, have out of this season's profits, not only made up last year's losses, but are still a considerable amount to the good.—Globe.

**Dominion Notices to Mariners.**

The Department of Marine has issued the following notices:—

No. 85. Nov. 6, Quebec, new buoy placed at Three Rivers.

No. 86. Nov. 15, Quebec, Ste. Croix Bar range lights. Newfoundland, Flower Island light in operation.

No. 87. Nov. 16, British Columbia, buoy replacing beacon on Kelp Bar. Buoy off Virago Rock in Portier Pass. Uncharted rock in Portier Pass.

No. 88. Nov. 20, New Brunswick, changes at Little Belledune light station, U.S.A. Changes in fog signals on Maine coast.

No. 89. Nov. 28, British Columbia, lighthouse on Pointer Island. Lighthouse on Dryad Point, Campbell Island. Hydrographic notes, vicinity of Dryad Point lighthouse. Uncharted rock in Metlah-catlah Bay. Removal & change in color of Hodgson reefs buoy, Erratum.

No. 90. Nov. 29, New Brunswick, buoys off Cape Tormentine. Improvements in Ship-pigan buoyage.

No. 91. Dec. 1, Nova Scotia, Sambro Harbor light.

No. 92. Nova Scotia, Whistling Buoy off Pennant.

**Yukon & Northern Navigation Matters.**

The C.P. Navigation Co. is making preparations to compete for next year's trade with the North. At the beginning of the year R. Hall, who has been for some time connected with the Bennett Lake & Klondike Navigation Co. at Victoria, leaves the service of that Co. to act as Skagway representative of the C.P. N., where he will have the oversight of its steadily increasing northern trade.

The American Transportation & Trading Co.'s str. Roanoke is for sale, & it is altogether probable that the Co. contemplates retiring from business as Alaskan passenger carriers. It has no idea, however, of abandoning its freight carrying & Yukon mercantile business. This sale of the Roanoke would mean also a disposal of the Co.'s fleet of river boats, which according to report have not been a money making investment. It would also necessitate the purchase by the Co. of one or more freight vessels with only such passenger carrying accommodations as are needed for the Co.'s employees.

A letter received early in Dec. from a Dawson correspondent, dated Oct. 13, said:—"A general feeling exists here that the Canadian Development Co. called in its boats earlier than the weather demanded, especially in view of the fact that its steamers carried the mail. It is reliably reported that this Co. has made a fortune out of its season's work. The freight blockade at the upper end of the river is causing considerable anxiety among business men in Dawson. The latest arrivals in town assert that it is impossible for anyone who has not seen it to conceive the amount of freight that lies along the route all the way from Skagway to White Horse. It is estimated that 2,000 tons at least have congested between these points, while every steamer up the coast is loaded heavily. The river steamship companies were aroused to a sense of the situation early in Sep., & have been making strenuous efforts to clear the blockade. But, owing to the advanced season, the futility of such an effort is apparent, & it is a fore-

gone conclusion that between 1,000 & 2,000 tons must remain undelivered until spring. There is no fear of any actual shortage in any goods in Dawson during the winter, as the large trading companies are amply supplied, but prices will advance & essentials will be cornered. The real sufferers will be general merchants & miners. Many of the former have gone out to Skagway with the intention of disposing of perishable goods; the latter will in many instances lose a winter's work by reason of the non-arrival of necessary machinery. A long line of heavily laden scows & barges, built by steamboat companies & desperate shippers, stretches down the river from White Horse to Dawson, some making successful progress, others aground, others, mayhap, doomed to wreckage. If the weather remains fine they will continue to arrive at intervals during the next two weeks, it may be until the close of Oct. After that their fate is problematic.

"The last down-river boat left Dawson for St. Michael's two weeks ago. Within the last week several parties have left Dawson in open boats, & considerable anxiety is felt about them by their friends. Men who take such chances are playing with death, with all the odds in favor of the grim visitor. The Yukon River freezes first at its mouth, the cold weather beginning there a month earlier than it does in Dawson. About this time the river at St. Michael's must be closed with ice or else so choked up with floes as to make navigation, especially in an open boat, practically impossible. The chances of these people reaching St. Michael's this winter are very slender; while the life risk is proportionately great."—Globe.

Various correspondents have written us with reference to recent fluctuations in the shares of the Klondike Mining & Promotion Co. We believe it has had a fairly prosperous year. Possibly the results may not have been so good as last year, but until the accounts come to hand, shareholders will exercise judgment by again perusing the circular containing extracts from the managers' letters at Dawson City & Victoria. Under date of Sept. 6th, the directors are informed "we have now as much freight as we can handle, in fact the boats have to bring it down in scows, owing to the limited carrying capacity of the steamers. From reports I believe that the season will not be so long as it was last year, as the cold weather has even now commenced to set in." Thus it would appear as if the pressure of goods was so great that the Co. was unable to handle it all; indeed, corroboration of this promise is given in a later statement in which it was estimated "that between Skagway, Bennett & White Horse, there must be 12,000 tons, & it will be impossible for all the goods to get through this winter." Undoubtedly, the Co.'s boats upon the Yukon have all they can do, & at that time (Sept. 25th) were the

only ones then making headway with low water. The route into Klondike is still probably congested with freight, a fact which would induce owners to keep their goods at Skagway rather than at any other intermediate point. The White Pass Ry. is taxed to its utmost to take care of all the freight offering, yet it can handle 200 tons a day, & the steamers leaving Bennett together with scows from that point could, when running, take away 150 tons daily. Thus, with the river navigation closed for the season, there is every indication that the congestion at White Horse is of immense proportions, & the Manager, when writing towards the end of Sept., considered that "everything points to an enormous lot of goods, etc., going forward next spring. A man has just been in Victoria & offered me 20c. a pound if I will guarantee to get him 8,000 lbs. into Dawson. Sorry we cannot accommodate him." The White Pass Ry. is constructing an extension from Caribou. If the piece along Lake Bennett proves easy blasting it is possible it may be finished at the same time, if not, there will be 27 miles between the two sections of the railway, & if that distance proves to be so formidable that it cannot be completed for a year, the railway company purposes putting on mammoth scows to convey the cars from Bennett to Caribou. The outlook before the Co. appears, therefore, to be as favorable as in the past, for whatever irresponsible rumors there may be in circulation, these statements at least are genuine.—B.C. Review.

**British Columbia Shipping.**

The C.P.N. Co. has had an electric searchlight put on the str. Tees, & one will also be put on the str. Danube.

The Victoria Board of Trade is trying to get the steamboat service improved between there & Puget Sound. Improvements to Victoria's inner harbor are also being urged.

There is said to be a possibility of a direct line of steamers being established between Vancouver & Vladivostock, when the trans-Siberian railway is completed in about a year.

The Department of Marine has sold to E. Winkelman, of Seattle, the old str. Sir Jas. Douglas, which went out of service in B.C. waters 3 years ago, being too slow. She was built at Victoria in 1884.

It is said that arrangements are in progress for the organization of another company to run steamers between Golden and Windermere. The project contemplates the building of a boat to run on the Columbia river on the lowest stages of water till the river freezes up.

Reports from Manila state that the C.P.R. steamers Athenian & the Tartar, which were employed by the U.S. Government carrying

troops, etc., to the Philippines, performed the work in a most satisfactory manner. The Athenian recently carried 180 men & 500 horses, while the Tartar took two batches of 1,500 men each. When these ships return to the Pacific Coast they will resume their usual work.

R. P. Rithet & Co., Victoria, report little change in grain & tonnage markets. Foreign markets for wheat continue weak & while the few vessels available for charter are holding for full rates, exporters are unwilling to pay prices demanded. Business has therefore been very limited. The lumber market is exceedingly active, & large orders have recently been placed with leading export mills. Tonnage, however, is almost unobtainable, & owners who have offered their vessels have found ready takers at high rates, even if 6 & 8 months distant.

President Shaughnessy's recent interview with the C.P.N. Co.'s management is bearing fruit. The str. Islander is undergoing extensive repairs & also alterations to her cabin accommodation to fit her for the promised daylight run. The improved service will probably begin in Feb. It is said the Islander will leave Victoria at 7 a.m., arriving at Vancouver at noon, & leaving on the arrival of the Pacific express. It is intended to run the str. Charmer daily as a freight and passenger boat if business warrants. She is to leave Victoria about 1 p.m., & arrive at Vancouver about 6 p.m., departing at midnight, arriving back at Victoria at 6.30.

**Manitoba & Northwest Territories.**

McDougall & Secord will build a steamboat at Athabasca Landing this winter to ply on the upper reaches of the Athabasca river & as far down as Grand Rapids.

Navigation on Lake Winnipeg lasted till unusually late this year. On Nov. 20 a steamer left Selkirk with a cargo for Norway House, & on Dec. 1 another one left to make calls at lake ports.

The screw st. Lady of the Lake, owned by Capt. W. Robinson, which was sunk in Lake Winnipeg recently, was built at Selkirk, Man., in 1897. Her dimensions were length 105 ft., breadth 18 ft. 5 ins., depth 8 ft. 9 ins., tonnage, gross 201, register 155.

The three steamboats on the Athabasca belonging to the Alaska Trading & Transportation Co. were recently sold by the sheriff. McDougall & Secord being the purchasers. The steamer at Athabasca Landing brought \$400, the one at Fort Smith \$300 & the one at Fort McMurray \$60.

Members of the Winnipeg City Council & Board of Trade made a trip the full length of Lake Winnipeg late this season & have presented a report stating that the development of the

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J. R. Booth Elevator, Depot Harbor, Ontario.	1,000,000	"
Cleveland Elevator Company's Elevator, Cleveland, O.	500,000	"
Eric R. It. 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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vast resources of the lakes is at a standstill, owing to there being no direct steamboat connection with an established market, that this want has lost Manitoba at least \$100,000 a year for the last 10 years & that the City of Winnipeg should insist on the navigation of the Red River between Winnipeg & Lake Winnipeg being improved without further delay. Attention is also called to the total absence of Government protection for mariners on Lake Winnipeg, which has been traversed by Canadian steamers for more than 20 years. There is no Government chart of the lake, & very few lights or safeguards, & practically no money has been expended on wharves or landing places except at Gimli, where boats seldom have occasion to call.

### Richelieu & Ontario Navigation Co.

The Montreal-Quebec boats ceased running Nov. 25.

It is expected that the construction of the Co.'s hotel at Murray Bay, Que., will be gone on with during the winter.

It is said the annual statement will show a large increase this year, the earnings being about \$960,000, against \$728,000 in 1898. Much of the increase is credited to the improvement in the service by the addition of the str. Toronto.

No tenders were sent in recently for the ferry service between Montreal & St. Helen's Island, but the Co. wrote saying it was willing to continue to operate the ferry on practically the same terms as the last agreement, under which nothing was paid to the City. The conditions laid down by the City were unacceptable to this Co. & everyone else.

Milloy & Co.'s lease of Yonge st. wharf, Toronto, having expired, the R. & O. N. Co. has leased it for 3 years. The Niagara Navigation Co., Lakeside Navigation Co., Toronto Ferry Co., & other owners of vessels using the wharf heretofore will continue to do so. Another pier is to be built from Scott st., 300 ft. long, to accommodate the str. Toronto.

### Ontario & the Great Lakes.

The str. Maple Leaf was badly damaged in a collision with the str. Van Horne on the Lake of the Woods recently.

Tenders have been invited by the Dominion Department of Public Works for the extension of the breakwater at Port Elgin, Ont.

The C.P.R. Upper Lakes steamships are laid up at Owen Sound for the winter. The str. Rosedale & Algonquin are also wintering there.

The Rideau Canal locks closed for the season Nov. 30. The U.S. Canal at Sault Ste. Marie closed Dec. 11, the Canadian Canal remaining open until Dec. 20.

The slip dock at Erieau, Ont., having been completed, the Lake Erie & Detroit River Railway Co.'s large car ferry Shenango is calling there to land & take on passengers to & from points in Ohio.

The Myles Transportation Co., Ltd., has been incorporated to carry on a navigation & transportation business on the lakes. The provisional directors are: R. & J. T. Williamson, Niagara Falls, N.Y.; C. J. Myles, R. O. MacKay & Mrs. E. Dillon, Hamilton, Ont.

The str. Niagara, of St. Catharines, owned by J. & J. T. Mathews, Toronto, founded Dec. 5, about 8 miles east of Long Point, Lake Erie, Captain McGlory & the 15 hands on board being lost. She was built at St. Catharines in 1875, length 135 ft. 6 ins., breadth 26 ft. 3 ins., depth 12 ft. 2 ins., tonnage gross 468, register 302.

The largest steamer which ever arrived in Montreal intact after passing through the

canals, is the Porto Rico, from Toledo, Ohio, which went through in Nov. She is 225 ft. long & 32 ft. beam, & has a gross tonnage of 1,257, net 840, & draws light, 10 ft. of water. She was bound for New York, to engage in passenger service to the island of Porto Rico.

The Dominion Minister of Public Works has before him plans for the improvements to be made at Port Colborne, sanctioned by Parliament last session. It is said a breakwater will first be built along with a few wharves suitable for the transfer of cargoes. An attempt will be made to get the work under way soon. The appropriation available is \$120,000.

The schooner Wave Crest, owned by J. J. Turner, of Peterboro', & chartered by the Toronto Electric Light Co. to carry coal from Charlotte to Toronto, when abreast of Thirty-Mile Point Dec. 7, encountered a heavy northern squall, & went ashore at Oak Orchard on the south side of the lake. A tug from Kingston was unable to get to her assistance owing to rough weather.

The str. Imperial, running between Windsor, Amherstburg & Pelee Island, & owned by the Kingsville & Pelee Island Navigation Co., caught fire Nov. 25, while lying at Amherstburg dock. The upper cabin was the only loss sustained by fire, but the cargo of potatoes & fish was partly destroyed by water. Insurance, \$7,500 on boat. Shippers lose the damaged cargo.

The str. Constance, owned by Homer & Co., Gravenhurst, which runs on the Muskoka Lakes, is having 16 ft. added amidships. The high pressure 30 h.p. engine & boiler are being replaced with a fore & aft compound condensing engine & boiler of 150 h.p. When altered she will have a speed of 12½ miles. She was built at Gravenhurst in 1898, her present dimensions being: length, 65 ft.; breadth, 13 ft.; depth, 5 ft.; gross tonnage, 42.

The Niagara Navigation Co.'s annual meeting was held in Toronto Dec. 12. The Manager's report for the past year was approved, directors were elected & a resolution was unanimously adopted expressing sympathy with Sir Frank Smith in his long illness. The officers now are: President, Sir Frank Smith; Vice-President, B. Cumberland; Manager, Jno. Foy; Auditor, R. H. McBride; other directors, J. J. Foy, E. B. Osler, W. Hendrie.

The Hamilton Steamboat Co.'s report, presented at the recent annual meeting showed that the past season was one of the most prosperous in the history of the Co. The directors were re-elected, as follows: President & Managing Director, M. A. Kerr; Vice-President, M. Legatt; Directors, G. E. Tuckett, F. W. Fearman, G. F. Tuckett, S. Jones & H. B. Witton; Manager, W. E. Bishop. The shareholders unanimously decided that in consideration of the very successful season Managing Director Kerr take a trip to Europe at the expense of the Co. in consideration of his valuable services.

The Rideau Navigation Co. is seeking incorporation with \$100,000 capital. It is said the C.P. & New York Central Rys. are interested, & that Capt. Noonan will be manager, the str. James Swift, which he now commands on the Kingston-Ottawa route, to be taken over by the new Co., also the steamer now being built at Kingston, & which is intended to make tri-weekly trips between Clayton, N.Y., & Ottawa. She will be 112 ft. long, 28 ft. beam, 7 ft. deep. The upper cabins will occupy a space of 84 ft. in length, with 32 state rooms. The engine will be triple expansion, 8½" 13" 21" by 14" stroke; water tube boiler 8 ft. wide, 9 ft. long, 8½ ft. height, with 42 ft. grate surface & 1,400 ft. heating surface, steam pressure 200 lbs., h. p. 500, speed of piston, 600, speed of boat 12½ to 13 miles, draft 4 ft. 9 ins., cost \$20,000.

St. Lawrence canal construction, which was carried on to a considerable extent last winter in pursuance of the policy of having the 14-ft. system of navigation ready for 1899, will be practically at a standstill this winter. Such work as remains to be done on the enlargements between Prescott & Montreal cannot be done during winter. It consists mainly of finishing up contracts. Some work will be done before spring, however, upon the Trent Valley canal, several sections of which are under contract. Tenders have been asked for about 9 miles between Trenton & Frankford. Hon. J. R. Stratton announced at the recent annual meeting of the Peterboro-Trent Waterways Association, on the authority of the Dominion Government, that it was intended to complete the balance of the section between Balsam Lake & Lake Simcoe, which would require about \$900,000, & that prior to last session the Government had concluded to construct with reasonable despatch the section from Peterboro to Lake Ontario.

The ratemakers of Collingwood have almost unanimously voted a bonus of \$50,000 to the Dry Dock & Steel Ship Building Co., of Collingwood, Ltd., which is to take over the business of the Collingwood Dry Dock & Wrecking Co. The principal shareholders of the old company, T. & J. J. Long, C. Cameron & P. M. Campbell, are also in the new company & have associated with them Capt. Alex. McDougall, of West Superior, Minn., well known in connection with whaleback construction. Under the terms of the by-law the Co. agrees to establish a first-class steel ship building yard at Collingwood with plant & machinery capable of constructing at one time 4 of the largest class of steel vessels required in the navigation of the upper lakes, to maintain & operate the same for 30 years & to invest at least \$100,000 in the establishment of the industry. Half of the \$50,000 bonus is to be paid when the machinery is on the ground ready to operate & the balance when the keel of the first steel steamer is laid. The town grants the free use of the Hurontario st. slip for launching & for a dry dock when necessary. It is said a large portion of the plant will be in place by the end of Feb. & the whole by the end of May, & that the Co. will start work at once on a large steel freighter for the Northern Navigation Co., & on a passenger steamer for Brown's Windsor & Sault line.

During the season of navigation recently closed 42 vessels passed out of existence. Their total tonnage was 8,195, & they were worth \$226,200. Last year 58 vessels, with an aggregate tonnage of 29,194 tons & worth nearly \$500,000, were lost. Ships are now building at lake yards to carry over 100,000 tons in a single trip, & costing over \$8,000,000. There were 569 losses all told on the lake in 1898 & 386 this year, divided as follows:—Ashore, 168; foundered, 15; burned, 28; waterlogged, 11; dismantled, 4; disabled, 81; ice, 5; collision, 73; capsized, 1. Lake Erie was the scene of the most losses, 92; Lake Michigan, 61; Lake Ontario, 10; Green Bay, 9; Lake Huron, 43; Detroit & St. Clair Rivers, 69; Soo River, 49; Georgian Bay, 2; Welland Canal, 1. Nearly 40% of all these losses was caused by disasters in the narrow connecting lake channels, such as the Detroit River & the Sault passages. Chief among the causes was overcrowding, with strandings & collisions resulting. Many vesselmen are of the opinion that as vessels have been increasing in size until they are too big for the waterways, there must be larger & deeper channels provided, particularly at the Sault, where the two blockades caused more loss than any direct disaster shipping ever experienced. Such accidents are always liable to occur, & Lake Superior shipping interests will never be safe until another channel is cut to avoid the danger.

The U.S. Deep Waterways Commission has reported in favor of a system of dams in the upper Niagara River to raise the lake levels. It is said the Dominion Government will object on the ground that the dams may not only maintain the lake levels, but may raise them. If they should do this, the lower lands in Essex & Kent counties might be submerged. It is claimed that a great deal has been expended in draining these lands. Speaking on the subject recently, the U.S. Secretary of War said: "The Deep Waterways Board informs me that the structure will not cost over \$1,000,000 at the most, & probably not more than \$800,000. Yet this dam will save the government over \$1,000,000 already appropriated for deepening harbors & channels in Lake Erie & Detroit River. The Board has informed me that by its plans & surveys it will recommend a dam that will raise the lower end of Lake Erie from 2½ to 3 ft. This will deepen all the harbors on that lake about that much & will add from 20 ins. to 2 ft. to the depth of the water at the Limekiln Crossing. It will even raise the water of St. Clair Flats & Lake St. Clair about 1 ft., & will tend to hold back any permanent lowering of the level of Lake Huron by the washing out of St. Clair River, a process which has already done much damage. The dam will do away with the necessity for appropriations for deepening channels & harbors which have been growing greater & greater from year to year. For the Detroit River alone an appropriation of over \$500,000 is now awaiting expenditure, & we are led to believe by recent publications that this is merely the beginning of an unending expenditure for dredging & blasting."

#### Province of Quebec Shipping.

The St. Lawrence channel between Montreal & Quebec is being dredged to a depth of 29 ft. in low water.

The str. Princess Louise, recently burned near St. John's, Que., was built at Wolfe Island, Ont., in 1879. Her dimensions were: Length, 94 ft.; breadth, 18 ft. 5 in.; depth, 4 ft. 9 in.; gross tonnage, 115.

The enlargement of the Lorne graving dock at Quebec will extend it to 600 ft. in length, which will make it capable of receiving any vessel entering the St. Lawrence. The pres-

ent dimensions are: Length, 445 ft.; width at coping level, 100 ft.; width at bottom, 73 ft.; width at entrance, 62 ft.; depth of water on sill at high-water spring tides, 26½ ft.; neap tides, 20½ ft. The cost was \$910,000. The extended dock will be large enough to accommodate such huge ocean liners as the Teutonic, which is 582 ft. long, or the New York, which is 580 ft. It could not, however, accommodate the Oceanic, which is 704 ft. over all.

During the season of navigation recently closed there has been a decrease, not only in the number of steamships making the port of Montreal, but also in the tonnage. The 801 seagoing vessels making the port this year had a tonnage of 1,517,611, as compared with 868 vessels last year, with a tonnage of 1,584,072. The decrease is accounted for very largely by the fact that in the spring of 1898 there was a very large influx of steamships which came to take out grain & lumber, particularly the former. This year the trade in this line, which was largely made up of foreign grains, has been lacking. Another factor which had a tendency to decrease the tonnage this year was the putting off of a number of steamers & engaging them transporting troops, etc., to South Africa.

#### Maritime Provinces & Newfoundland.

The Lunenburg, N.S., Marine Ry. Co.'s capital stock has been increased from \$25,000 to \$40,000.

The Reform Shipping Co., Ltd., has been incorporated by Dominion letters patent, with a capital of \$21,000, W. L. Lovitt, of Yarmouth, N.S., & others being the incorporators.

H. M. Whitney, of Boston, Mass., & A. J. Moxham, General Manager of the projected iron works at Sydney, N.S., are said to be making arrangements for locating a steel ship-building plant at North Sydney.

Incorporation has been secured for separate companies to own the ships Kings County, Kambira, Harvest Queen, Canada, Skoda & Conductor, a fleet managed & heretofore principally owned by R. Burgess, of Wolfville, N.S.

Between Halifax & Shelburne, N.S., there are 45 vessels, mostly schooners, being built,

the aggregate value being estimated at about \$225,000. A large number of Lunenburg schooners have recently been sold to St. Pierre parties, hence the demand for new ones.

In Prince Edward Island recently one of the leading Liberals hoisted a series of ships' flags to welcome Sir Louis Davies, who was visiting his town. The flags were signals, & they read "Alter your course." The foregoing may not be true, but it is a good story anyway.

The Dominion Atlantic Ry.'s str. Prince Arthur has taken the Prince Edward's place on the Boston-St. John, N.B., route for the winter. She was turned out of the Hull shipyards on June 10 last. She is 308 ft. long by 38 ft. beam. Her registered speed is 19 knots, but on her final trial trip she made a speed of 20¾ for 300 miles. She furnishes accommodation for 600 passengers—550 1st class & 50 steerage. She has 4 decks.

Arrangement has been made between the Plant Line & the Newfoundland Ry., which will give Halifax a new steamship service between Halifax & St. John's. It will be operated by the Plant Line in conjunction with its Boston & Halifax service. The steamer, which has been built to the order of R. G. Reid for the Newfoundland Ry. Steamship Line, has been named Glencoe. She has made a satisfactory trial trip on the Clyde & started for Canada Dec. 11. She is to perform a regular winter weekly service.

#### ELECTRIC RAILWAYS.

##### Pavements Between Street Railway Tracks.

By C. H. Rust, City Engineer, Toronto.

In 1891 the exclusive privilege of operating the street railways in the city of Toronto, for 30 years, was disposed of to a company now known as the Toronto Ry. Co. The clauses of the agreement, made between the city & the Co., that refer more particularly to this paper, read as follows:

"The purchaser shall maintain the ties, stringers, rails, turnouts, curves, etc., in a state of thorough efficiency & to the satisfaction of the city engineer, & shall remove, renew or replace the same as circumstances may require, & as the city engineer may direct.

This illustration represents a group of Boston & Maine Railway yardmen demonstrating the practical part of the

## U. S. CAR PUSHER

by testing the device, which proved very satisfactory. Biggest part of those present are perfectly familiar with car moving by hand power, and this cut shows how many there were who said our pusher was all right. This device is manufactured by

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Factory, Moreau Street.



When a street upon which tracks are now laid is to be paved in a permanent manner, on concrete or other like foundation, then the purchaser shall remove present tracks & sub-structures, & replace the same, according to the best modern practice, by improved rails, points & sub-structures of such description as may be determined upon by the city engineer as most suitable for the purpose, & for the comfortable & safe use of the highway by those using vehicles thereon, & all changes in the present rails, tracks & roadbed, construction of new lines or additions to present ones, shall be done under the supervision of the city engineer and to his satisfaction.

"(A). In the event of the purchaser desiring to make any repairs or alterations to the ties, stringers, rails, turnouts, curves, etc., on paved streets, the purchaser shall repave the portion of the roadbed so torn up at his own expense.

"II. When the purchaser desires or is required to change any existing tracks or sub-structures for the purpose of operating by electric or other motive power, approved by the city engineer & confirmed by the council, the city will lay down a permanent pavement in conjunction therewith upon the track allowance (as herein defined) to be occupied by such new tracks & sub-structures. This shall first apply only to existing main lines & thereafter to branch lines or extensions of main lines & branches, as & when the city engineer may from time to time recommend & the city council may direct & require; but such tracks as are now laid on a permanently formed roadway must, when so required as aforesaid, be changed by the purchaser as hereinbefore provided, without any change of roadbed being made or any expense occasioned to the city thereby."

Under the terms of the agreement the Co. pays the city \$1,600 a year per mile of double track, & 8% of the gross receipts. When the receipts exceed \$1,000,000, 10% is to be paid. To raise the money for constructing these permanent pavements debentures were issued, payable in 10 years, & the revenue derived from the mileage and percentage of gross receipts is used to pay interest & sinking fund upon these, the total amount of bonds issued being \$1,210,776, & the annual payment to provide interest & sinking fund is \$149,136. This is at present very nearly the amount received from the Co., but as these pavements between the tracks will last for a much longer period than 10 years, in a few years there should be a considerable revenue derived from this source.

A great diversity of opinion has arisen as to the meaning of the word "permanent," used in connection with pavements. In 1888 this question was in the High Court of Justice before Judge Rose, in a case brought by the corporation of Toronto against the old Toronto St. Ry. Co., & after a considerable litigation it was finally settled, without, however, the judge giving his opinion as to the meaning of the word "permanent." When the present Co. obtained its franchise, the interpretation of the word was again subjected to a great deal of discussion, & in 1893 the continuation of the work of changing the rails by the Co., & the construction of the pavements were postponed from April until Aug., pending a settlement as to the meaning of this word. The writer has always taken the ground that in this case the word "permanent" refers to pavements with a concrete foundation, & this has since been taken as the meaning of the word as mentioned in these clauses. It is a great pity that this word should be so frequently used in connection with pavements. It would certainly be well in future cases to state explicitly what is a permanent pavement.

In compliance with the provisions contained in the previously mentioned clauses, in the spring of 1892 plans & specifications for paving

the track allowance on King, Queen, Yonge & other streets were prepared, & on June 28, 1892, the Co. laid down a temporary track on King St., west of Simcoe St., & the contractor for the pavements commenced work. The work of changing the tracks & constructing permanent pavements on the above streets was carried on continuously until winter set in (with the exception of a week's intermission during the time of the Industrial Exposition). The amount of track taken up & relaid this season was 29.9 miles. The rail adopted by the Co. & approved of by the city was a 6½ in. steel girder rail, weighing 70 pounds to the yard, & having a web three-eighths inch in thickness & a base of 4½ ins. wide. A slight alteration was afterward made in the size of the base, making it 5 ins. instead of 4½. The rail now weighs about 73 lbs. to the yard. From experience since gained a heavier section of rail should have been used. The following are the quantities required to build a mile of single track: 114,714 tons of 73 lbs. rails per mile; 5.85 tons of fish plates, 17 lbs. per pair; 1,800 cedar ties; 1 ton of spikes, ¾ lb. each; 1 ton of bolts & nuts, 1 lb. each.

The work of constructing these pavements & the laying of new rails was carried on continuously until the work was practically completed in 1894, there being only a few extensions constructed since. In constructing these new pavements the Co. took up the old rails, tamped the gravel under the ties, put down new rails & lined & leveled them & the paving contractor did the rest of the work. It may be of some interest to give the amount of work done in each year, the average cost per lineal foot (the width paved being 15 ft. for double track), the average rate of progress per day & the different classes of paving material:

1892—29.9 miles single track cost..\$322,555.00  
1893—26.1 miles single track cost.. 392,030.00  
1894— 9.8 miles single track cost.. 116,942.61

Average cost per lineal foot of double track for the different classes of pavement during these years was:

Asphalt.....	\$5 23
Granite.....	2 43
Brick.....	4 21
Cedar blocks.....	3 83

This covers the cost of stone or scoria toothing, but where granite was used the contractor was allowed to relay the blocks that were on the street. Average amount done per day was:

Asphalt—131 lineal feet of double track.
Granite—56 lineal feet of double track.
Brick—73 lineal feet of double track.
Cedar blocks—96 lineal feet of double track.

In 1894, on McCaul St., the method of construction was slightly altered as to the system of laying the granite or scoria toothing. It was found that when the blocks were laid as headers and stretchers that the water lodged next to the block & assisted in destroying the asphalt. To prevent this it was decided to lay scoria blocks, 4 x 5 x 9 ins., parallel to the rail, & then lay the asphalt. The practice had been to lay the first 6 ins. of concrete up to the bottom of the rail, then lay the scoria blocks in mortar, & finally put in the remainder of the concrete. On this street a change was also made in this respect. The whole of the concrete was put in at once & while still wet scoria blocks were pounded into it, & left to consolidate with the concrete before the asphalt was laid down. In any extension constructed since 1895, wooden ties have been dispensed with & steel tie bars, 2 x 3-8 ins., placed 6 ft. apart, are used, the rails being laid on a solid bed of concrete 8 ins. in depth by 20 ins. wide. This method of construction is much superior to the first type adopted, & is largely used in other cities. After an experience of 6 years of the different materials used, it is evident that with the conditions existing in Toronto, asphalt is

not a suitable paving material to be used between street railway tracks. After having been down only 4 years, the asphalt commenced to disintegrate. This was at first more noticeable where the asphalt joined the toothing, but it was not long before the rest of the material between the rails commenced to wear into holes. This was due probably to the following causes: The lack of proper foundation under the ties, which was shown by the settlement of the rails in several places, the impossibility of properly tamping the asphalt between the toothing, & the constant watering of the asphalt, rendered necessary by the dust caused by the passage of the cars, & also by climatic conditions. Upon King St., which was the only asphalt pavement laid without toothing, a rut was soon formed, rendering necessary constant repairs. The fact of the lip of the rail not being quite as high as the head, & the gauge of the track being 4 ft. 10⅞ ins. instead of 4 ft. 8½ in., probably had a great deal to do in forming this rut.

As previously mentioned, the first pavements were laid in 1892, & in 1897 it became necessary to commence tearing up the asphalt & replacing it with granite, scoria or brick, depending upon the amount of travel upon the street. By 1900 all the asphalt between the rails will have been replaced by a more permanent material. Up to the present 7½ miles of this work have been done. As these asphalt pavements were guaranteed for 5 years, arrangements were made with the contractors whereby they substituted brick for this asphalt, & were paid \$1.50 a square yard, but afterward, when the guarantee expired, the price paid for substituting scoria for asphalt averaged about \$2.40 a square yard. This includes taking up the old asphalt & also 4 ins. of concrete. The amount spent up to the present in substituting a more permanent material than asphalt is \$137,340.19. In putting in blocks in place of asphalt, the asphalt was first taken off & then the concrete had to be picked out so as to afford room for the blocks, which was bedded on a cushion of sand. Fortunately, on most of the streets the concrete was put in between the rails just to a depth of 4 ins., & it was not a very difficult operation to take this out. Granite is no doubt the most durable material to use between street railway tracks, but owing to the very strong opposition of the cyclists to this material not so much of it was used as the department would have liked, & scoria blocks, imported from England, were used instead. On streets where there was not a great deal of travel Canadian bricks were used. Cement grout was almost entirely used for this work, although some filling was done with paving pitch; but cement was found to be the most satisfactory. Owing, however, to the impossibility of stopping street car traffic while this work was in progress, it was very difficult for the filling to become properly set. On King St., during the past summer, where we were substituting scoria block for the asphalt, a portion of the pavement between the tracks was laid with concrete. It has been down now some two months, but not long enough to know the result.

### Maritime Provinces & Newfoundland.

**St. John Railway.**—The case of Hesse vs. this Co. has recently been before the Supreme Court at Ottawa on the appeal of the plaintiff from an order of the Supreme Court of New Brunswick granting a new trial. The case is of considerable interest, especially on account of the heavy damages awarded at the trial. Jos. Hesse, the plaintiff, on July 17, 1898, with two companions, boarded an open car on King St., St. John. When the car had reached the foot of King St., which is a steep incline, the whole brake gear beneath the car went to pieces. This was known to the con-

ductor & motorman of the car, but, having consulted, they allowed the passengers to remain on the car, & received others on board. They allege that they did this because they thought they could so use the electric energy itself as to supply the place of the disordered brake gear. In such an emergency there were two modes of applying the electric energy to control the car on a down grade, upon which they hoped to rely, viz., the application of the reversing power in the motor, & the application of the direct power from the power house. They started the car from the foot of King St. across Market Square, a level space, & ran it rapidly up Dock St. Hill. It passed quickly over the crest and began the descent of Mill St. Hill. There being no brakes, the motorman had recourse to the reversing power in the motor, to check the speed of the car, but there was no response; the apparatus was out of order; as a last resort he invoked the direct power from the power house; here, too, as the result of some accident just at that moment, in the power house, the direct power was shut off from the car, which, by its own momentum, went plunging down the steep grade. The plaintiff stood up in the car & laid hold of the iron bar that runs from the floor to the top, & put his left foot out upon the first step extending along the side of open cars, prepared, to be on top if the car should topple over when it would have reached the curve ahead. But, when the car reached the curve at the junction of Mill St. with Main, it jumped the track & went straight ahead across Main St. towards the sidewalk. When the front wheels of the car struck the curb-stone & leaped up on the sidewalk, the concussion broke plaintiff's hold on the iron bar in front of him & threw him violently to the pavement, breaking his left leg above the ankle, so that the bones pierced through his clothing. He was removed to the public hospital, where on July 24, 1898, blood poisoning being imminent, the foot was amputated above the ankle. The plaintiff, at the time of the accident, resided at Providence, R.I., & was a teacher of the organ & piano. He was engaged as organist & choir director in the Roman Catholic cathedral there, & had been for about 10 years prior to the injury complained of. The plaintiff alleged in his declaration & offered evidence to prove at the trial, that the loss of his left foot wholly incapacitated him from playing upon the organ or piano, & in consequence his power to earn money as a musical performer, as well as a teacher of instrumental music was wholly destroyed. The trial took place at the Circuit court in St. John in Mar. 1899, before Judge VanWart & a jury, & a verdict was rendered in favor of plaintiff for \$25,000. The Co. moved before the Supreme Court of New Brunswick, in April, 1899, for a new trial, upon the grounds of improper reception & rejection of evidence, mis-direction by the trial judge, & excessive damages. The rule was made absolute for a new trial in June, 1899, by Tuck, C.J., & Hanington & McLeod, J.J.; Van Wart, J., the trial judge, dissenting. The appeal from the judgment ordering a new trial was argued at the Oct. sitting of the Supreme Court, the argument lasting three days. On the plaintiff's side it was mainly almost entirely devoted to the question of excessive damages, in connection with which evidence was given of the different services of the church at which plaintiff officiated as organist & the remuneration received. The result of the appeal, as decided by the Supreme Court, is that the rule for a new trial stands, but is restricted entirely to the amount of damages, & the plaintiff succeeds to the further extent that while his appeal is dismissed he has not to pay the costs. The Chief Justice & Judge Gwynne dissented from the judgment, holding that the rule for a new trial should be discharged & judgment entered for appellant according to the verdict.

**Quebec Electric Railways.**

**Montreal St. Ry.**—The gross earnings are :

	1899.	1898.	Increase.
Oct. ....	\$145,877.20	\$133,619.63	\$12,257.57
Nov. ....	133,489.12	125,125.09	8,364.03
	\$279,366.32	\$258,744.72	\$20,621.60

In the suit of Gareau vs. the Co., in which the plaintiff claimed that his property had been injured by the vibration, smoke & noise pro-

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**W. H. CODDINGTON,**

Hamilton, Ontario.

**NOTICE.**—The Arrowhead & Kootenay Railway Company (incorporated by an Act of the Legislature of British Columbia, 61 Victoria, Chapter 47) will apply to the Parliament of Canada at its next session for an Act declaring the works which the Company is, by its Act of Incorporation, authorized to construct to be works for the general advantage of Canada, extending until the end of the year 1905, the period within which the Company may complete its works, & giving such powers to the Company as to the maintaining & operating or disposing of its railway & works as are usually given to Railway Companies incorporated by the Parliament of Canada.

By order of the Provisional Directors,  
 CHARLES DRINKWATER, Secretary.  
 Montreal, 20th November, 1899.

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ceeding from the Co.'s power house, situated between William & Barre streets, the Superior Court dismissed the action and the Court of Review has confirmed this judgment. (Nov., pg. 339.)

A correspondent of the Montreal Herald having asked why the Co. will not allow passengers to get on & off at the front end of cars, Superintendent McDonald has replied as follows: "The reason for not permitting passengers to get on & off the cars at the front end is simply a measure of precaution for the protection of passengers from the danger which attends getting up & down at the front end of the cars. Further, on account of the hills & heavy grades, which are much steeper & more frequent here than in any other city in Canada, it is necessary to prohibit passengers from riding on the front platform in order that the motorman may not be interfered with in the management of the car. The difficulty of controlling a car on the heavy grades in Montreal is not to be compared with the same duties in Toronto, where the roads are perfectly level & the conditions entirely different."

At a recent meeting of the city Finance Committee the question of keeping the streets clear of snow caused a lively discussion between the aldermen & the President & Manager of the Co. The contract between the city & the Co., which has been in force for the last 5 years, expired Nov. 1, & the question of making a new contract came up. By the old contract the Co. paid the city \$1,650 a mile & the city kept the streets clear of snow, & the Co. had to keep its own tracks clean. In the 5 years this cost the city \$101,328; & the Co. \$266,236. The Co. objected & said it was willing to pay half the cost, but could not pay two-thirds, as it had been doing. The aldermen tried to talk the Co.'s officials out of this position, but could not do so, & decided to approve of the Road Committee's action in reporting to Council to adhere to the by-law, which says:—

"The Co. shall, under instructions from the city, keep the track free from ice & snow, & the city may, at its option, remove the whole or such part of ice & snow from curb to curb, as it may see fit, from any street or part of street, in which cars are running, including the snow from the roofs of houses, thrown or falling into the streets, & that removed from the sidewalks into the streets, with the consent of the city, & the Co. shall be held to pay half the cost thereof."

In the interpretation of the by-law is where the dispute comes in. The Co. says it means that the cost of removing the snow from curb to curb is to be divided equally. The city says no. The Co. must first clear its tracks, & that not by throwing the snow on the streets, but by taking it away, & then pay half the cost of removing the rest of the snow. The Co. says it will go to Court about it, & the committee says go ahead.

E. W. Olds, Superintendent of Rolling Stock, & T. E. Mitten, General Superintendent of the Milwaukee Electric Ry. & Light Co., recently spent some days in Montreal to look into the M.S.R. Co.'s system. In an interview Mr. Mitten said:—"Our mission here is for educational purposes. We have had an electric system in Milwaukee for the past 7 years, & our mileage is over 165 miles of track, to accommodate a population of between 280,000 & 300,000. We have spent immense sums of money on equipment, etc., & believe ourselves thoroughly up-to-date, but we have had to come to Montreal to learn something more. Your street railway system here has the reputation in the U.S. of being the best conducted system there is in America. I mean by that, that you serve more people with greater satisfaction & in a more systematic fashion than in any other similar city on the continent. I speak as one who knows, when I say that. I have been on all routes, & the service every-

where is excellent. In Milwaukee our fares are 5c. straight & we sell 20 tickets for \$1. Our transfer system is similar to yours. We are allowed to travel between 8 & 15 miles an hour, averaging 8½ miles. The city ordinance compels us to have fenders on. They are similar in construction to yours, only they are below the platform instead of in front of it. We have an average of seven fatal accidents a year, & in only one instance since 1892, when the electric system was adopted, has a jury censured the Co. or held it responsible. The U.S. courts hold that before a company can be held responsible for accident the injured party must have proved that he exercised all due precaution. Thus, if a man walks across a street at an intersection & is knocked down by a car, he cannot justify a claim for damages unless he can prove that before crossing he 'stopped, looked & listened' to find out if there was any probability of danger. Our city charter gives us the right of way, & it is on this principle the courts act. I am a street railway man of considerable experience & I can assure you that I have never yet known of an accident for which the injured party was not to a great extent responsible. 'Stop, look & listen;' this ought to be taught in the public schools as a headline for copy, & if that were done accidents would be minimized."

### Ontario Electric Railways.

**Berlin to Port Dover.**—It is said progress is being made with this project, the idea being to build from Berlin via Blair, Roseville, Ayr, Paris, Brantford, Waterford, & Simcoe to Port Dover. The promotion is being done by what is termed the Clarke-McNair Syndicate, & L. H. Green, a Montreal engineer, has been going over the route. An unconfirmed press report says the syndicate has bought the Grand Valley Ry. Charter, which gives power to build from Berlin to Galt, also that it has bought the Ayr toll road & that it has an option on the Cavan water-power, owned by the Grand River Electric Power Co. There is difficulty in securing a franchise in Paris. Promoter Clark says the road will go through; that prominent New York financiers are at his back, & that it is the intention of the Co. to apply for an amended charter for the Grand Valley Ry. Co. & to acquire the street railways of Berlin & Brantford. The President of the Brantford St. Ry. Co. informs us that no arrangement for its sale has been entered into.

**Fort Erie to Chippawa.**—It is announced that the Niagara Falls Park Commissioners have reached an agreement with the Fort Erie Electric Ry. Co., under which the latter will be allowed to extend its line for 13 miles along the bank of the Niagara River to Slater's Point. This extension will bring the line within 2 miles of Chippawa, but the ground between the two points is already occupied by the Niagara Falls Park & River Ry., which has not, however, been running cars between Slater's Point & Chippawa this season, & if it fails to do so much longer the Park Commissioners may cancel the agreement & transfer running rights to the Fort Erie Co. In return for the franchise from Fort Erie to Slater's Point the Fort Erie Co. has agreed to acquire a right of way, giving a width of 66 ft. over the land to be traversed, & to pay a yearly rental. The terms as to the rental have not been divulged, but it is stated that the amount will begin at about \$2,000, & increase every subsequent 5 years, until at the end of 15 years the maximum is reached. In considering the question of the right of way two courses were open to the Commissioners. They had either to purchase the land themselves at very considerable cost & then sell a portion of it to the railway company for the purposes of a track, or to require the company to obtain the land with the right to occupy 20 or 24 ft., setting apart the bal-

ance as a carriage way. The Commissioners adopted the latter course as being more in the public interest. The land in question forms part of the chain reserve extending along the bank of the river from Chippawa to Fort Erie. Farmers along the route are willing to afford a right of way to the railway & to move their fences back, but the bank for a considerable distance has been washed away through the erosion of ice or water, & there would hardly be sufficient width at some places for carriages to pass. The Park Commissioners, therefore, insist upon the railway company purchasing a width of land sufficient not only to lay its tracks, but to give a carriage way of 40 ft. The company will also be required to make good the bank at points where gaps exist, & strengthen it against further inroads. The acquisition of the necessary right of way will cost the company about \$50,000. The agreement between the Commissioners & the company will be submitted to the Ontario Government for ratification. (Nov., pg. 336.)

The foregoing appeared in the Toronto Globe. The Chairman of the Park Commissioners informs us that it is not altogether correct. Pending the Government's action he will not make any further statements.

**The Hamilton Consolidations.**—J. Moodie, Jr., followed up the legal proceedings mentioned in our last issue by issuing a writ against the Cataract Power Co. to set aside the letters patent recently issued granting the Co. enlarged powers. It is said that he is, however, being settled with, & that he will get \$143,000 for an actual expenditure of \$38,500 in the Co.'s stock. (Nov., pg. 337.)

**The London St. Ry. Co.** has gone to the Court of Appeal with its case against the city assessment of \$150,000 upon its rails, poles, wires, etc. The Co. seeks to have it declared that the material in question should have been assessed on the basis of scrap.

**Metropolitan Electric Ry.**—See under "Railway Committee of Privy Council," on an earlier page of this issue.

**Niagara Falls & Wesley Park Tramway Co.**—A press despatch says that the Sutherland Improvement & Development Co., of New York City, has secured a controlling interest in this Co., & proposes to change the line from a horse one to electricity by July 1, 1900, that a deposit of \$1,000 has been made with the Town Council, and that the line will be extended to Fall's View & out to Lundy's Lane.

**Niagara, St. Catharines & Toronto Ry.**—The following officers were recently elected: President, J. A. Power, Lansingburg, N.Y.; Secretary & Treasurer, A. P. Colvin, Glens Falls, N.Y.; other directors, J. W. Herbert, Helmetta, N.J.; J. W. Flavelle, Z. A. Lash, & A. Jarvis, Toronto, Ont.; J. L. Hees, Fonda, N.Y.; General Manager, F. A. Cheney; General Freight & Passenger Agent, W. N. Warburton.

The work of converting the line from steam to electricity is rapidly progressing, & it is expected to have passenger cars in operation between St. Catharines & Niagara Falls by Jan. 1. The cars will be of a special type, with heavy cross seats, electrically equipped with 4 motors of 50 h.p. each. (Nov., pg. 336.)

**Ottawa Electric Ry.**—The line being built between Ottawa & Britannia will be a double track railway for the whole distance. It will connect with the city tracks at Holland Avenue, & will run through a most picturesque country, commanding a fine view of the Ottawa River, to a sandy beach at Britannia-on-the-Bay. The rails are 72 lbs. standard railway section, with long fishplates, each having 6 bolts. The ties are placed at 2 ft. centres. Bonding is done with 4/0 copper wire. The centre pole construction is used throughout. The trolley wire is of the figure 8 shape, & will entirely avoid the flashing at the supports which occurs in the use of the ordinary round wire. The poles will be painted for the whole distance, as well as the fence posts on either

**THE FIRSTBROOK BOX CO., LIMITED.**  
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**NOTICE.**—The Canadian Pacific Railway Company will apply to the Parliament of Canada, at its next session, for an Act authorizing the company to construct or acquire & to operate a railway from a point at or near Morden on its Pembina Mountain Branch; thence to a point at or near Miami, & thence to a point at or near Carman, all in Manitoba; & also a railway from a point between Hartney & Souris on the company's Souris Branch; thence to a point between Boissevain & Ninga on the Manitoba & South Western Colonization Railway, with power to issue in aid of the construction & equipment of each of the said railways, bonds which will be a first lien & charge thereon with the same effect as if it were being built by the company as a branch line within the meaning of section one, chapter fifty-one of the Statutes of 1888, or in lieu of such bonds consolidated debenture stock conferring on its holders equal rights in all respects & a rank pari passu with holders of such consolidated debenture stock as the company has been heretofore authorized to issue, & for other purposes.

By order of the Board,  
 CHARLES DRINKWATER,  
 Secretary C.P.R.

**NOTICE.**—The British Columbia Southern Railway Company will apply to the Parliament of Canada at its next session for an Act authorizing the Company to complete at any time before the end of the year 1904, its western section as described in the Act of the said Parliament (60-61 Victoria, Chapter 36) & a Branch line from a point on its main line at or near the forks of Michel Creek, thence by way of Michel Creek to Morton Creek; & for other purposes.

By order of the Board,  
 H. CAMPBELL OSWALD, Secretary.  
 Montreal, 17th November, 1899.

**NOTICE** is hereby given that The Dominion Atlantic Railway Company will apply to the Parliament of Canada, at the next session thereof, for an Act confirming the company's issues of capital stocks, the conveyance to the company by the Windsor and Annapolis Railway Company, dated the thirty-first December, 1895, the Mortgage Trust Deeds made by the company, and the first and second debenture stocks, issued and to be issued, thereunder, to the amount of 940,000 pounds (sterling), and also to enable the company to increase the capital stock, borrow and secure money upon ships and other outside property of the company, to create reserves, and for other amendments to the Act incorporating the company.

CHRYSLER & BETHUNE,  
 Solicitors for the Company.

Dat d the 7th November, 1899.



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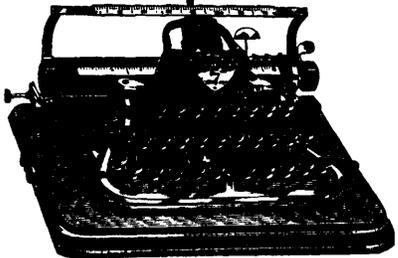
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They relieve Distress from Dyspepsia, Indigestion and Too Hearty Eating: are a perfect remedy for Dizziness, Nausea, Drowsiness, Bad Taste in the Mouth, Coated Tongue, Pain in the Side, TORPID LIVER.

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side of the right of way. The rolling stock will consist of closed & open cars, each 50 ft. in length, mounted on double trucks. Each car will be equipped with four 50 h.p. latest type Westinghouse motors. The line is almost straight, & will permit of very high speed being attained. The cars will run into the city of Ottawa & round what is known as the Sandy Hill Loop. At the Britannia end they will also turn by going around a loop, thus avoiding the turning of the trolley at any portion of the line. (Nov., pg. 337.)

**Queenston, St. Catharines & Port Dalhousie Electric Ry. Co.** T. D. Cowper, solicitor, has given notice of application to the Ontario Legislature for an Act to incorporate a company under this name, with power to construct & operate an electric railway from Queenston through Niagara township to St. Catharines, & thence to Port Dalhousie, & with other powers.

**The Sarnia St. Ry. Co.** has issued a prospectus stating that having determined to electrify its road, it offers from \$30,000 to \$50,000 of its unsubscribed stock for subscription. The Co. has conducted its business as a horse-car railway since 1874, always at a profit; is now paying 5% dividend, & has a surplus of \$5,000 accumulated since 1892, as a cash asset; besides a large amount of plant & assets immediately available for use in electrifying the road, & also very considerable assets which can be turned into money as soon as the change is accomplished. The Co. has made a close estimate of the value of its plant & assets which can be properly used in the construction of the road & in its operation when electrified, & is reducing the present holdings of stock, \$38,600 to the amount of such estimated value, namely, \$28,950. The Co. proposes to construct its electric line from the Tunnel Station to the town over its present location, then northerly through the town over Front & Christina Streets, continuing the road to Point Edward, thence to & along the shore of Lake Huron; & to lay a branch line to the south part of the town near the proposed wire works; in all about 6 or 7 miles. The Co. expects to get power from the Electric Light Co. on advantageous terms. The Co. has procured an estimate of the cost of construction & earnings of the proposed new road by its engineer, J. H. Jones, who reports that the probable cost of the road, after having added a very considerable sum for unseen expenses, will be \$100,000. To provide for this the Co. proposes to utilize the present plant & assets so far as available for the construction of the road, to raise by subscription of stock from \$30,000 to \$50,000, & to borrow the balance on bonds of the Co. The engineer has further made what the Co. believes to be a conservative estimate of probable earnings, which shows that the same will be sufficient, after paying all the costs of operation & maintenance, & providing a fund for payment of interest & a sinking fund for the payment of its bonded debt, to pay a handsome dividend to the shareholders. The Co. proposes that after the stock has been subscribed, that the present directors shall withdraw, & that a new board shall be elected by the entire shareholders, who will then undertake the construction of the road. The Co. desires to bring before the attention of intending investors the fact of the present road having been run at a profit to its shareholders; the permanent advancement the town has made within the past two years, & the most encouraging existing indications of the future prosperity of the town & the community, the valuable charter the Co. has being such as cannot now be obtained, & that the Co. is composed almost entirely of residents of the town, who have the best interests of the town in view; & also desire to make special notice of the natural advantages of the locality for the operation of a success-

ful street railway, embracing the ordinary town services similar to other places, & in addition thereto the traffic to the Tunnel Station, & the ever increasing summer resort & excursion business to the lake shore.

We are informed that if the stock offered is taken up, the letting of contracts for rails, ties, motor cars, generators & overhead construction will be at once taken up. (Nov., pg. 337.)

**Toronto Railway.**—The gross earnings are:

	1899.	1898.	Increase.	Decrease.
Jan. ..	\$95,690.12	\$86,502.36	\$9,187.76	.....
Feb. ..	91,860.30	82,402.19	9,458.11	.....
Mar. ..	103,234.88	92,318.42	10,916.46	.....
April ..	95,212.37	86,898.83	8,313.54	.....
May ..	104,866.62	92,670.35	12,196.27	.....
June ..	109,063.18	94,119.32	14,943.86	.....
July ..	116,824.94	104,302.92	12,522.02	.....
Aug. ..	123,282.70	110,300.54	12,982.16	.....
Sept. ..	137,621.10	138,021.74	.....	\$400.64
Oct. ..	111,465.37	99,650.16	11,815.21	.....
Nov. ..	102,502.78	99,734.91	2,767.87	.....
	\$1,191,564.36	\$1,086,921.54	\$105,043.36	\$400.64

Increase, Jan. 1 to Nov. 30, \$104,642.72.

The Co. has commenced cast welding its rail joints on the same plan as adopted by the Montreal St. Ry.

**Electric Lines in Western Canada.**

**British Columbia Electric Ry.**—Work has commenced on the station building on Columbia St. west.

Earnings & expenses for October:

	1898.	1899.	Increase.
<b>GROSS EARNINGS.</b>			
Railway—Vancouver division	\$5,723	\$7,914	\$2,191
Victoria "	6,981	8,320	1,339
Westminster "	10,394	11,733	1,339
Lighting—Vancouver	10,139	11,000	861
Victoria "	5,085	6,107	1,022
Total gross earnings	\$38,322	\$45,074	\$6,752
Working expenses	\$21,600	\$22,951	\$1,351
Net earnings	\$16,722	\$22,123	\$5,401

Gross earnings April 1 to Oct. 31	\$228,686	\$250,842	\$22,156
Net profit April 1 to Oct. 31	\$94,322	\$110,592	\$16,270

**Nelson Electric Tramway.**—The rolling stock will, to begin with, consist of 3 cars. The pole line to convey the electric power from Bonington Falls to Nelson has been completed. Six copper wires & 2 telephone wires have been strung. Good progress is being made with track laying. (Nov., pg. 339.)

**Trail to Rossland.**—Col. Topping, of Trail, B.C., who has for some time been urging the feasibility of an electric railway between there & Rossland, states that he is making progress & that it is very probable that a line will be built next year.

**Hauling Freight by Electricity.**—In the larger cities we may soon expect to see freight trains running on the electric street railway as a part of the regular traffic. Such action is contemplated in Toronto. There the Metropolitan Ry., which runs electric cars in the County of York on roads north of Toronto, has made arrangements to connect with the C.P.R. on Yonge St. The object is to deliver freight from the C.P.R. station throughout the city & suburbs. Already we have in the work being done by the Kingston St. Ry. Co. the initial step in that direction here. The plan has many advantages. It would prevent the wear & tear of streets which result from heavy drayage, & would lessen the cost of repairs. Farmers could avoid the necessity of long drives to the city, & as a result, provisions would probably be cheaper. The cars could stop at any number of points along the road & collect the freight, a thing impossible to the ordinary freight train on the regular railway lines. Then, too, the work of hauling the freight cars could be done more economically on an electric road. Altogether,

the scheme has many points in its favor.—Kingston, Ont., News.

**Government Bonuses to Electric Railways.**—In referring to the application by the Cataract Power Co. to the city council of Hamilton, Ont., for aid in the construction of an electric railway from there to Guelph & to the probability of the Co. asking the city of Guelph for aid to extend the line to Mount Forest, the Guelph Mercury says: "If municipalities are to be expected to bonus electric lines, is there any reason why the legislature should not also be looked to for assistance? Many points, like Guelph, did not share proportionately in the advantages of the railway aid granted by the province a few years ago with Toronto & some other places. The Toronto, Grey & Bruce & both branches of the Credit Valley Ry., for example, were antagonistic to Guelph interests. They diverted to Toronto much trade which formerly came here. No doubt electric railways would enable us to get some of this trade back again, so that, from this city's point of view at least, provincial assistance to such lines should be favorably regarded. Probably a great many other parts of the province would take a similar view of the matter."

**The Ontario Government's Policy.**—In a recent speech Provincial Secretary Davis said that we are just on the verge of a wonderful electric railway development in this country. He explained the provision of the law by which a line running a short distance out of a city may be considered part of the city franchise, but there was springing up a new kind of railway extending for perhaps 30 miles, like the Metropolitan in York County. Owing to the decision of the Railway Committee in Ottawa a question of jurisdiction arose, & the Ontario Government wished it to be distinctly understood that they believed the jurisdiction over railways of this class rests with the Provincial Government & the municipalities through which they pass, & steps had already been taken to find out exactly what the power of the Local Government is. Whatever power they had under the B.N.A. Act they would fight for in the interests of the people of Ontario, no matter what Government was in power at Ottawa.

**Dominion Government Telegraph Lines.**

J. B. Charleson, of Ottawa, Ont., who superintended the construction of the line from Bennett, B.C., to Dawson, Yukon, stated in a recent interview, according to the Montreal Herald, that he left Ottawa with the construction party Mar. 10, & the line was opened on Sep. 28. He is reported to have stated the distance from Bennett to Dawson as being 740 miles, though possibly this is a mistake, as it has been understood to be only 593 miles. The principal points served by the line between the two terminal points above mentioned are Cariboo Crossing, Tagish, White Horse Canyon, Lake Laberge, Thirty Mile River, Teslin, Five Fingers, Selkirk, Pentlers, Selwyn, Ogilvie & Big Salmon. Mr. Charleson said: "I had 108 men engaged in construction, & the cost of the line will be about \$137,000, but besides constructing the line, I had to build 13 houses for operators, who are to work the line between Bennett & Dawson, as well as for the men who will be employed to look after its maintenance. Close beside these 13 houses we constructed small sheds, each provided with wooden bedsteads that may be required by belated travellers. At each of the stations I also left two men, one being the operator & the other in charge of the repairs. At each post provisions have been put in in sufficient quantities to last at least nine months." The cost above given is merely that of the line itself, & the other things mentioned by Mr. Charleson bring the total cost up to \$183,200, while what

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(For \$1,000 Mortuary Benefit.)

Initiation fee (minimum).....	\$1 00
Certificate fee.....	1 00
Registration fee.....	1 00
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<b>Total minimum cost.....</b>	<b>\$4 50</b>

(For more than \$1,000 Mort. Benefit.)

Cost to take \$2,000 Mort. Benefit.....	\$6 00
" " \$3,000 " " " " " "	7 00
" " \$4,000 " " " " " "	9 00
" " \$5,000 " " " " " "	10 00
Sick benefits, when required, cost extra.	

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- 1.—Social and Fraternal Privileges of the Court Room.
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- 7.—An Old Age Pension payable during disability, which may be taken as a substitute for the Old Age Disability Benefit.
- 8.—A Burial Benefit of \$100 at death of a Pensioner.
- 9.—A Funeral Benefit of \$50 at death of a member enrolled in Sick and Funeral Benefit Department.
- 10.—The Mortuary Benefit of \$500, \$1,000, \$2,000, \$3,000 \$4,000 or \$5,000.

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Year.	Total Membership.	Benefits Paid.	Total Surplus.	Surplus per Capita.	Death Rate per 1,000.
1881	1,019	\$ 1,300 00	\$ 4,568 55	\$ 4 48	4.50
1882	1,134	12,058 86	2,967 93	2 61	11.00
1883	2,216	9,493 68	10,857 65	4 91	4.73
1884	2,558	13,914 31	23,081 85	9 01	4.23
1885	3,642	26,576 99	29,802 42	8 18	7.76
1886	5,801	28,499 82	53,981 28	9 30	4.85
1887	7,311	59,014 67	81,384 41	10 44	5.78
1888	11,800	89,018 16	117,821 96	9 98	6.43
1889	17,349	116,787 82	188,130 36	10 84	5.85
1890	24,601	181,846 79	283,967 20	11 54	5.18
1891	32,303	261,436 21	408,798 20	12 65	6.40
1892	43,024	344,748 82	580,597 85	13 49	6.25
1893	54,484	392,185 93	858,857 89	15 76	5.47
1894	70,055	511,162 30	1,187,225 11	16 94	5.47
1895	86,521	685,000 18	1,560,733 46	18 03	5.67
1896	102,838	820,941 91	2,015,484 38	19 60	5.50
1897	124,685	992,225 60	2,558,832 78	20 52	5.56
1898	144,000	1,176,125 14	3,186,370 36	22 12	5.67

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Or Any Officer or Member of the Order.

was evidently a typographical error made him say that it would average \$980 a mile. He says the C.P.R. Co.'s telegraph authorities estimated the cost of the line at \$350 a mile, & the G.N.W. telegraph manager thought it would cost \$400. Of course the use of scows on the river cheapened the cost considerably. Where the Big Salmon enters the Yukon, the former had to be crossed, the distance being 900 ft., the very rapid current preventing a cable being laid, so the wire was strung above the river at a height of 69 ft.

When Mr. Charleson arrived at Skagway last spring he found that neither wire nor insulators had arrived there. The White Pass & Yukon Ry. lent him sufficient for 40 miles, enabling the work to be started without delay.

As it was evident that some of the figures given in the interview above quoted were erroneous, we communicated with Mr. Charleson with a view of obtaining correct information & received a reply reading as follows:—"I am not in a position to give you figures as to the cost of the line as I have not yet made my report to the Government & you will therefore see the delicate position in which I am placed. You say that I am credited with stating that the distance between Bennett & Dawson is 750 miles, & you further say that you understand it to be 593 miles. I am not yet in a position to say what the correct distance between these two points is. Further I wish to state that I never gave an interview to any newspaper man in the Dominion, & when they quote me they do so on their own responsibility & without my approval. You say that I am credited with giving the cost of the line itself at \$137,000, & the total cost, including buildings, at \$183,200. This also I am not yet in a position to state, but when I have submitted my report to the Minister he will be quite at liberty in his position to give out details. You also state that I am reported as stating that the line cost \$980 a mile, & you are kind enough to say that this is absurd. If I was speaking & not writing I might use a word more emphatic, because taking the statement which you say I am reported as having made, that the distance was 750 miles, and multiplying the same by \$980, would give you an amount difficult to cover with \$137,000. You are quite right when you call \$980 a mile absurd. At some future date, when I have submitted my report to the Minister, it will give me much pleasure to send you correct figures."

Mr. Charleson may be technically correct in saying that he never gave an interview to a newspaper man in Canada, but there is no doubt that he has done a lot of talking to reporters both at the Pacific coast & in the east.

During the first month the Bennett-Dawson line was in operation the receipts were \$13,000.

On Oct. 13 a correspondent at Dawson wrote that the line had been inoperative for two weeks.

A correspondent of the "Victoria Colonist" writes:—"Mr. Charleson arrived at Bennett on April 1, accompanied by a staff of assistants of all kinds, imported from the Eastern provinces at great expense for transportation & keep, although all the necessary help & better than that brought West could have been obtained in the district. The material & tools, many of which will never see use in the country, were hauled to Bennett at great expense, & the poles were purchased at Bennett & shipped down the river, although 20% could have been saved by cutting them along the line. The telegraph follows the windings of the river. The Government built a new trail, which, it is claimed, is 140 miles shorter than the one following the river. Why was not the line built along the new trail & 140 miles of wire saved?"

A Yukon paper says that at a dinner given Mr. Charleson, at Dawson, on the opening of the line, he stated that he had received in-

structions from the Department of Public Works to make immediate arrangements to extend the line south to Quesnelle. The distance in a direct line is about 600 miles, but the route which the telegraph line will have to follow will probably be in the neighborhood of 750 miles. The Western Union had a line at one time for about one-third of the distance from Quesnelle. It was to have been extended to Europe, via Siberia, but the successful laying of an Atlantic cable led to the abandonment of the enterprise. If the same route is followed by the new line, this part of the distance will present no great difficulties. The Victoria Colonist thinks there must be about 400 miles of the route to be covered yet to be thoroughly examined before a final section is made, and the work will necessarily occupy some time, although work could be begun simultaneously from Atlin south, from Telegraph Creek north, from Telegraph Creek south, from the Naas north, from the Naas south, from the Skeena north, from the Skeena south, & from Quesnelle north. That is, eight construction parties might be put in the field simultaneously.

The telegraph line between Kamloops & Nicola, B.C., has been completed.

#### C.P.R. Company's Telegraph.

W. J. Camp having been appointed Superintendent of the Eastern division, the position of electrician, heretofore held by him, has been abolished. In future the electrical part of the work will be performed by the inspector of each division. Tariffs, etc., will be attended to in the manager's office.

A large amount of construction & improvement work has been done during the year. The only change in buildings on the Eastern Division has been the removal at Halifax, N.S., into the Government building, which the Co. occupies jointly with the Commercial Cable Co. & the Direct West India Co., & which is very handsomely fitted up. The floors outside the counter are tiled, all wood work is quarter cut oak. The ceilings & walls are handsomely decorated to conform with other parts of the office. One wire was strung from Carleton Place to Brockville. One single wire & one quadruplex wire was strung from Montreal to Smith's Falls, meeting two new Toronto wires at that point.

Ontario Division.—A no. 6 gauge wire has been built between Toronto & Buffalo; no. 6 gauge wire between Montreal & Toronto; no. 8 gauge wire between Toronto & Elora; taking in Streetsville Jct., Brampton, Cheltenham, Inglewood, Cataract, Alton, Erin, Belwood, Hillsburg, Fergus & Elora; new line between Harriston & Listowel via Palmerton; no. 8 gauge wire between Toronto & St. Thomas; no. 8 gauge wire between Toronto & London. The Co. is putting in 12 motor generators at Toronto to supply electric power for the working of the lines on this division. This plant, when completed, will, it is said, be the most up-to-date in Canada.

Western Division.—The pole line on the main line has been reconstructed for 329 miles between Winnipeg & Fort William & for 112 miles between Moose Jaw & Swift Current. This completes the reconstruction of the pole line between Fort William & Bowell, west of Medicine Hat. This new line is of the most substantial description. A no. 8 gauge wire has been strung between Rat Portage & Ignace, 145 miles. Telegraph lines have been constructed along the following branch railways: Snowflake branch, 16 miles; Deloraine-Waskada branch, 21 miles. On the Pipestone branch extension, about 48 miles will be constructed by the end of the year, weather permitting. On the Canadian Northern Ry. about 70 miles of new telegraph line will be constructed by the end of the year & about 70 miles on the Manitoba & Southeastern. About

23 miles have been constructed on the Great Northwest Central extensions at Rapid City & beyond Hamiota.

Pacific Division.—Two no. 8 wires have been constructed along the Columbia & Western Ry. from West Robson to Greenwood, 92 miles. A branch of 12 miles is being built from Eholt to Phoenix, & will be completed about Dec. 20. An additional wire has been strung between Robson & Rossland, 30 miles, & 2 additional wires between Robson & Nelson, 28 miles. The main line & branches have also been greatly strengthened by a general overhauling, & the erection of about 100 miles of new poles.

Along the Columbia & Western Ry. extension from West Robson, B.C., offices have been opened at Grand Forks, Greenwood, Midway Rock Creek & Camp McKinney. An office has also been opened at Lardeau, B.C.

#### Great North-Western Telegraph Co.

Reconstruction work has been going on over the entire system during the past season, & the Co. has had engaged in different parts of the country almost continually since the spring, 6 or 7 gangs of men.

A wire is under erection along the route of the Great Northern Ry. between Quebec & Hawksbury, Que. The line will be of the usual specifications, one wire being put up in the meantime on a 4-wire cross-arm.

Since the completion of the Victoria Jubilee Bridge at Montreal, the Co. has strung on the top of the structure some 40 wires, using hard-drawn copper & steel pins. This open work was considered to be more advantageous in every respect than the cables which had heretofore been in use.

The new offices in Montreal have attracted considerable attention. Besides giving the Co. thoroughly up-to-date quarters, a large part of the building has been rented to first-class tenants, such as steamship agencies, etc. An elevator was installed, & the interior of the building made thoroughly up-to-date in every particular.

The crowded condition of business over the G.T.R. wires between Montreal & Toronto & Montreal & Portland, has rendered necessary the erection of new wires over these parts of the system, which have just been completed.

The telegraph service at stations along the G.T.R. has recently been made a subject of rigid inquiry, & in order that this branch might be placed on a thoroughly satisfactory footing, General Manager Hays has issued a circular to all agents & operators along the road containing special instructions to the effect that all commercial business offered by the public at station offices should receive every possible attention.

The Co. has this fall completed the erection of a new wire over the Northern Pacific Ry. between Winnipeg & Brandon, including an extension over the Souris River branch to Hartney. The business along the route of the N.P.R. has greatly increased during the last year or two, & additional facilities were rendered necessary in consequence.

The Co.'s business between Eastern & Western Canada is reported as never having been better, & the business between Vancouver, Victoria & other B.C. points & the West, is steadily on the increase.

#### General Telegraph Matters.

The Spokane & Northern Telegraph Co. has opened an office at Cascade, B.C.

The G.T.R. is stringing a despatchers' wire between Toronto & Montreal.

Some information about the North American Telegraph Co. will be found under the head of "General Telephone Matters," on page 376.

A Chicago telegram, of Nov. 23, said:—"By the use of a new automatic telegraph invention, 122,000 words an hour were sent yesterday from the Tribune office to Milwaukee & back again. The apparatus was invented in Buda Pest, Hungary, & this was the first exhibition of its working powers in this country. Nearly as many words were sent to Buffalo & return, but the experiment was not so successful. The instruments used were not adapted to such a long distance."

We have been unable to find any foundation for the report that telegraph communication is to be established between Port Arthur, Ont., & Duluth, Minn., via the Port Arthur, Duluth & Western Ry., though, of course, it may come later on. At present there is no telegraph line along the P.A., D. & W., but a wire has been strung from Port Arthur to Stanley, & is being continued along the Ontario & Rainy River Ry., now under construction. On the Minnesota side the telegraph wires now extend to the terminus of the Duluth & Iron Range Ry., at Ely.

The people in Prince Edward Island who are agitating for improved or competitive cable service with the mainland, allege that the Anglo-American Telegraph Co., the only company operating on the Island, only provides a 12 hours' service in the day, closing down from 7 p.m. to 7 a.m. daily, that the tolls from the Island to the mainland are double the tolls charged between points in the mainland provinces, & within 5c. of double the charges between New Brunswick & Nova Scotia, & Ontario & Quebec, & that press messages are charged double those of the mainland. Wireless telegraphy from the Island to the New Brunswick shore is suggested as a remedy.

#### General Telephone Matters.

A telephone line is projected between Skagway, Alaska, & Bennett, B.C.

Oyster Bay, B.C., has been connected with Alexandria & Extension Mines by telephone.

The Bell Telephone Co.'s Hamilton, Ont., office is to have an entirely new keyboard & fittings.

Telephone service has been established between St. George, Pennfield, Beaver Harbor, & Black's Harbor, N.B.

The Eastern Telephone Co., which operates in Cape Breton, has added over 50 subscribers this year, & has made a number of office improvements.

Thieves have found a new sphere of activity in copper telephone wires. The Delaware & Atlantic Co. recently lost about 2½ miles of wire by one night's operations.

The New Westminster & Burrard Inlet Telephone Co.'s new switchboard at Vancouver, referred to in our last issue, is to be put in by the Bell Telephone Co.

The people of Oaklands district, Man., to which the Northern Pacific Ry. has recently been extended, are trying to secure telephone connection with Portage la Prairie.

The North American Telegraph Co. has rebuilt its line between Belleville & Madoc, Ont., putting up a copper metallic circuit between those places for telephone purposes, & has connected Douglas, Ont., with its telephone system.

In reference to the issue of debenture stock & shares of the British Columbia Telephones, Ltd., referred to in our last issue, pg. 343, we were advised by the Secretary on Nov. 26 that he was in a position to say that the whole issue would be taken up.

The Roads Committee of Montreal City Council recently considered the application of B. R. Dodge, of Vermont, inventor of the Dodge system of telephones, to establish a new system of telephones in the city, a system which he claims is way ahead of anything so far invented, while the prices are practically nothing. He refrained, however, from giving any prices in his letter, which asked for the right to erect poles on the streets & carry on a system of telephones. The committee took the matter as a huge joke, the City Engineer saying there were already too

many poles on the streets. It was decided that there was not enough information given in the letter, & it was decided to reply, asking for capitalization of the company, what it would give for the franchise, charge for a telephone, & if it could put its wires underground.

#### Among the Express Companies.

The Great Northern Ex. Co. has opened an office at Salmo, B.C.

The Western Ex. Co.'s money orders are now payable at all offices of the Maritime Ex. Co.

The Canadian Ex. Co. has opened the following offices; Grand Mere Jct., Que.; Shawenegan Falls, Que.; Niagara Falls South (Drummondville), Ont.

At a recent meeting of the Great Northern Ex. Co. the following officers were elected: President, D. Miller; Vice-Pres. & General Manager, W. J. Footner; other directors, M. D. Groves, R. I. Farrington, J. N. Hill; Sec.-Treas., E. Sawyer. The new President is 2nd Vice-President of the Great Northern R.R.

It has been agreed that the charge on all business, except special traffic matter, from common points in the U.S. to all points in Canada, not reached by American or National Ex. Companies, shall be the local charge from the point of origin to the Canadian transfer point by which the lowest through rate can be obtained added to the Canadian or Dominion Ex. Co.'s charge from such transfer point to destination, excepting that from any common point in the U.S. reached by the American National or other Ex. Company to common points of such Company in Canada that are reached also by either the Canadian, Dominion or other Express Company, the through charge shall be that fixed by the company or companies reaching both the U. S. & Canadian common point; & it is further agreed that such companies will furnish to all other companies parties hereto, on application, their tariffs from common points in the U. S. to their common points in Canada.

**THE HUNTER, ROSE CO.,**

All kinds of... Limited.

PRINTING, BOOKBINDING,  
OFFICE STATIONERY  
AND ACCOUNT BOOKS

Temple Building, • • Toronto.

# STEEL

## LaBELLE STEEL CO.

Pittsburgh, Pa.

MANUFACTURERS OF

### FINE TOOL STEEL

For Railway Purposes

Track Tools,

Punches, Dies,

Drills, Magnets, etc.

And all purposes where requirements are exacting.

Steel Forgings. Case Hardening Steel.

## W. G. BLYTH,

Agent for Canada,

29 Melinda St. - Toronto

# ADVERTISING

ON THE

# CANADIAN PACIFIC RAILWAY.

The exclusive privilege of advertising in the Stations, Ticket Agencies and Hotels of the CANADIAN PACIFIC RAILWAY, and on that Company's buildings, premises, telegraph poles and fences, is controlled by THE ACTON BURROWS COMPANY.

The franchise embraces the whole of the C. P. R. System, including all branches and leased lines, comprising 7,178 miles of railway, 690 stations, and a number of ticket agencies and hotels.

Advertising on the C. P. R. is like every department of that Company's service, modern, up-to-date and reliable.

FOR RATES AND FURTHER PARTICULARS APPLY TO

## The Acton Burrows Company,

29 Melinda St., Toronto, Canada

BRANCH OFFICE :

197 Lombard Street, Winnipeg—S. A. Erskine, Resident Agent.

# The Purchasing Agents' Guide

To the Manufacturers of & Dealers in Steam & Electric Railway, Steamship, Express, Telegraph & Telephone supplies, &c.

<b>Accident Insurance</b>		<b>Gas &amp; Gasoline Engines</b>		<b>Semaphore Arms</b>	
Travelers' Insurance Co.....	Montreal.	The Fairbanks Co.....	Montreal.	Acton Burrows Co.....	Toronto.
<b>Aerated Waters</b>		Northey Manufacturing Co.....	Toronto.	<b>Shafting</b>	
E. L. Drewry.....	Winnipeg.	<b>Gates</b>		Rice Lewis & Son.....	Toronto.
<b>Air Brakes &amp; Fittings</b>		Page Wire Fence Co.....	Walkerville, Ont.	<b>Shipbuilders' Supplies</b>	
Westinghouse Mfg. Co.....	Hamilton, Ont.	<b>General Supplies</b>		Rice Lewis & Son.....	Toronto.
<b>Ales</b>		The Hudson's Bay Company.....		<b>Ship Carpenters' Tools</b>	
E. L. Drewry.....	Winnipeg.	<b>Grain Elevators</b>		Rice Lewis & Son.....	Toronto.
<b>Anchors</b>		John S. Metcalfe & Co.....	Chicago, Ill.	<b>Ships</b>	
Rice Lewis & Son.....	Toronto.	<b>Groceries</b>		Polson Iron Works.....	Toronto.
<b>Axles</b>		The Hudson's Bay Company.....		<b>Shovels</b>	
James Hutton & Co.....	Montreal.	<b>Half Tons</b>		The Fairbanks Co.....	Montreal.
Rhodes, Curry & Co.....	Amherst, N.S.	Acton Burrows Co.....	Toronto.	The Hudson's Bay Company.....	Toronto.
<b>Babbitt</b>		<b>Hand &amp; Push Cars</b>		Rice Lewis & Son.....	Toronto.
Rice Lewis & Son.....	Toronto.	F. E. Came.....	Montreal.	<b>Signal House Numbers</b>	
<b>Badges</b>		The Fairbanks Co.....	Montreal.	Acton Burrows Co.....	Toronto.
John Martin, Sons & Co.....	Montreal.	<b>Hardware</b>		<b>Signals</b>	
<b>Beams</b>		Rice Lewis & Son.....	Toronto.	Noah L. Piper & Sons.....	Toronto.
Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....		<b>Signs</b>	
<b>Bells</b>		<b>Headlights</b>		Acton Burrows Co.....	Toronto.
Rice Lewis & Son.....	Toronto.	Noah L. Piper & Sons.....	Toronto.	<b>Snow Ploughs</b>	
<b>Belting</b>		<b>Hose</b>		Rhodes, Curry & Co.....	Amherst, N.S.
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.	<b>Speed Indicators</b>	
<b>Blankets &amp; Bedding</b>		<b>Illustrations</b>		Rice Lewis & Son.....	Toronto.
The Hudson's Bay Company.....		Acton Burrows Co.....	Toronto.	<b>Spikes</b>	
<b>Block &amp; Tackle</b>		<b>Iron</b>		Rice Lewis & Son.....	Toronto.
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.	<b>Station Name Signs</b>	
<b>Boat Fittings &amp; Hardware</b>		<b>Iron Signs</b>		Acton Burrows Co.....	Toronto.
Rice Lewis & Son.....	Toronto.	Acton Burrows Co.....	Toronto.	<b>Steamboats</b>	
<b>Boiler Covering</b>		<b>Japans</b>		Polson Iron Works.....	Toronto.
Mica Boiler Covering Co.....	Toronto.	McCaskill, Dougall & Co.....	Montreal.	<b>Steamboat Signs</b>	
<b>Bollers</b>		<b>Lager Beer, &amp;c.</b>		Acton Burrows Co.....	Toronto.
Polson Iron Works.....	Toronto.	E. L. Drewry.....	Winnipeg.	<b>Steam Whistles</b>	
<b>Boiler Tubes</b>		<b>Lamps</b>		Rice Lewis & Son.....	Toronto.
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.	<b>Steel</b>	
<b>Bolts</b>		Noah L. Piper & Sons.....	Toronto.	W. G. Blyth.....	Toronto.
Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....		James Hutton & Co.....	Montreal.
<b>Brake Shoes</b>		<b>Lanterns</b>		Rice Lewis & Son.....	Toronto.
F. E. Came.....	Montreal.	Rice Lewis & Son.....	Toronto.	<b>Steel Castings</b>	
<b>Bridge Numbers</b>		<b>Launches</b>		F. E. Came.....	Montreal.
Acton Burrows Co.....	Toronto.	Polson Iron Works.....	Toronto.	<b>Switch Targets</b>	
<b>Buckets</b>		<b>Life Insurance</b>		Acton Burrows Co.....	Toronto.
Rice Lewis & Son.....	Toronto.	Independent Order of Foresters.....	Toronto.	<b>Switches</b>	
<b>Bunting</b>		Travelers' Insurance Co.....	Montreal.	F. E. Came.....	Montreal.
Rice Lewis & Son.....	Toronto.	<b>Linoleum and Floor Coverings</b>		<b>Telegraph Office Signs</b>	
The Hudson's Bay Company.....		The Hudson's Bay Company.....		Acton Burrows Co.....	Toronto.
<b>Carpets</b>		<b>Locomotives</b>		<b>Telegraph Spoons</b>	
The Hudson's Bay Company.....		Richmond Locomotive & Machine.....	Richmond, Va.	Rice Lewis & Son.....	Toronto.
<b>Cars</b>		<b>Lubricators</b>		<b>Telephone Office Signs</b>	
Rhodes, Curry & Co.....	Amherst, N.S.	Rice Lewis & Son.....	Toronto.	Acton Burrows Co.....	Toronto.
<b>Car Wheels</b>		<b>Matches</b>		<b>Tires</b>	
Rhodes, Curry & Co.....	Amherst, N.S.	E. B. Eddy Co.....	Hull, Que.	James Hutton & Co.....	Montreal.
<b>Castings</b>		The Hudson's Bay Company.....		<b>Tobacco and Cigars</b>	
Rhodes, Curry & Co.....	Amherst, N.S.	<b>Milepost Numbers</b>		The Hudson's Bay Company.....	
<b>Chains</b>		Acton Burrows Co.....	Toronto.	<b>Toilet Paper</b>	
Rice Lewis & Son.....	Toronto.	<b>Mohair</b>		The Hudson's Bay Company.....	
<b>Cross Arms, Top Pins &amp; Side Blocks</b>		The Hudson's Bay Company.....		<b>Tools</b>	
The Firstbrook Box Co.....	Toronto.	<b>Numbers</b>		Rice Lewis & Son.....	Toronto.
<b>Curtains</b>		Acton Burrows Co.....	Toronto.	<b>Track Jacks</b>	
The Hudson's Bay Company.....		<b>Oakum</b>		Duff Manufacturing Co.....	Allegheny, Pa.
<b>Cuts</b>		Rice Lewis & Son.....	Toronto.	A. O. Norton.....	Coaticook, Que.
Acton Burrows Co.....	Toronto.	The Hudson's Bay Company.....		<b>Track Tools</b>	
<b>Door Signs</b>		<b>Oils</b>		F. E. Came.....	Montreal.
Acton Burrows Co.....	Toronto.	Galena Oil Co.....	Franklin, Pa.	Rice Lewis & Son.....	Toronto.
<b>Drills</b>		<b>Office Signs</b>		<b>Trucks</b>	
The Fairbanks Co.....	Montreal.	Acton Burrows Co.....	Toronto.	The Fairbanks Co.....	Montreal.
<b>Dry Goods</b>		<b>Packing</b>		Rice Lewis & Son.....	Toronto.
The Hudson's Bay Company.....		The Fairbanks Co.....	Montreal.	<b>Typewriters</b>	
<b>Electric Car Route Signs</b>		<b>Pipe</b>		Creelman Bros. Typewriter Co.....	Georgetown.
Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.	Creelman Bros. Typewriter Co.....	Toronto.
<b>Emery Wheels</b>		<b>Pipe Covering</b>		<b>Uniforms</b>	
The Fairbanks Co.....	Montreal.	Mica Boiler Covering Co.....	Toronto.	John Martin, Sons & Co.....	Montreal.
<b>Enameled Iron Signs</b>		<b>Plushes</b>		<b>Uniform Caps</b>	
Acton Burrows Co.....	Toronto.	The Hudson's Bay Company.....		John Martin, Sons & Co.....	Montreal.
Rice Lewis & Son.....	Toronto.	<b>Pneumatic Tools</b>		<b>Valves</b>	
<b>Engines, Stationary &amp; Marine</b>		F. E. Came.....	Montreal.	Rice Lewis & Son.....	Toronto.
Polson Iron Works.....	Toronto.	<b>Porter</b>		<b>Varnishes</b>	
<b>Engraving</b>		E. L. Drewry.....	Winnipeg.	McCaskill, Dougall & Co.....	Montreal.
Acton Burrows Co.....	Toronto.	<b>Portland Cement</b>		<b>Vessels</b>	
Toronto Engraving Co.....	Toronto.	Rice Lewis & Son.....	Toronto.	Polson Iron Works.....	Toronto.
<b>Express Office Signs</b>		<b>Printing</b>		<b>Waste</b>	
Acton Burrows Co.....	Toronto.	The Hunter, Rose Co.....	Toronto.	Rice Lewis & Son.....	Toronto.
<b>Fencing</b>		<b>Pumps</b>		Noah L. Piper & Sons.....	Toronto.
Page Wire Fence Co.....	Walkerville, Ont.	Rice Lewis & Son.....	Toronto.	<b>Water Meters</b>	
<b>Ferry Signs</b>		<b>Rails</b>		Westinghouse Mfg. Co.....	Hamilton, Ont.
Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.	<b>Water Tanks</b>	
<b>Flags</b>		<b>Rail Saws</b>		The Fairbanks Co.....	Montreal.
Rice Lewis & Son.....	Toronto.	F. E. Came.....	Montreal.	<b>Wheelbarrows</b>	
The Hudson's Bay Company.....		<b>Rivets</b>		The Fairbanks Co.....	Montreal.
<b>Foghorns</b>		Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.
Rice Lewis & Son.....	Toronto.	<b>Rope</b>		<b>Window Blinds</b>	
<b>Gas &amp; Gasoline Engines</b>		Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....	
The Fairbanks Co.....	Montreal.	<b>Scales</b>		<b>Wines and Liquors</b>	
Northey Manufacturing Co.....	Toronto.	The Hudson's Bay Company.....		The Hudson's Bay Company.....	
<b>Gates</b>		<b>Semaphore Arms</b>		<b>Wire &amp; Wire Rope</b>	
Page Wire Fence Co.....	Walkerville, Ont.	Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.
<b>General Supplies</b>		<b>Shafting</b>		<b>Yachts</b>	
The Hudson's Bay Company.....		Rice Lewis & Son.....	Toronto.	Polson Iron Works.....	Toronto.
<b>Grain Elevators</b>		<b>Shipbuilders' Supplies</b>			
John S. Metcalfe & Co.....	Chicago, Ill.	Rice Lewis & Son.....	Toronto.		
<b>Groceries</b>		<b>Ship Carpenters' Tools</b>			
The Hudson's Bay Company.....		Rice Lewis & Son.....	Toronto.		
<b>Half Tons</b>		<b>Ships</b>			
Acton Burrows Co.....	Toronto.	Polson Iron Works.....	Toronto.		
<b>Hand &amp; Push Cars</b>		<b>Shovels</b>			
F. E. Came.....	Montreal.	The Fairbanks Co.....	Montreal.		
The Fairbanks Co.....	Montreal.	The Hudson's Bay Company.....	Toronto.		
<b>Hardware</b>		Rice Lewis & Son.....	Toronto.		
Rice Lewis & Son.....	Toronto.	<b>Signal House Numbers</b>			
The Hudson's Bay Company.....		Acton Burrows Co.....	Toronto.		
<b>Headlights</b>		<b>Signals</b>			
Noah L. Piper & Sons.....	Toronto.	Noah L. Piper & Sons.....	Toronto.		
<b>Hose</b>		<b>Signs</b>			
Rice Lewis & Son.....	Toronto.	Acton Burrows Co.....	Toronto.		
<b>Illustrations</b>		<b>Snow Ploughs</b>			
Acton Burrows Co.....	Toronto.	Rhodes, Curry & Co.....	Amherst, N.S.		
<b>Iron</b>		<b>Speed Indicators</b>			
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.		
<b>Iron Signs</b>		<b>Spikes</b>			
Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.		
<b>Japans</b>		<b>Station Name Signs</b>			
McCaskill, Dougall & Co.....	Montreal.	Acton Burrows Co.....	Toronto.		
<b>Lager Beer, &amp;c.</b>		<b>Steamboats</b>			
E. L. Drewry.....	Winnipeg.	Polson Iron Works.....	Toronto.		
<b>Lamps</b>		<b>Steamboat Signs</b>			
Rice Lewis & Son.....	Toronto.	Acton Burrows Co.....	Toronto.		
Noah L. Piper & Sons.....	Toronto.	<b>Steam Whistles</b>			
The Hudson's Bay Company.....		Rice Lewis & Son.....	Toronto.		
<b>Lanterns</b>		<b>Steel</b>			
Rice Lewis & Son.....	Toronto.	W. G. Blyth.....	Toronto.		
<b>Launches</b>		James Hutton & Co.....	Montreal.		
Polson Iron Works.....	Toronto.	Rice Lewis & Son.....	Toronto.		
<b>Life Insurance</b>		<b>Steel Castings</b>			
Independent Order of Foresters.....	Toronto.	F. E. Came.....	Montreal.		
Travelers' Insurance Co.....	Montreal.	<b>Switch Targets</b>			
<b>Linoleum and Floor Coverings</b>		Acton Burrows Co.....	Toronto.		
The Hudson's Bay Company.....		<b>Switches</b>			
<b>Locomotives</b>		F. E. Came.....	Montreal.		
Richmond Locomotive & Machine.....	Richmond, Va.	<b>Telegraph Office Signs</b>			
<b>Lubricators</b>		Acton Burrows Co.....	Toronto.		
Rice Lewis & Son.....	Toronto.	<b>Telegraph Spoons</b>			
<b>Matches</b>		Rice Lewis & Son.....	Toronto.		
E. B. Eddy Co.....	Hull, Que.	<b>Telephone Office Signs</b>			
The Hudson's Bay Company.....		Acton Burrows Co.....	Toronto.		
<b>Milepost Numbers</b>		<b>Tires</b>			
Acton Burrows Co.....	Toronto.	James Hutton & Co.....	Montreal.		
<b>Mohair</b>		<b>Tobacco and Cigars</b>			
The Hudson's Bay Company.....		The Hudson's Bay Company.....			
<b>Numbers</b>		<b>Toilet Paper</b>			
Acton Burrows Co.....	Toronto.	The Hudson's Bay Company.....			
<b>Oakum</b>		<b>Tools</b>			
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.		
The Hudson's Bay Company.....		<b>Track Jacks</b>			
<b>Oils</b>		Duff Manufacturing Co.....	Allegheny, Pa.		
Galena Oil Co.....	Franklin, Pa.	A. O. Norton.....	Coaticook, Que.		
<b>Office Signs</b>		<b>Track Tools</b>			
Acton Burrows Co.....	Toronto.	F. E. Came.....	Montreal.		
<b>Packing</b>		Rice Lewis & Son.....	Toronto.		
The Fairbanks Co.....	Montreal.	<b>Trucks</b>			
<b>Pipe</b>		The Fairbanks Co.....	Montreal.		
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.		
<b>Pipe Covering</b>		<b>Typewriters</b>			
Mica Boiler Covering Co.....	Toronto.	Creelman Bros. Typewriter Co.....	Georgetown.		
<b>Plushes</b>		Creelman Bros. Typewriter Co.....	Toronto.		
The Hudson's Bay Company.....		<b>Uniforms</b>			
<b>Pneumatic Tools</b>		John Martin, Sons & Co.....	Montreal.		
F. E. Came.....	Montreal.	<b>Uniform Caps</b>			
<b>Porter</b>		John Martin, Sons & Co.....	Montreal.		
E. L. Drewry.....	Winnipeg.	<b>Valves</b>			
<b>Portland Cement</b>		Rice Lewis & Son.....	Toronto.		
Rice Lewis & Son.....	Toronto.	<b>Varnishes</b>			
<b>Printing</b>		McCaskill, Dougall & Co.....	Montreal.		
The Hunter, Rose Co.....	Toronto.	<b>Vessels</b>			
<b>Pumps</b>		Polson Iron Works.....	Toronto.		
Rice Lewis & Son.....	Toronto.	<b>Waste</b>			
<b>Rails</b>		Rice Lewis & Son.....	Toronto.		
Rice Lewis & Son.....	Toronto.	Noah L. Piper & Sons.....	Toronto.		
<b>Rail Saws</b>		<b>Water Meters</b>			
F. E. Came.....	Montreal.	Westinghouse Mfg. Co.....	Hamilton, Ont.		
<b>Rivets</b>		<b>Water Tanks</b>			
Rice Lewis & Son.....	Toronto.	The Fairbanks Co.....	Montreal.		
<b>Rope</b>		<b>Wheelbarrows</b>			
Rice Lewis & Son.....	Toronto.	The Fairbanks Co.....	Montreal.		
The Hudson's Bay Company.....		Rice Lewis & Son.....	Toronto.		
<b>Scales</b>		<b>Window Blinds</b>			
The Fairbanks Co.....	Montreal.	The Hudson's Bay Company.....			
		<b>Wines and Liquors</b>			
		The Hudson's Bay Company.....			
		<b>Wire &amp; Wire Rope</b>			
		Rice Lewis & Son.....	Toronto.		
		<b>Yachts</b>			
		Polson Iron Works.....	Toronto.		

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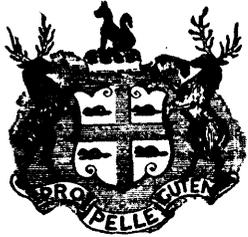
# The Hudson's Bay Company

HAS GENERAL STORES

In Manitoba, the Northwest Territories,  
and British Columbia, where the best  
goods can be obtained at the Lowest  
Prices.



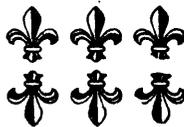
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# The Hudson's Bay Company

HAS LANDS FOR SALE

Farming and Grazing Lands on Easy  
Terms of Payment and without any  
conditions of Settlement.



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# The Hudson's Bay Company

MAKES THE BEST FLOUR

Highest Awards at the Winnipeg Indus-  
trial Exhibitions. Mills at Winnipeg and  
Prince Albert.